

# The Financial Development Report





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# The Financial Development Report 2008



The terms *country* and *nation* as used in this report do not in all cases refer to a territorial entity that is a state as understood by international law and practice. The terms cover well-defined, geographically self-contained economic areas that may not be states but for which statistical data are maintained on a separate and independent basis.

World Economic Forum USA Inc.

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#### **Preface**

#### KLAUS SCHWAB.

Executive Chairman, World Economic Forum

The release of the World Economic Forum's inaugural Financial Development Report 2008, comes at a time when financial stability is of paramount importance to governments, civil society, and the business community alike. The United States financial markets, long-revered as among the strongest and most advanced in the world, have witnessed a dramatic contraction of credit and an atrophying of the housing and secondary mortgage markets that few thought possible. Other developed nations are questioning the degree to which financial integration and innovation have brought exposure to this unabated financial crisis. Emerging markets such as China and India that have been primary drivers of global economic growth in the new millennium have yet to see the extent to which "decoupling" truly exists and if their economic expansion can continue independent of the financial trauma plaguing the US and other developed countries.

Against this backdrop, it is easy to forget the benefits that the development of global financial systems and increased capital flows have conferred upon other parts of the world. The link between financial development and economic growth is increasingly well established. The development of local financial markets in developing economies is vital to provide needed capital to the small- and medium-sized companies that drive a large portion of economic growth in these countries. In addition, the potential for financial markets to help tackle the most pressing issues on the global agenda is manifest in the evolution of microfinance and carbon markets.

In this time of uncertainty, where the potential to recast many aspects of our financial systems exists, it is important to take a holistic perspective and consider all the different factors that contribute to the development of financial systems and the beneficial impact they can have on the lives of many. It is in the spirit of providing this informed and shared perspective that the World Economic Forum has undertaken the publication of *The Financial Development Report 2008*. Started more than a year ago, the *Report* was commissioned in collaboration with the Forum's Financial Institutions Industry Partners and Global Competitiveness Network to create an analytical tool and a common framework for stakeholders to identify strengths, development areas and priorities for reform.

In the tradition of the Forum's multistakeholder approach to global issues, the creation of this *Report* 

involved an extended program of outreach and dialogue with members of the academic community, public figures, representatives of non-governmental organizations and business leaders from across the world. This work included numerous interviews and collaborative sessions to discuss the approach to the design of the Index at the core of the report. The *Report* was the subject of sessions at the Annual Meeting of the New Champions 2007 in Dalian, China; the India Economic Summit 2007 in New Delhi; the Forum's 2008 Annual Meeting in Davos, Switzerland; and the Latin America Summit 2008 in Cancun, Mexico. Now that it is completed, the *Report* will serve as the basis for future sessions where the results can be discussed and debated, insights drawn and new findings incorporated into its revision and publication next year.

We would like to express our gratitude to the lead academic on the project, Nouriel Roubini of New York University, for his thought leadership in the design of the Financial Development Index and contributions to this report. We are grateful to our industry partners who served on the project advisory committee including American International Group, Inc.; Barclays Capital; Lloyd's; and Standard Chartered Bank. We are appreciative of our academic advisors who generously contributed their time and ideas in helping shape this report. We would also like to thank James Bilodeau at the World Economic Forum USA, editor of the report, for his energy and commitment to the project, as well as the other members of the project team including Thierry Geiger, Samantha Test (on secondment from McKinsey & Co.) and Charles Martorana. We are grateful to Irene Mia for her guidance as Project Advisor. Appreciation also goes to Fiona Paua, Head of Strategic Insight Teams, and other team members: Ciara Browne, Agustina Ciocia, Pearl Samandari, and Eva Trujillo Herrera. Finally, we would like to thank our network of 142 Partner Institutes worldwide, without whose enthusiasm and hard work the annual administration of the Executive Opinion Survey and this Report would not be possible.



#### **Foreword**

#### KEVIN STEINBERG.

Chief Operating Officer and Head of the Centre for Global Industries (New York), World Economic Forum USA

The World Economic Forum is proud to release this first *Financial Development Report*, which was conceived and executed as part of our Industry Partnership Programme. The *Report* represents the culmination of a year-long partnership between academic scholars, industry practitioners, other distinguished experts and stakeholders, and our organization. We hope that it will provide a comprehensive and robust fact base related to the development of the world's financial systems and enable a rich series of discussions and analyses for both private and public sector organizations focused on economic development.

The Industry Partnership Programme, under whose auspices this work was undertaken, provides CEOs and senior executives of the world's leading companies the opportunity to engage with their peers to define and address critical industry issues through the World Economic Forum's unique platform. Last year, the over 75 financial institutions engaged as the Forum's Industry Partners identified the deepening and development of the world's capital markets and financial systems as one of the world's key drivers to deliver sustainable social development and economic progress. They commissioned this report to draw attention to related issues and provide a catalyst for reform and change.

We believe the Financial Development Report is unique in the degree of comprehensiveness with which it looks at financial systems. Financial systems are inherently complex, spanning foundational aspects such as the institutional and business environments; financial intermediaries including banks, insurance providers, and investment banks; financial markets for bonds, equity, foreign exchange and derivatives; and businesses—the "consumers" of capital—who ultimately transform financial resources into improved economic growth and welfare for a nation's citizens. Taking this holistic view is vital to provide stakeholders in financial systems a common framework with which to cultivate strengths, develop weaknesses, and establish priorities for reform. The uncertainty of today's financial climate makes this common framework even more vital to develop a balanced agenda with respect to financial issues.

#### Core findings

Capturing the above breadth of factors was a considerable undertaking, requiring the refinement of over 120

different data sets, grouped into seven major pillars. These seven pillars, which form the foundation of the Index are:

- 1. Institutional environment
- 2. Business environment
- 3. Financial stability
- 4. Banks
- 5. Non-banks
- 6. Financial markets
- 7. Size, depth, and access

Data were obtained from a variety of sources, ranging from The World Bank and other private and publicly available sources to the World Economic Forum's Executive Opinion Survey, which provides a unique glimpse into the perspective of businesses seeking to access capital.

On the basis of this holistic view, this year the United States scores top honors in the rankings closely followed by the United Kingdom. The collective strength of financial intermediaries and markets in these countries, spanning banks, investment banks, insurance companies, equity markets, and bond markets is unparalleled. Yet, the Index also reveals development areas in these countries that should be considered. Besides issues of financial stability that are common to both countries, regulatory issues and judicial reform remain lingering areas for improvement in the United States, while the cost of doing business in the United Kingdom is an area of concern.

Following the U.S. and U.K., one finds Germany, Japan, Canada, France, Switzerland, Hong Kong, the Netherlands and Singapore in a closely-banded tier rounding out the top ten. Germany, Japan, Canada and the Netherlands deliver generally solid performance across all aspects of the Index. Singapore, Switzerland, and Hong Kong demonstrate particular strength across their institutional and business environments. France shows solid marks with respect to the strength of its financial intermediaries.

Comparing the different measures across the breadth of the Index reveals interesting results with respect to other countries' relative strengths and weaknesses. For instance, a number of countries perform significantly better with respect to the factors, policies, and institutions that support financial systems (e.g., sound regulatory

systems, low cost of doing business, financial stability, etc.) than they do with respect to financial intermediation (e.g., banks, investment banks, financial markets, etc.) Countries in this category include Bahrain, Chile, the Czech Republic, Mexico, the Slovak Republic, and Peru. Exploring the reasons why countries do not seem to translate foundational requirements like a sound regulatory system and low cost of doing business into more robust financial intermediation may reveal some interesting insights around priorities for reform.

Still other countries, such as Russia and Kazakhstan, deliver relatively strong performance with respect to financial intermediation but, compared to other countries covered in the Index, do not perform as strongly with respect to capital availability and access. Conversely, one sees that Israel scores relatively well with respect to these access measures, even in the face of relatively less developed financial intermediaries. The question as to why countries are able or unable to translate relatively strong performance in areas such as initial public offerings or banking into ease of access to capital as assessed by businesses within these countries may be an important line of inquiry.

The capital access data contained in this report represent unique measures of the degree to which businesses in all these countries feel that they are able to access different forms of capital such as private credit, bank loans, or initial public offerings. It is interesting to note that these assessments do not always seem to correspond to the total depth of financial assets that are available within a country. For instance, China and Egypt score relatively solidly with respect to total financial assets to GDP but near the bottom of the overall ranking with respect to measures of capital access. Conversely the United Arab Emirates ranks relatively low in terms of depth of total financial assets but ranks quite high in terms of measures of access. Why are some countries able to maximize access to capital even when, by certain measures, there is less overall capital available? We encourage readers of this report to pursue these patterns of analysis.

#### **Key contributors**

The Financial Development Report represents a collaborative endeavour linking many of the Forum's Industry Partner companies together with leading academics and thinkers, active practitioners, partner institutes from around the world, and representatives of many parts of civil society.

The core research team, tasked with crafting and populating the Index, was drawn from the World Economic Forum and Roubini Global Economics, and was comprised of Nouriel Roubini, Lead Academic on the project, James Bilodeau, Thierry Geiger, Ayah El Said, Samantha Test, and Charles Martorana.

On behalf of the World Economic Forum, the project was ably led by James Bilodeau, who served both as project manager and as editor of this *Report*. He worked closely not only with the core research team, but also the Forum's Financial Institutions Team and our Global Competitiveness Network led by Fiona Paua. We have also benefitted from a number of academic advisors to this work and we would particularly like to thank Ross Levine for his thought leadership in this area.

Intellectual stewardship and guidance was provided by an Advisory Committee, which included Jacob Frenkel, Vice-Chairman, American International Group, Inc.; Lord Peter Levene, Chairman, Lloyd's; Hans-Joerg Rudloff, Chairman, Barclays Capital; and Peter Sands, Group Chief Executive, Standard Chartered Bank.

An active Operating Committee provided feedback, counsel and refinement of the Index, helping shape its final formulation. It included Michael Drexler, Head of Strategy and Planning, Barclays Capital; Darragh Gray, Senior Manager, Lloyd's; Oakley Johnson, Senior Vice President, American International Group, Inc.; Gerard Lyons, Chief Economist, Standard Chartered Bank; and Hans-Joerg Rudloff, Chairman, Barclays Capital.

While not necessarily endorsing any of the specific conclusions reflected in the analyses in the Report, both the Advisory Committee and Operating Committee provided detailed feedback and helped ensure the overall integrity of the work. Any opinions herewith are solely the views of the authors and do not reflect the opinions of the Advisory Committee, the Operating Committee or the World Economic Forum.

#### **Going forward**

This first Financial Development Report is, as with many new endeavors, very much a work in progress which will evolve in successive years. We nonetheless hope that even this first version will serve as a valuable framework for exploring the many issues it raises and lead to discussions and public debate.

On behalf of the World Economic Forum as well as the project team, I extend thanks to all involved in creating this first Index for their tremendous contributions to this work. We welcome your feedback and reactions, and hope you will continue your involvement in our future efforts.

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#### The Financial Development Index 2008 Rankings

Country/Economy	Rank	Score (1–7)
United States	1	5.85
United Kingdom	2	5.83
Germany	3	5.28
Japan	4	5.28
Canada	5	5.26
France	6	5.25
Switzerland	7	5.23
Hong Kong SAR	8	5.23
Netherlands	9	5.22
Singapore	10	5.15
Australia	11	4.98
Spain	12	4.90
Sweden	13	4.75
Ireland	14	4.72
Norway	15	4.66
United Arab Emirates	16	4.61
Belgium	17	4.56
Austria	18	4.55
Korea, Rep.	19	4.55
Malaysia	20	4.48
Finland	21	4.45
Italy	22	4.38
Israel	23	4.14
China	24	4.09
South Africa	25	4.00
Kuwait	26	3.93
Saudi Arabia	27	3.90
Bahrain	28	3.89
Thailand	29	3.82
Chile	30	3.79
India	31	3.63
Panama	32	3.61
Hungary	33	3.53
Pakistan	34	3.46
Czech Republic	35	3.43
Russian Federation	36	3.40
Egypt	37	3.32
Indonesia	38	3.31
Turkey	39	3.30
Brazil	40	3.28
Poland	41	3.27
Slovak Republic	42	3.25
Mexico	43	3.21
Colombia	43	3.21
Kazakhstan	45 46	3.13
Peru Argentina	46 47	3.06 3.04
Philippines	48	3.03
Vietnam Nigeria	49	3.03
•	50 51	2.76
Ukraine	51	2.73
Venezuela	52	2.71



# Part 1

# Findings from the Financial Development Index



**CHAPTER 1.1** 

# The Financial Development Index: Assessing the World's Financial Systems

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A key factor in economic growth is the development of financial systems. Despite the prominence of this topic in discussions of economic growth, there is still surprisingly little agreement about how to define and measure financial system development. To address this gap, the World Economic Forum has undertaken a research initiative aimed at providing business leaders and policymakers with a common framework to identify and discuss the key factors in the development of global financial systems and markets.

This inaugural *Financial Development Report* provides an Index and ranking of 52 of the world's leading financial systems. The *Report* is a tool with which countries can benchmark themselves and establish priorities for financial system improvement. It will be published annually so that countries can continue to benchmark themselves against their peers and track their progress over time.

In recognition of the diversity of countries covered in the Index and the variety of financial activities that are vital to economic growth, we have taken a holistic view of financial systems. For the purposes of this Report and Index we have defined financial development as the factors, policies, and institutions that lead to effective financial intermediation and markets, and deep and broad access to capital and financial services. This definition thus spans the "inputs" or foundational supports of a financial system, such as the institutional and business environments, the financial intermediaries and markets through which efficient risk diversification and capital allocation occur, and the "outputs" of the financial intermediation process, which include the availability of and access to capital.

The Index relies upon current academic research in both selecting the factors that are included and in determining its overall structure. However, to the extent possible it also encourages breadth of analysis over a theoretical focus on a few specific areas. With this holistic view, decision-makers can develop a balanced perspective as to which aspects of their country's financial system are most important and empirically calibrate this view relative to other countries.

# Financial development and economic growth and welfare: The seven pillars of financial development

A vast empirical and analytical literature suggests that in addition to many other important factors, the performance and long-run economic growth and welfare of a country are related to its degree of financial development. Financial development is measured by factors such as size, depth, access, efficiency and stability of a financial system, including its markets, intermediaries, range of assets, institutions and regulations. The greater the

degree of financial development, the wider the availability of financial services that allow the diversification of risks. This increases the long-run growth trajectory of a country and ultimately improves the welfare and prosperity of producers and consumers that have access to financial services. The link between financial development and economic growth can be traced back to the work of Joseph Schumpeter<sup>1</sup> in the early 20th century, and more recently to Ronald McKinnon and Edward Shaw. This link is now well established in terms of empirical evidence.<sup>2</sup>

Why do financial markets and intermediaries exist in the first place? Economic theory suggests that financial markets and intermediaries exist mainly because of two types of market frictions: information costs and transaction costs. These frictions lead to the development of financial intermediaries and financial markets, which perform multiple functions, such as:

- facilitating the trading, hedging, diversification, and pooling of risk;
- · providing insurance services;
- allocating savings and resources to the appropriate investment projects;
- monitoring managers and promoting corporate control and governance;
- · mobilizing savings efficiently; and
- · facilitating the exchange of goods and services.

How do financial intermediation and markets affect economic growth and performance and, more generally, contribute to increased aggregate economic welfare and prosperity? They mostly do this through their effect on capital accumulation (the rate of investment) and on technological innovation. First, greater financial development leads to greater mobilization of savings and its allocation to the highest return investment projects. This increased accumulation of capital enhances economic growth. Second, by appropriately allocating capital to the right investment projects and promoting sound corporate governance, financial development increases the rate of technological innovation and productivity growth, further enhancing economic growth and welfare. As a result, direct measures of economic performance impacted by these effects of financial development include variables such as the rate of economic growth, the rate of capital accumulation, the rate of productivity growth, and the rate of technological innovation.

Financial markets and intermediation benefit consumers and firms in many other ways that are not directly related to economic growth. Access to financial markets for consumers and producers can reduce poverty, such as when the poor have access to banking services and credit. The importance of microfinance can be seen in this context. This access allows consumers to

smooth consumption over time by borrowing and/or lending and stabilizes consumer welfare in the presence of temporary shocks to wages and income. By contributing to the diversification of savings and of portfolio choices, it can also increase the return on savings and ensure higher income and consumption opportunities. Insurance services can help mitigate a variety of risks that individuals and firms face, thus allowing better risk sharing of individual or even macroeconomic risks.

To understand and measure the degree of financial development, one must consider all of the different factors that together contribute to the degree of depth and efficiency of the provision of financial services. Conceptually, in thinking about an index that measures the degree of financial development, the various aspects of development can be seen as seven "pillars" grouped into three broad categories as indicated in Figure 1:

- 1. *Factors, policies, and institutions:* the "inputs" that allow the development of financial intermediaries, markets, instruments and services
- 2. *Financial intermediation:* the variety, size, depth, and efficiency of the financial intermediaries and markets that provide financial services
- 3. *Capital availability and access:* the "outputs" of financial intermediation as manifested in the size and depth of the financial sectors and the availability of, and access to, financial services

This combination of "inputs," financial intermediaries and markets, and "outputs" provides an organic measure of the degree of financial development. The seven pillars are organized and described below according to these three categories.

#### Factors, policies, and institutions

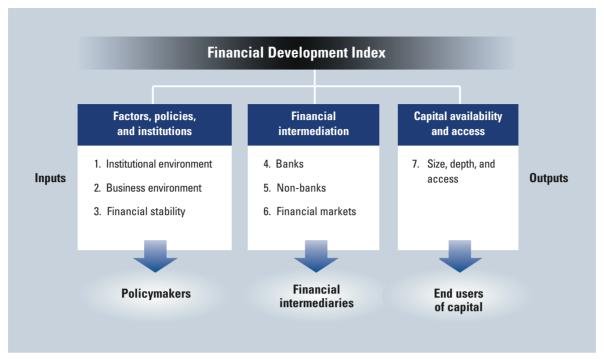
This first category covers the inputs supporting financial intermediation and the optimal provision of financial services and includes the first three of the seven pillars: the institutional environment, the business environment, and the degree of financial stability.

#### First pillar: Institutional environment

The institutional environment encompasses the laws and regulations that allow the development of deep and efficient financial intermediaries, markets and services. This includes the overall laws, regulations and supervision of the financial sector, as well as the quality of contract enforcement and corporate governance.

Economic theory proposes that a strong institutional environment exists to alleviate information and transaction costs.<sup>3</sup> Much empirical work has tackled issues related to the importance of institutions and their impact on economic activity in general. The presence of

Figure 1: Composition of the Financial Development Index



Source: World Economic Forum

#### Box 1: Finance, growth, and the poor

(Please see the essay by Ross Levine in Chapter 1.2 for a full discussion of this topic)

Financial development has a disproportionately positive impact on an economy's poor. This occurs because better-developed financial markets reduce the importance of parental wealth on the income of the next generation by providing access to capital, intensifying competition, and by expanding economic opportunities.

The level of human capital of an individual depends partially on schooling. Schooling is costly in terms of school fees, the higher cost of housing in school districts with high quality schools, and the opportunity cost from lost wages. Thus, families and individuals must raise the funds necessary to achieve a high level of human capital through schooling. When financial markets are highly developed, individuals of high ability but low means can borrow the necessary funds to attain the same advanced qualifications of people whose parents have greater financial means. When markets are not developed, children of wealthy parents, regardless of their ability, will have access to schooling that high-ability individuals of poorer parents will not. For example, this can occur when the banking sector is too highly concentrated and not competitive enough.

Similarly, wages and wealth generation can be related to entrepreneurial successes. To succeed in an entrepreneurial endeavour, individuals need capital to start or expand their businesses. In a well-developed financial market, individuals will be able to find lenders or investors to fund their ventures based solely on their merits as business propositions. However, in underdeveloped markets, potential lenders and investors will be unlikely to fund a business proposal by people who do not have families with sufficient wealth to post collateral for the loan. In the absence of well-developed financial markets, capital will not flow to the best business ideas, and people who do not come from wealthy families will be shut out of entrepreneurial opportunities.

Wealthy families have the means to fund schooling and entrepreneurial activity, or the connections to access these funds in the markets regardless of the level of development of financial markets. However, well-developed financial markets that distribute capital on the basis of ability or on the merits of a business proposal are essential for the poor to have access to those same opportunities. If markets function well, both rich and poor have access to capital and scarce resources are assigned where they will have the greatest returns, thereby increasing wealth in the whole society.

legal institutions that safeguard the interests of investors is an integral part of financial development.<sup>4</sup> Reforms that bolster a country's legal environment and investor protection are likely to contribute to better growth prospects.<sup>5</sup> Accordingly, we have included variables related to the degree of judicial independence and judicial efficiency.

Better corporate governance is believed to encourage financial development, which in turn has a positive impact on growth.<sup>6</sup> Contract enforcement is also important as it limits the scope for default among debtors, which in turn promotes compliance in the formal transfer of funds from savers to investors.<sup>7</sup> Inadequate investor protection leads to a number of adverse effects, which can be detrimental to external financing and ultimately the development of well functioning capital markets.<sup>8</sup> In general, inadequate enforcement of financial contracts has been found to augment the process of credit rationing, thus hindering the overall process of growth.<sup>9</sup>

Other important aspects related to the institutional environment are a country's capital account openness and domestic financial sector liberalization. Financial liberalization generally permits a greater degree of financial depth, which translates into greater financial intermediation among savers and investors. This in turn increases the monetization of an economy, resulting in a more efficient flow of resources. <sup>10</sup> Empirically, however, the impact of capital account liberalization delivers mixed evidence. Several studies have asserted that capital account liberalization has no impact on growth while others have found a positive, and statistically significant, impact. <sup>11</sup> At the same time, other work asserts that the relationship is undetermined.

Given such ambiguity over the impact of capital account openness, it is best examined within the context of the legal environment. The better a country's legal environment, the greater the benefits from capital account openness, and vice versa. Accordingly, within the Index we try to capture the relationship between capital account openness and the level of legal development and have interacted the variables used to measure each (see methodology later in this chapter). The presence of both a robust legal system and capital account openness provides a positive indication of the financial development of a country.

A similar analysis can be extended to the degree of liberalization of the domestic financial sector. This degree of liberalization is based on whether a country exerts interest rate controls (either ceilings or floors), whether credit ceilings exist, and whether foreign currency deposits are allowed. In general, the better a country's legal and regulatory environment, the greater the impact of domestic financial sector liberalization on a county's economic growth. Variables representing each of these characteristics have been interacted to represent this result. Recent research supports the importance of

advanced legal systems and institutions in this respect, holding that the presence of such institutions is as vital as having both a developed banking sector and equity market development.<sup>12</sup>

#### Second pillar: Business environment

The second pillar focuses on the business environment and considers:

- the availability of human capital—that is, skilled workers who can be employed by the financial sector and thus provide efficient financial services;
- the state of physical capital—that is, the physical and technological infrastructure; and
- other aspects of the business environment, including taxation levels and the costs of doing business for financial intermediaries.

Measures taken to facilitate the creation and improvement of human capital have been found to assist the process of economic growth.<sup>13</sup> Empirical evidence supports this relationship showing positive correlations between human capital and the degree of financial development.<sup>14</sup> Our proxies for the amount of human capital are related to the enrollment levels of tertiary education. We also include measures that reflect the quality of human capital, such as the degree of staff training, the quality of management schools and math and science education, and the availability of research and training services.

Another key area is infrastructure. Physical infrastructure enhances the process of private capital accumulation by increasing the profitability of investment. Dur analysis of infrastructure captures different measures of information and communication technologies that are important to any business, especially those operating within a financial context.

Another integral aspect of the business environment is the cost of doing business in a country. Specifically, research has shown that the cost of doing business is a vital feature of the efficiency of financial institutions. The different costs of doing business are integral to assessing a country's business environment as well as the type of constraints that businesses may be facing. <sup>16</sup> As such, the better the business environment, the better the performance of financial institutions, and the higher the degree of financial development. Variables that capture such costs include the World Bank's measures of the cost of starting a business, the cost of registering property, the cost of dealing with licensing, the cost of exporting and importing, and the cost of closing a business.

Our analysis also considers taxes as another key constraint that businesses can face. Generally, the higher the tax rates, the lower the growth rate as higher taxes deter businesses from operating and expanding. Within the context of financial intermediaries, higher taxes deter financial intermediaries from expanding, and hence impede economic growth.

#### Third pillar: Financial stability

The third pillar addresses the stability of the financial system. This factor is important given the pervasiveness of episodes of financial crises that have negative effects on economic growth and lead to significant losses to investors, including systemic banking crises, systemic corporate crises, currency crises and sovereign debt crises.

Financial stability can be considered in terms of a trade-off between risk and innovation/return. For example, a financial system that is very heavily supervised and regulated may be very stable and never spark a financial crisis. However, such a controlled system would hamper the financial development and innovation that increases returns, diversifies risks, and better allocates resources to the highest-return investments. Conversely, a financial system that is very free and innovative and is very lightly regulated and supervised may eventually become unstable and trigger credit booms and asset

#### Box 2: The cost of financial crises

(Please see subsequent essay by Nouriel Roubini in Chapter 1.3 for a full discussion of this topic)

Financial crises have important economic and financial consequences that might lead to severe economic contractions such as recessions or depressions. These contractions may be either short-lived or persist over time. Financial crises are also associated with significant bankruptcies among households, corporate firms and financial institutions, with all the ensuing social deadweight losses from debt restructurings and bankruptcies. This makes financial crises expensive. Within this context, financial stability arises as an important issue given the pervasiveness of episodes of financial crises, including systemic banking crises, systemic corporate crises, currency crises and sovereign debt crises.

Financial stability, a crucial input to financial development, should be viewed in terms of a trade-off between risk and return/innovation. A financial system that is highly supervised and regulated may be very stable but could hamper financial development and the innovation that allows increased returns, better diversification of risks, and better allocation of resources. Conversely, a financial system that lacks financial stability, that is free and innovative and very lightly regulated may become unstable, triggering credit booms and asset bubbles that may have severe effects on growth, returns and welfare if they go bust.

Asset bubbles occur when an asset price rises above the underlying fundamental value. Asset bubbles can occur for any financial or real asset but recent experience shows they are pervasive in equity markets and in housing and real estate markets. The perverse interaction between easy money, asset bubbles, credit growth and leveraging that feeds asset bubbles has been observed in many episodes. In the mid 1980s in the United States, the credit cycle fed the investment boom in commercial and residential real estate causing a real estate bubble that went bust in the late 1980s. In the 1990s, the tech and Internet bubble was in part fed by easy monetary policy, with the Fed worrying about "irrational exuberance" and doing nothing to control it. This bubble was also fed by easy credit conditions that allowed investors to use leverage to increase their pur-

chases of high-tech and Internet stocks. Next, there was the housing and credit bubble of the 2000s, which was followed by the housing bust and credit crunch of 2007.

Other episodes of systemic crisis and financial crisis include the Japanese real estate bubble and equity bubble of the 1980s that collapsed in 1990 and led to an acute banking and corporate crisis and a severe decade long stagnation during the 1990s. We witnessed the Scandinavian banking crises of the early 1990s and the collapse of the fixed exchange rates within the European Monetary System in 1992–93.

Among emerging market economies, the Latin American sovereign debt crisis started in 1982 and led to a decade of lost growth. Another cycle of financial crises, a combination of currency, sovereign debt, banking, corporate and household debt crises, started in 1994 with the collapse of the Mexican peso currency peg. The following decade showed a variety of financial crises in emerging market economies: East Asia (Thailand, Indonesia, Malaysia, Korea) in 1997–98; Russia in 1998; Brazil in 1999; Ecuador, Pakistan, and Ukraine in 1999–2000; and Turkey and Argentina in 2001.

The history of most financial and banking crises suggests that in almost every episode the resolution of the crisis entails a significant amount of government intervention that is fiscally costly. These fiscal bailout costs are a significant social burden. The added public debt needed to bail out borrowers and/or lenders has to be serviced over time, which means that the social costs of systemic banking and financial crises are very serious in the affected economies.

Within this framework, financial stability becomes an important factor in assessing the degree of development of a financial system. While financial crises will never be altogether eliminated, the frequency and severity of booms and busts of asset prices and credit that cause financial crises and costly financial instability can be reduced if appropriate supervision and regulation is applied. Such reduction will also contribute to reducing the fiscal costs associated with such crises, thereby lessening their consequences.

bubbles that can severely affect growth, returns and welfare. While there is some trade-off between the stability of the financial system and its degree of innovation and sophistication, financial stability remains an important input in the process of financial development. Excessively unstable financial systems—systems that are prone to repeated and virulent financial crises—are less likely to grow and develop.

This pillar tries to capture the risk of three types of crises: currency crises, systemic banking crises and sovereign debt crises. For the risk of currency crises, variables captured include the real effective exchange rate, current account balance, the dollarization vulnerability indicator, the external vulnerability indicator, and external debt to GDP.

The systemic banking crises subpillar captures the frequency of banking crises since the 1970s, the degree of banking stability, a measure of cumulative real estate appreciation, and a measure of the regulation of the banking institutions. Banking stability is one of the most important variables that proxies for the risk of systemic banking crises. Empirical research has shown that countries that have gone through systemic banking crises or endured a high degree of financial volatility are more susceptible to profound short-term negative impacts on the degree of financial intermediation. More stable countries were found not to be vulnerable to such effects and are thus more prone to growth.<sup>17</sup>

Research has also been conducted on the link between banking regulatory and supervisory issues and banking sector development. Policies that induce correct information disclosure, authorize private sector corporate control of banks, and provide motivation for private agents to exercise corporate control tend to encourage the development, operational efficiency, and stability of the banking system. This in turn enhances growth. Fewer regulatory restrictions on banks have also been shown to decrease banking system vulnerabilities. Research also shows that countries that foster competition among banks through national institutions are less likely to experience a systemic banking crisis.<sup>18</sup>

The last type of crisis captured within this pillar is sovereign debt crisis. The best proxy for the risk of this crisis is sovereign credit ratings. These data were calculated as an average of both local currency sovereign credit ratings and foreign currency credit sovereign ratings. Sovereign ratings measure the degree to which a country is willing and able to pay its debt in a timely manner and in full. Thus, a high sovereign credit rating signifies a lesser likelihood of default as occasioned by a sovereign debt crisis.

The greater the risk of these crises, the greater the likelihood that the different processes of financial intermediation will be hampered, precipitating lower economic growth rates.

#### Financial intermediaries and markets

The second category of pillars measures the degree of development of the financial sector as seen in the different types of intermediaries. These three pillars are: banks, non-banks (e.g., investment banks and insurance firms) and financial markets.

#### Fourth pillar: Banks

Bank-based financial systems emerge to improve acquisition of financial information and lower transaction costs, as well as to more efficiently allocate credit. This role is especially important in developing economies.

The efficient allocation of capital in a financial system generally occurs through bank-based systems or market-based financial systems.<sup>19</sup> Some research asserts that banks finance growth more effectively and efficiently than market-based systems, particularly in underdeveloped economies where non-bank financial intermediaries are generally less sophisticated.<sup>20</sup> Research also shows that compared to other forms of financial intermediation, well-established banks form strong ties with the private sector, which enables them to acquire information about firms more efficiently and to persuade firms to pay their debts in a timely manner.<sup>21</sup> Advocates of bank-based systems argue that banks that are unimpeded by regulatory restrictions tend to benefit from economies of scale in the process of collecting information and can thus enhance industrial growth. Banks are also seen as key players in eradicating liquidity risk, which causes them to increase investments in highreturn, illiquid assets and speed up the process of economic growth.22

One of the key measures of the efficacy of the banking system captured in this pillar is size. The greater the size of the banking system, the greater the amount of resources that can be channeled from savers to investors. This enhances the process of financial development, which in turn leads to greater economic growth.

Another key aspect of the banking system is its efficiency. An important aspect of efficiency is the structure of bank ownership and how this structure affects its performance. Publicly owned banks tend to be less efficient, impeding the process of credit allocation and channeling of capital, which in turn slows down the process of financial intermediation.

Another measure of the efficiency of a banking system is the degree of foreign ownership of banks, which reflects a country's investment climate and the willingness of the government to allow competition.<sup>23</sup> Efficiency also encompasses the degree of banking concentration, which is captured in a measure of the share of assets (deposits) in the three largest banks in a country. Concentrated banking systems are usually less prone to a systemic banking crisis, which improves the efficiency of their operations.<sup>24</sup>

A third key aspect of efficiency captured by this pillar is the role of financial information disclosure within

the operation of banks. Policies that induce correct information disclosure, authorize private sector corporate control of banks, as well as motivate private agents to exercise corporate control, tend to encourage bank development, operation, and stability.<sup>25</sup> This has a positive effect on the overall economy.

#### Fifth pillar: Non-banks

Non-bank financial intermediaries, such as broker dealers, traditional asset managers, alternative asset managers and insurance companies, are considered both a complement to banks, as well as a substitute for them. Their complementary role lies in their efforts to fill any vacuum created by commercial banks. Their competition with banks allows both parties to operate more efficiently in meeting market needs. Activities of non-bank financial intermediaries include their participation in securities markets, as well as the mobilization and allocation of financial resources of a longer-term nature, for example in insurance activities.

Empirical research has found that banks as well as non-bank financial intermediaries are larger, more active, and more efficient in advanced economies. Advocates of the market-based system (i.e., non-banks) point to the fact that the market-based system is able to finance innovative and high-risk projects. As for the insurance sector, it can be seen as a tool that eases trade and commerce by providing ample liability coverage. Insurance also creates liquidity and facilitates the process of building economies of scale in investment, thereby improving overall financial efficiency. Insurance has also been found to mobilize illiquid savings to positively affect growth.

The degree of development of non-bank financial intermediaries in general has been found to be a good proxy of a country's overall level of financial development.<sup>30</sup>

#### Sixth pillar: Financial markets

The four major types of financial markets include bond markets (both for government and corporate bonds), stock markets where equities are traded, foreign exchange markets and derivatives markets.

Stock market liquidity is statistically significant in terms of its positive impact on capital accumulation, productivity growth, and current and future rates of economic growth.<sup>31</sup> More generally, economic theory suggests that stock markets encourage long-run growth by promoting specialization, acquiring and disseminating information, and mobilizing savings in a more efficient way to promote investment.<sup>32</sup> Research also shows that as countries become richer, stock markets become more active and efficient relative to banks.<sup>33</sup> Bond markets have received little empirical attention, but recent research has shown that bond market development does in fact affect economic output.<sup>34</sup>

Derivatives markets are an important aspect of this pillar because they can significantly improve risk management and risk diversification. The development of derivatives markets can enhance the confidence of international investors and financial institutions to participate in them. Derivatives markets generally are small in emerging markets. The strengthening of the legal and regulatory environment can enhance the development of such markets, which in turn contributes to the process of economic growth.<sup>35</sup>

#### Capital availability and access

This third and final category is comprised of one pillar which represents the "outputs" of financial intermediation.

#### Seventh pillar: Size, depth, and access

The measures represented in this last pillar span the size and depth of the financial system and the degree of access by both savers and users of capital to financial services. These macro-level issues of size and depth and micro-level issues of access are integrally related to the provision and allocation of capital that drive economic growth.

#### Size and depth

Empirical evidence shows that a limited set of variables is significantly correlated with economic growth and welfare and can be good proxies for the "output" of financial intermediation. This output group includes measures of how large and deep the financial system is, appropriately scaled to the GDP of the country. It also includes measures of access to capital and financial services by businesses.

Consensus exists on the relationship between the size and depth of the financial system and the supply and robustness of financial services that drive economic growth.36 This effect occurs because the size of financial markets is viewed as an important determinant of savings and investment.<sup>37</sup> The size of the financial system also matters because the larger the size of the financial system, the greater its ability to benefit from economies of scale given the significant fixed costs prevailing in financial intermediaries' activities. A larger financial system tends to relieve existing credit constraints. This facilitates borrowing by firms and further improves the process of savings mobilization and the channeling of savings to investors. Given that a large financial system should allocate capital efficiently and better monitor the use of funds, improved accessibility to financing will tend to amplify the resilience of an economy to shocks. Thus, a larger financial system implies a better allocation of risks, increasing the level of physical and human capital accumulation, which leads to higher growth rates.<sup>38</sup>

Empirical studies concerning financial development and growth have generally found that cross-country differences in the levels of financial development explain a considerable portion of the cross-country differences in growth rates.<sup>39</sup> Correspondingly, improvements in the depth of financial markets seemed to precipitate improvements in economic growth rates across countries.<sup>40</sup>

The proxies included to capture size and depth, include M2<sup>41</sup> to GDP, stock market capitalization to GDP, bank deposits to GDP, public as well as private debt to GDP, and private credit by deposit money banks and other financial institutions to GDP.

#### Access

Another integral component of this "output" category is access to financial services. Empirically, greater access to financial services has been associated with the usual proxies for financial development and resulting economic growth.<sup>42</sup> The presence of financial services per se as reflected by size and depth does not imply their accessibility by the different types of users within an economy. Thus, the presence of access as part of the output pillar becomes integral to our analysis. The measures of access captured include venture capital availability, access to local equity markets, access to credit, access to loans and an overall level of financial market sophistication. Performance in the other pillars contributes to performance in this subpillar and the extent of access to financial services by end users. Accessibility, along with the size and depth of the financial system as a whole, has a significant effect on a country's real activity, economic growth and overall welfare.

#### Methodological overview

As indicated in the preceding description of the seven pillars, the *Report* takes a holistic approach in the design of the Index by trying to address the breadth of different factors relevant to financial development. Accordingly, a large variety of variables were included for the 52 financial systems covered by the Index. The choice of variables was guided by two general criteria:

- the findings of the vast body of empirical studies, which focus on financial development; and
- the availability of data that serve as effective proxies for the different dimensions of financial development across emerging and developed economies.

The variables were organized into the seven pillars using a methodology similar to that used in other indexes published by the World Economic Forum. A combination of *hard* data from various sources, such as the World Bank and the Bank of International Settlements, and *survey* data collected as part of the Forum's Executive Opinion Survey is used. <sup>43</sup> This survey captures data that are otherwise not available through hard data sources, such as those pertaining to a country's institutional and business environment, and the degree to which firms feel

they can easily access different forms of capital such as venture capital, initial public offerings and private credit.

#### Approach to standardization

To permit aggregation and cross-country comparisons, all hard data variables (i.e., not from the Forum's *Survey*) in the Financial Development Index have been standardized. This was done by re-scaling these variables on a 1-to-7 scale, the former being the least advantageous and the latter being the most advantageous to financial development. The following formula was employed to standardize those variables:

The sample minimum and sample maximum are, respectively, the lowest and highest country scores in the sample of 52 countries covered by this Index. Thresholds were identified for outliers in both directions (maximum and minimum) and high outliers were automatically given a score of 7 and low outliers a score of 1. For those variables where a higher raw data value implies a worse result (such as any vulnerability indicator), we inverted the standardization formula such that a higher standardized score is still considered more advantageous.<sup>44</sup> Data from the Executive Opinion Survey are presented in their original form as an aggregation of survey responses on a 1-to-7 scale.

In certain cases, a "non-monotonic" standardization had to be employed to ensure that the proportion between the raw data and standardized score changes over the range of data for the variable. The public bond to GDP variable was treated in this manner. In general we have assumed that low levels of public bonds to GDP imply low levels of financial development. As the level of public bonds to GDP increases, the degree of development of the bond market improves, which contributes to financial development as a whole. After a certain level, however, high debt levels may be considered a weakness within the economy. To reflect this in the Index variable, a threshold was selected (60 percent of GDP) above which the standardized score begins to go down. This also implies that having debt equivalent to 60 percent of GDP is treated as the "best" level of debt and thus gets a standardized score of 7.

In some instances, the "interaction" between different variables was also captured as certain variables can be considered more beneficial in the presence of others. For instance, the effect of liberalizing the capital account and the domestic financial sector has been found in empirical studies to be mixed, yielding both positive and negative results. However, the presence of a strong legal and regulatory environment tends to mitigate the negative impacts of the liberalization process. To account for this, the scores of the capital account liberalization and domestic financial sector liberalization indexes were adjusted. Any country above the average standardized

score for the legal and regulatory environment<sup>45</sup> experienced positive effects as a result of the liberalization process, while the opposite is true for countries with scores lower than this average.<sup>46</sup>

#### Weighting and scaling of variables

One of the key design principles of the Index is the inclusion of the breadth of variables relevant to the financial development of both emerging and developed economies. The aggregation of these variables into an overall Index can provide a unified measure of financial development. However, by examining the individual pillars and constituent variables one gains greater insight into the strengths and weaknesses of different financial systems.

Given the emphasis placed on the component parts of the Index as a framework for analysis, we have taken a very conservative approach to the weighting of variables. Unless there is a clear and compelling reason to the contrary, we have generally weighted different components of the Index equally. The seven pillars are weighted equally as are most of the subpillars that comprise each of the pillars. The weightings of the different pillars and subpillars as the result of this approach is described in Appendix A.

We recognize and agree that there is a case to be made that certain elements of the financial system are more important for different countries depending on their unique circumstances and different stages of development. For instance, the "sequencing" theory supported by some within the academic community emphasizes the importance of sequential development of different aspects of the financial system depending on a country's stage of development. A key tenet of this theory asserts that banks are more important in the process of financial development and reform for emerging markets, while capital markets and non-banks (for example equity markets and investment banks) are more important for advanced economies. Yet, given the diversity of countries covered in the Index and the variety of issues they confront, we decided that the risks of being overly prescriptive in weighting certain variables for different classes of countries justified our more conservative approach.

In some instances, there was sufficient cause to assign different weights to the subpillars within the Index. Within the risk of systemic crises subpillar, the regulation of banking institutions and the stability index are weighted more (30 percent each) as compared to the frequency of crises and the appreciation of real estate variables (20 percent each). Within the banking pillar there are three sub-groups: the size of the banking system, efficiency of the banking system, and the role of financial information disclosure. The first two variables were weighted 40 percent each in this pillar, while the last variable was weighted at 20 percent, thus placing more importance on the size and efficiency of the banking system. Within the financial markets pillar, a 30

percent weight was assigned to the equity and bond market subpillars, and a 20 percent weight was assigned to the foreign exchange and derivatives market subpillars. This was done to signify the relatively greater importance of equity and bond market development.

For many variables, especially those related to the size and depth of the financial system, scaling by GDP was deemed necessary to control for country size. Scaling by GDP also allows for more relevant crosscountry comparisons.

#### The Financial Development Index 2008 rankings

The detailed rankings for the Financial Development Index (FDI) are presented in Table 1. Overall rankings are listed first followed by rankings within each of the seven pillars that comprise the FDI.

At first glance, the overall FDI rankings yield what may be unsurprising results: the United States and the United Kingdom came out on top of the Index at 1st and 2nd place respectively in what amounts to a virtual tie. This seems consistent with their standing as longestablished and truly global financial centers. They are followed by a very closely ranked tier of developed Western and some Asian countries in the top 10. Germany, Japan, Canada, France, Switzerland, Hong Kong and the Netherlands take the third through ninth spots with very close overall scores and Singapore comes in at 10th with a slightly lower score. Less developed countries from other regions progressively populate the lower reaches of the FDI.

However, the more interesting and instructive story revealed by the FDI is the degree of variation in performance across the seven pillars of the Index. This holistic view of financial systems reveals strengths and development areas, extending across both top and low performers alike that might not immediately be apparent. In Table 2, one can see those countries that most frequently scored within the top three places in each of the seven pillars. Interestingly, aside from the United Kingdom and the United States, those countries that achieved top scores in one or more pillars did not necessarily take top honors in the overall ranking. For these countries, success in one pillar is offset by shortcomings in others, thereby affecting the overall performance of the financial system as measured by the FDI. Germany was one of the few top-ranked countries that delivered even performance across all seven pillars; it is number three in the overall ranking yet did not make the top three in any of the seven component pillars.

## Factors, policies, and institutions versus financial intermediation

By looking beyond the overall rankings to explore variations in different facets of financial systems both within and across countries, the FDI can be a useful tool to frame new patterns of analysis. To illustrate this, we

#### **Table 1: Financial Development Index 2008**

						CTORS, POLICIES, AN						
0	D 1		1st pillar: Institutional			2nd pillar: Business environment			3rd pillar: Financial stability			
Country/Economy	Rank		Country/Economy		Score	Country/Economy		Score	Country/Economy	Rank		
United States	1	5.85	Singapore	1	6.31	Singapore	1	5.82	Singapore	1	6.2	
United Kingdom	2	5.83	Hong Kong SAR	2	6.24	Finland	2	5.76	Switzerland	2	6.1	
Germany	3	5.28	Finland	3	6.23	Norway	3	5.67	Saudi Arabia	3	5.9	
Japan	4	5.28	Norway	4	6.15	Hong Kong SAR	4	5.65	Norway	4	5.8	
Canada -	5	5.26	United Kingdom	5	6.09	Sweden	5	5.63	Austria	5	5.8	
France	6	5.25	Germany	6	6.08	Switzerland	6	5.63	Germany	6	5.	
Switzerland	7	5.23	Canada	7	6.06	Netherlands	7	5.57	Netherlands	7	5.	
Hong Kong SAR	8	5.23	Sweden	8	6.06	Canada	8	5.43	Japan	8	5.7	
Netherlands	9	5.22	Austria	9	6.04	Korea, Rep.	9	5.42	United Arab Emirates	9	5.	
Singapore	10	5.15	Netherlands	10	6.02	Germany	10	5.41	United States	10	5.	
Australia	11	4.98	Ireland	11	6.01	United Kingdom	11	5.34	Ireland	11	5.	
Spain	12	4.90	United States	12	5.98	United States	12	5.32	Kuwait	12	5.4	
Sweden	13	4.75	Australia	13	5.94	Austria	13	5.29	Sweden	13	5.2	
Ireland	14	4.72	Japan	14	5.88	Australia	14	5.24	Canada	14	5.	
Norway	15	4.66	Belgium	15	5.84	France	15	5.20	Finland	15	5.	
United Arab Emirates	16	4.61	France	16	5.83	Japan	16	5.17	Belgium	16	5.:	
Belgium	17	4.56	Switzerland	17	5.74	Ireland	17	5.15	Hong Kong SAR	17	5.	
Austria	18	4.55	Israel	18	5.66	<b>United Arab Emirates</b>	18	5.14	Malaysia	18	5.	
Korea, Rep.	19	4.55	Spain	19	5.62	Israel	19	5.00	China	19	5.	
Malaysia	20	4.48	Bahrain	20	5.43	Belgium	20	5.00	France	20	5.	
Finland	21	4.45	Chile	21	5.38	Kuwait	21	4.93	Australia	21	5.	
Italy	22	4.38	Malaysia	22	5.14	Chile	22	4.89	Spain	22	5.	
Israel	23	4.14	Korea, Rep.	23	5.08	Malaysia	23	4.80	United Kingdom	23	4.	
China	24	4.09	United Arab Emirates	24	5.02	Spain	24	4.80	Italy	24	4.	
South Africa	25	4.00	Panama	25	4.82	Czech Republic	25	4.77	Bahrain	25	4.	
Kuwait	26	3.93	Italy	26	4.66	Bahrain	26	4.74	South Africa	26	4.7	
Saudi Arabia	27	3.90	South Africa	27	4.58	Hungary	27	4.71	Mexico	27	4.0	
Bahrain	28	3.89	Hungary	28	4.52	Slovak Republic	28	4.69	India	28	4.0	
Thailand	29	3.82	Indonesia	29	4.46	Italy	29	4.63	Thailand	29	4.	
Chile	30	3.79	Thailand	30	4.46	Poland	30	4.56	Israel	30	4.4	
India	31	3.63	Mexico	31	4.31	Saudi Arabia	31	4.54	Chile	31	4.4	
Panama	32	3.61	Peru	32	4.22	Turkey	32	4.38	Korea, Rep.	32	4.4	
Hungary	33	3.53	Saudi Arabia	33	4.18	Thailand	33	4.24	Russian Federation	33	4.4	
Pakistan	34	3.46	Czech Republic	34	4.14	Russian Federation	34	4.08	Czech Republic	34	4.2	
Czech Republic	35	3.43	Egypt	35	4.07	China	35	4.07	Colombia	35	4.2	
Russian Federation	36	3.40	Kuwait	36	4.06	South Africa	36	4.03	Slovak Republic	36	4.	
Egypt	37	3.32	Slovak Republic	37	3.80	Brazil	37	4.00	Pakistan	37	4.	
Indonesia	38	3.31	Colombia	38	3.80	Panama	38	3.95	Poland	38	4.0	
Turkey	39	3.30	Nigeria	39	3.71	Argentina	39	3.92	Nigeria	39	4.0	
Brazil	40	3.28	Brazil	40	3.69	Egypt	40	3.91	Vietnam	40	3.	
Poland	41	3.27	Philippines	41	3.60	Peru	41	3.89	Venezuela	41	3.	
Slovak Republic	42	3.25	Poland	42	3.54	Ukraine	42	3.88	Peru	42	3.	
Mexico	43	3.21	India	43	3.42	Colombia	43	3.82	Indonesia	43	3.	
Colombia	44	3.21	Turkey	44	3.36	Mexico	44	3.81	Brazil	44	3.	
Kazakhstan	44	3.13	Argentina	44	3.35	India	44	3.61	Kazakhstan	44	3.	
Peru	45	3.06	China	45	3.33	Vietnam	45	3.56	Hungary	45	3.	
									• ,			
Argentina	47	3.04	Kazakhstan	47	3.14	Kazakhstan	47	3.51	Egypt	47	3.	
Philippines	48	3.03	Russian Federation	48	3.10	Philippines	48	3.50	Philippines	48	3.	
Vietnam	49	3.03	Pakistan	49	3.09	Indonesia	49	3.46	Panama	49	3.	
Nigeria	50	2.76	Vietnam	50	3.06	Pakistan	50	3.46	Argentina	50	2.	
Ukraine	51	2.73	Ukraine	51	2.75	Venezuela	51	3.22	Ukraine	51	2.	
Venezuela	52	2.71	Venezuela	52	2.39	Nigeria	52	3.08	Turkey	52	2.	

Table 1: Financial Development Index 2008 (cont'd.)

			FINANCIAL INTEN					
4th pillar: Ba		5th pillar: Non-				- <del> </del>	6th pillar: Financial mar	
Country/Economy	Rank	Score	Country/Economy	Rank	Score		Country/Economy	Country/Economy Rank
United States	1	5.80	United Kingdom	1	6.55		United States	United States 1
Malaysia	2	5.72	United States	2	6.05		United Kingdom	United Kingdom 2
United Kingdom	3	5.51	France	3	5.29		Switzerland	Switzerland 3
United Arab Emirates	4	5.26	Japan	4	4.50		France	France 4
Hong Kong SAR	5	5.20	Canada	5	4.37		Japan	Japan 5
Canada	6	5.15	Australia	6	4.26		Singapore	Singapore 6
China	7	4.97	Germany	7	4.12		Germany	Germany 7
Japan	8	4.92	Netherlands	8	3.87		Australia	Australia 8
Germany	9	4.85	Spain	9	3.77		Netherlands	Netherlands 9
Spain	10	4.84	Russian Federation	10	3.71		United Arab Emirates	United Arab Emirates 10
Korea, Rep.	11	4.81	Korea, Rep.	11	3.62		Hong Kong SAR	Hong Kong SAR 11
Ireland	12	4.80	Kazakhstan	12	3.56		Sweden	Sweden 12
Indonesia	13	4.60	Hong Kong SAR	13	3.54		Canada	Canada 13
France	14	4.55	Italy	14	3.35		Spain	Spain 14
Thailand	15	4.45	China	15	3.30		Italy	
Italy	16	4.41	India	16	3.24		Belgium	
Belgium	17	4.37	Ireland	17	3.15		Pakistan	•
Austria	18	4.32	Switzerland	18	2.99		Finland	
Netherlands	19	4.25	Singapore	19	2.91		Kuwait	
Norway	20	4.20	Sweden	20	2.87		Korea, Rep.	
Australia	21	4.20	Brazil	21	2.82		Turkey	
South Africa	22	4.12	Argentina	22	2.48		India	,
Saudi Arrica Saudi Arabia	23	4.09	South Africa	23	2.48			
		-					Malaysia	,
Kuwait	24	3.96	Norway	24	2.38		Austria	
Pakistan	25	3.91	Bahrain	25	2.27		Norway	,
Israel	26	3.85	Belgium	26	2.25		Ireland	
Switzerland	27	3.80	Israel	27	2.23		Panama	
Vietnam	28	3.78	Turkey	28	2.19		South Africa	
Panama	29	3.77	Finland	29	2.15		Saudi Arabia	Saudi Arabia 29
Chile	30	3.72	Austria	30	2.12		China	China 30
Sweden	31	3.67	Peru	31	2.08		Czech Republic	Czech Republic 31
Singapore	32	3.63	Hungary	32	2.01		Bahrain	Bahrain 32
Hungary	33	3.46	Ukraine	33	1.99		Israel	Israel 33
Egypt	34	3.40	Panama	34	1.95		Brazil	Brazil 34
Slovak Republic	35	3.36	Malaysia	35	1.93		Hungary	Hungary 35
Colombia	36	3.33	Colombia	36	1.89		Thailand	• '
Turkey	37	3.32	Thailand	37	1.89		Argentina	
Poland	38	3.21	Mexico	38	1.88		Egypt	
Ukraine	39	3.13	United Arab Emirates		1.87		Poland	371
Finland	40	3.08	Philippines	40	1.78		Chile	
	41		• • • • • • • • • • • • • • • • • • • •	40	-		Russian Federation	******
Kazakhstan	41	3.07	Egypt	41	1.75			
Philippines		2.96	Pakistan		1.73		Philippines	
Bahrain	43	2.96	Poland	43	1.72		Venezuela	
Czech Republic	44	2.92	Chile	44	1.68		Kazakhstan	
Russian Federation	45	2.87	Venezuela	45	1.62		Mexico	
Argentina	46	2.85	Indonesia	46	1.58		Indonesia	
Venezuela	47	2.81	Nigeria	47	1.48		Colombia	Colombia 47
Nigeria	48	2.80	Czech Republic	48	1.47		Slovak Republic	Slovak Republic 48
Mexico	49	2.65	Saudi Arabia	49	1.40		Peru	Peru 49
India	50	2.61	Vietnam	50	1.40		Nigeria	Nigeria 50
Peru	51	2.51	Slovak Republic	51	1.31		Ukraine	
Brazil	52	2.47	Kuwait	52	1.07		Vietnam	

FINANCIAL INTERMEDIATION

# CAPITAL AVAILABILITY AND ACCESS

#### 7th pillar: Size, depth, and access

Country/Economy         Rank         Score           Switzerland         1         6.89           Netherlands         2         6.71           Hong Kong SAR         3         6.62           United Kingdom         4         6.48           Canada         5         6.47           Spain         6         6.38           Singapore         7         6.16           United States         8         6.15           Germany         9         5.84           Japan         10         5.72           France         11         5.66           Malaysia         12         5.65           Sweden         13         5.60           Australia         14         5.60           Ireland         15         5.59           Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab	7tii piliar. Size, uepu	ı, anu	
Netherlands         2         6.71           Hong Kong SAR         3         6.62           United Kingdom         4         6.48           Canada         5         6.47           Spain         6         6.38           Singapore         7         6.16           United States         8         6.15           Germany         9         5.84           Japan         10         5.72           France         11         5.66           Malaysia         12         5.65           Sweden         13         5.60           Australia         14         5.60           Ireland         15         5.59           Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy	Country/Economy	Rank	Score
Hong Kong SAR         3         6.62           United Kingdom         4         6.48           Canada         5         6.47           Spain         6         6.38           Singapore         7         6.16           United States         8         6.15           Germany         9         5.84           Japan         10         5.72           France         11         5.66           Malaysia         12         5.65           Sweden         13         5.60           Australia         14         5.60           Ireland         15         5.59           Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand	Switzerland	1	6.89
United Kingdom         4         6.48           Canada         5         6.47           Spain         6         6.38           Singapore         7         6.16           United States         8         6.15           Germany         9         5.84           Japan         10         5.72           France         11         5.66           Malaysia         12         5.65           Sweden         13         5.60           Australia         14         5.60           Ireland         15         5.59           Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           Fouth Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama <td< td=""><td>Netherlands</td><td>2</td><td>6.71</td></td<>	Netherlands	2	6.71
Canada         5         6.47           Spain         6         6.38           Singapore         7         6.16           United States         8         6.15           Germany         9         5.84           Japan         10         5.72           France         11         5.66           Malaysia         12         5.65           Sweden         13         5.60           Australia         14         5.60           Ireland         15         5.59           Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           Foult Africa         21         5.30           Finland         24         5.14           Italy         25         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27	Hong Kong SAR	3	6.62
Spain         6         6.38           Singapore         7         6.16           United States         8         6.15           Germany         9         5.84           Japan         10         5.72           France         11         5.66           Malaysia         12         5.65           Sweden         13         5.60           Australia         14         5.60           Ireland         15         5.59           Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           China         24         5.14           Italy         25         5.27           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30 <td< td=""><td>United Kingdom</td><td>4</td><td>6.48</td></td<>	United Kingdom	4	6.48
Singapore         7         6.16           United States         8         6.15           Germany         9         5.84           Japan         10         5.72           France         11         5.66           Malaysia         12         5.65           Sweden         13         5.60           Australia         14         5.60           Ireland         15         5.59           Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30<	Canada	5	6.47
Singapore         7         6.16           United States         8         6.15           Germany         9         5.84           Japan         10         5.72           France         11         5.66           Malaysia         12         5.65           Sweden         13         5.60           Australia         14         5.60           Ireland         15         5.59           Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30<	Spain	6	6.38
Germany         9         5.84           Japan         10         5.72           France         11         5.66           Malaysia         12         5.65           Sweden         13         5.60           Australia         14         5.60           Ireland         15         5.59           Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32 <td>Singapore</td> <td>7</td> <td>6.16</td>	Singapore	7	6.16
Japan         10         5.72           France         11         5.66           Malaysia         12         5.65           Sweden         13         5.60           Australia         14         5.60           Ireland         15         5.59           Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33 </td <td>United States</td> <td>8</td> <td>6.15</td>	United States	8	6.15
France         11         5.66           Malaysia         12         5.65           Sweden         13         5.60           Australia         14         5.60           Ireland         15         5.59           Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33         4.33           Hungary         34	Germany	9	5.84
Malaysia         12         5.65           Sweden         13         5.60           Australia         14         5.60           Ireland         15         5.59           Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33         4.33           Hungary         34         4.28           Chile         35<	Japan	10	5.72
Sweden         13         5.60           Australia         14         5.60           Ireland         15         5.59           Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33         4.33           Hungary         34         4.28           Chile         35<	France	11	5.66
Australia         14         5.60           Ireland         15         5.59           Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Thailand         26         4.95           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33         4.33           Hungary         34         4.28           Chile         35         4.27           Vietnam         36         4.24           Brazil         37	Malaysia	12	5.65
Ireland         15         5.59           Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33         4.33           Hungary         34         4.28           Chile         35         4.27           Vietnam         36         4.24           Brazil         37         4.10           Turkey         39	Sweden	13	5.60
Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33         4.33           Hungary         34         4.28           Chile         35         4.27           Vietnam         36         4.24           Brazil         37         4.10           Prinklippines         38         4.07           Turkey         3	Australia	14	5.60
Belgium         16         5.57           Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33         4.33           Hungary         34         4.28           Chile         35         4.27           Vietnam         36         4.24           Brazil         37         4.10           Prinklippines         38         4.07           Turkey         3		15	5.59
Israel         17         5.47           Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33         4.33           Hungary         34         4.28           Chile         35         4.27           Vietnam         36         4.24           Brazil         37         4.10           Brazil         37         4.10           Czech Republic         40         3.96           Slovak Republic			
Norway         18         5.45           Austria         19         5.41           Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33         4.33           Hungary         34         4.28           Chile         35         4.27           Vietnam         36         4.24           Brazil         37         4.10           Philippines         38         4.07           Turkey         39         4.04           Czech Republic         40         3.96           Slovak Republic	•		
Austria     19     5.41       Korea, Rep.     20     5.33       South Africa     21     5.30       Finland     22     5.27       United Arab Emirates     23     5.17       China     24     5.14       Italy     25     4.97       Thailand     26     4.95       Panama     27     4.93       India     28     4.90       Kuwait     29     4.69       Bahrain     30     4.67       Egypt     31     4.58       Saudi Arabia     32     4.43       Pakistan     33     4.33       Hungary     34     4.28       Chile     35     4.27       Vietnam     36     4.24       Brazil     37     4.10       Philippines     38     4.07       Turkey     39     4.04       Czech Republic     40     3.96       Slovak Republic     41     3.88       Indonesia     42     3.71       Poland     44     3.66       Russian Federation     45     3.56       Argentina     46     3.54       Peru     47     3.50       Mexico     48 </td <td>Norway</td> <td>18</td> <td></td>	Norway	18	
Korea, Rep.         20         5.33           South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33         4.33           Hungary         34         4.28           Chile         35         4.27           Vietnam         36         4.24           Brazil         37         4.10           Philippines         38         4.07           Turkey         39         4.04           Czech Republic         40         3.98           Indonesia         42         3.72           Colombia         43         3.71           Poland	•		
South Africa         21         5.30           Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33         4.33           Hungary         34         4.28           Chile         35         4.27           Vietnam         36         4.24           Brazil         37         4.10           Philippines         38         4.07           Turkey         39         4.04           Czech Republic         40         3.96           Slovak Republic         41         3.88           Indonesia         42         3.71           Colombia         43         3.71           Poland			
Finland         22         5.27           United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33         4.33           Hungary         34         4.28           Chile         35         4.27           Vietnam         36         4.24           Brazil         37         4.10           Philippines         38         4.07           Turkey         39         4.04           Czech Republic         41         3.88           Indonesia         42         3.72           Colombia         43         3.71           Poland         44         3.66           Russian Federation         45         3.56           Argentina			
United Arab Emirates         23         5.17           China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33         4.33           Hungary         34         4.28           Chile         35         4.27           Vietnam         36         4.24           Brazil         37         4.10           Philippines         38         4.07           Turkey         39         4.04           Czech Republic         41         3.88           Indonesia         42         3.72           Colombia         43         3.71           Poland         44         3.66           Russian Federation         45         3.56           Argentina         46         3.54           Peru			
China         24         5.14           Italy         25         4.97           Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33         4.33           Hungary         34         4.28           Chile         35         4.27           Vietnam         36         4.24           Brazil         37         4.10           Philippines         38         4.07           Turkey         39         4.04           Czech Republic         40         3.98           Indonesia         42         3.72           Colombia         43         3.71           Poland         44         3.66           Russian Federation         45         3.56           Argentina         46         3.54           Peru         47         3.50           Mexico         48 <td></td> <td></td> <td></td>			
Italy     25     4.97       Thailand     26     4.95       Panama     27     4.93       India     28     4.90       Kuwait     29     4.69       Bahrain     30     4.67       Egypt     31     4.58       Saudi Arabia     32     4.43       Pakistan     33     4.33       Hungary     34     4.28       Chile     35     4.27       Vietnam     36     4.24       Brazil     37     4.10       Philippines     38     4.07       Turkey     39     4.04       Czech Republic     40     3.96       Slovak Republic     41     3.88       Indonesia     42     3.71       Colombia     43     3.71       Poland     44     3.66       Russian Federation     45     3.56       Argentina     46     3.54       Peru     47     3.50       Mexico     48     3.37       Kazakhstan     49     3.24       Ukraine     50     3.23       Venezuela     51     3.16			
Thailand         26         4.95           Panama         27         4.93           India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33         4.33           Hungary         34         4.28           Chile         35         4.27           Vietnam         36         4.24           Brazil         37         4.10           Philippines         38         4.07           Turkey         39         4.04           Czech Republic         40         3.96           Slovak Republic         41         3.88           Indonesia         42         3.72           Colombia         43         3.71           Poland         44         3.66           Russian Federation         45         3.56           Argentina         46         3.54           Peru         47         3.50           Mexico         48         3.37           Kazakhstan			
Panama       27       4.93         India       28       4.90         Kuwait       29       4.69         Bahrain       30       4.67         Egypt       31       4.58         Saudi Arabia       32       4.43         Pakistan       33       4.33         Hungary       34       4.28         Chile       35       4.27         Vietnam       36       4.24         Brazil       37       4.10         Phillippines       38       4.07         Turkey       39       4.04         Czech Republic       40       3.96         Slovak Republic       41       3.86         Indonesia       42       3.72         Colombia       43       3.71         Poland       44       3.66         Russian Federation       45       3.56         Argentina       46       3.54         Peru       47       3.50         Mexico       48       3.37         Kazakhstan       49       3.24         Ukraine       50       3.23         Venezuela       51       3.16			
India         28         4.90           Kuwait         29         4.69           Bahrain         30         4.67           Egypt         31         4.58           Saudi Arabia         32         4.43           Pakistan         33         4.33           Hungary         34         4.28           Chile         35         4.27           Vietnam         36         4.24           Brazil         37         4.10           Phillippines         38         4.07           Turkey         39         4.04           Czech Republic         40         3.96           Slovak Republic         41         3.82           Indonesia         42         3.71           Poland         44         3.66           Russian Federation         45         3.56           Argentina         46         3.54           Peru         47         3.50           Mexico         48         3.37           Kazakhstan         49         3.24           Ukraine         50         3.23           Venezuela         51         3.16			
Kuwait     29     4.69       Bahrain     30     4.67       Egypt     31     4.58       Saudi Arabia     32     4.43       Pakistan     33     4.33       Hungary     34     4.28       Chile     35     4.27       Vietnam     36     4.24       Brazil     37     4.10       Phillippines     38     4.07       Turkey     39     4.04       Czech Republic     40     3.96       Slovak Republic     41     3.88       Indonesia     42     3.71       Colombia     43     3.71       Poland     44     3.66       Russian Federation     45     3.56       Argentina     46     3.54       Peru     47     3.50       Mexico     48     3.37       Kazakhstan     49     3.24       Ukraine     50     3.23       Venezuela     51     3.16			
Bahrain     30     4.67       Egypt     31     4.58       Saudi Arabia     32     4.43       Pakistan     33     4.33       Hungary     34     4.28       Chile     35     4.27       Vietnam     36     4.24       Brazil     37     4.10       Philippines     38     4.07       Turkey     39     4.04       Czech Republic     40     3.96       Slovak Republic     41     3.88       Indonesia     42     3.72       Colombia     43     3.71       Poland     44     3.66       Russian Federation     45     3.56       Argentina     46     3.54       Peru     47     3.50       Mexico     48     3.37       Kazakhstan     49     3.24       Ukraine     50     3.23       Venezuela     51     3.16			
Egypt       31       4.58         Saudi Arabia       32       4.43         Pakistan       33       4.33         Hungary       34       4.28         Chile       35       4.27         Vietnam       36       4.24         Brazil       37       4.10         Philippines       38       4.07         Turkey       39       4.04         Czech Republic       40       3.96         Slovak Republic       41       3.88         Indonesia       42       3.72         Colombia       43       3.71         Poland       44       3.66         Russian Federation       45       3.56         Argentina       46       3.54         Peru       47       3.50         Mexico       48       3.37         Kazakhstan       49       3.24         Ukraine       50       3.23         Venezuela       51       3.16			
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	ivigeria	52	2.92

Table 2: Countries ranked within the top three of each Index pillar

			FINANCIAL DEVELOPMENT INDEX PILLARS							
Country/Economy	Financial Development Index 2008 rank	Number of times ranked in top three	1. Institutional environment	2. Business environment	3. Financial stability	4. Banks	5. Non-banks	6. Financial markets	7. Size, depth, and access	
Singapore	10	3	1	1	1	_	_	_	_	
Switzerland	7	3	_	_	2	_	_	3	1	
United Kingdom	2	3	_	_	_	3	1	2	_	
United States	1	3	_	_	_	1	2	1	_	
Finland	21	2	3	2	_	_	_	_	_	
Hong Kong SAR	8	2	2	_	_	_	_	_	3	
France	6	1	_	_	_	_	3	_	_	
Malaysia	20	1	_	_	_	2	_	_	_	
Netherlands	9	1	_	_	_	_	_	_	2	
Norway	15	1	_	3	_	_	_	_	_	
Saudi Arabia	27	1	_	_	3	_	_	_	_	

have aggregated the pillar scores with respect to the broad categories introduced in Figure 1 and described previously in the chapter. In Figure 2, scores for the institutional environment, business environment, and financial stability pillars are averaged and the resulting rank is presented on the horizontal axis as the measure "Factors, policies, and institutions." A ranking according to a simple average of the banks, non-banks, and financial markets pillars is presented on the vertical axis as "Financial intermediation."

As Figure 2 illustrates, the United States and United Kingdom both receive top marks with respect to financial intermediation (pillars four through six) but those factors, policies, and institutions that are the "inputs" into their financial systems (pillars one through three) are not as strong. The United States does not make the top 10 with respect to its institutional and business environments while the United Kingdom ranks a relatively low 23rd in the financial stability pillar. This results in both countries being positioned toward the bottom of the scatter plot in Figure 2. Will uneven performance in these areas create a long-term development disadvantage, compromising the ability of financial intermediaries and markets to efficiently provide capital to end users in these countries? This question has implications extending to whether the current pursuit of certain regulatory reforms should be prioritized to the exclusion of other, long-term drivers of financial development such as nondistortionary tax policies and judicial reform.

By contrast, countries such as Norway and Singapore achieve high marks with respect to their institutional and business environments and financial stability but perform relatively poorly with respect to the bank and non-bank pillars. This accounts for their placement at the leftmost part of the scatter plot in Figure 2. What is preventing these countries from translating these fundamental strengths into more robust financial intermediation and the more effective provision of capital and financial services to end users? Exploration of the

variables that produce this result and the broader phenomena for which they serve as proxies may have profound implications for financial system development and enhanced economic growth in these countries.

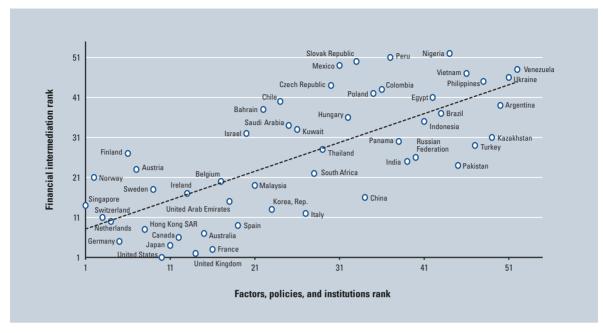
Taking a different and somewhat narrower perspective, one may question how Malaysia's banking system is able to achieve the relatively high performance shown in the 4th pillar in Table 1 in light of its relatively lower performance with respect to its business and institutional environments. Increased understanding of this question might shed light on how Malaysia could propagate this success to other aspects of its financial system. Alternatively, it may provide valuable lessons for other developing countries as they try to transcend the limitations of their current institutional and business environments to maximize the benefits of robust financial intermediation.

## Financial intermediation versus capital availability and access

A similar analysis can be performed with respect to the pillars in the financial intermediation category (the banks, non-banks and financial markets pillars) and the one pillar that comprises the capital availability and access category (the size, depth, and access pillar). In Figure 3, rankings based on the combined average of the scores for the pillars in each category are plotted.

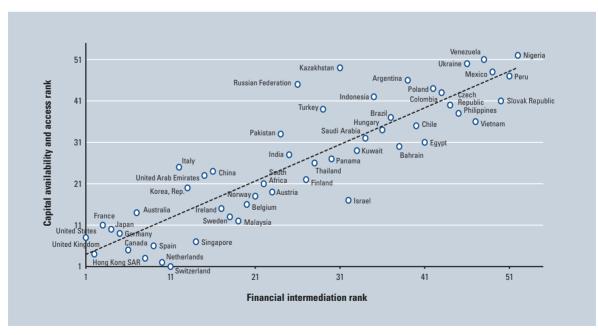
Switzerland is ranked number one in terms of capital availability and access based on a near perfect score driven by the size and depth of its financial assets. Yet it does not make the top 10 in terms of financial intermediation. Indeed its banking institutions are ranked a relatively low 27th and non-bank financial institutions at 18th. Given this apparent discrepancy are there other aspects of its financial system such as within its legal and regulatory or business environment that are more directly attributable to its relatively large and deep financial markets? Are these aspects idiosyncratic to the Swiss financial system or are their lessons for other countries

Figure 2: Factors, policies, and institutions versus financial intermediation



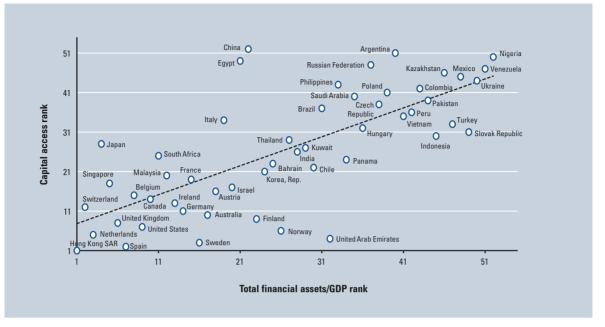
Note: A country ranking based on a simple average of the first three pillars is plotted as "factors, policies and institutions" on the horizontal axis. A country ranking based on a simple average of pillars 4, 5 and 6 is plotted as "financial intermediation" on the vertical axis.

Figure 3: Financial intermediation versus capital availability and access



Note: A country ranking based on a simple average of pillars 4, 5 and 6 is plotted as "financial intermediation" on the horizontal axis. The country ranking from pillar 7, "Capital availability and access" is plotted on the vertical axis.

Figure 4: Total financial assets to GDP versus capital access



Note: Total financial assets/GDP displayed on the horizontal axis is based on the same numbers found on the top of each country profile in Part 2 of the *Report*; the calculation of this measure is described in the "How to Read the Country/Economy Profiles" at the beginning of Part 2. The vertical axis measures the average of the different capital access variables contained in pillar 7 (variables 7.09, 7.10, 7.11, 7.12, and 7.14).

as they try to maximize the benefits to their economies of increased access to capital?

By contrast, the Russian Federation is ranked 45th in terms capital availability and access yet ranks a stronger 26th based on an average of the financial intermediation pillars. Its non-bank institutions are rated particularly strong at 10th (see the 5th pillar in Table 1), driven in large part by healthy initial public offerings (IPO) and securitization activity, while a relatively low 40th in terms of access to its equity markets (as can be seen in its country profile contained in Part 2 of this *Report*). Why hasn't Russia been able to translate robust financial intermediation into economically vital access to capital? More detailed exploration of this question may help inform priorities for reforms within its financial system.

#### Financial depth versus access

Intriguing variations in country performance can also be seen within the pillars of the Index. One of these variations occurs with respect to the two main components of pillar seven: the size and depth subpillar, which includes different measures of financial assets as a percentage of GDP and the access subpillar, which uses unique data from the Forum's *Survey* to assess how easily end users can access different forms of capital. Financial depth, typically expressed as a country's financial assets to GDP, is often cited as a measure of the availability of capital. Yet, from the perspective of economic growth,

what is also important is how easily end users are able to access this pool of capital.

In Figure 4, country rankings in terms of total financial assets to GDP are plotted against rankings of the average of all the access measures in pillar seven. It is clear from this graph that the degree of access that end users have to capital is not necessarily a close function of the financial depth in a given country. Looking at China, one can see that even though it has a very high ratio of financial assets to GDP, this has not translated to enhanced access for end users of capital within the country, which accounts for its position at the very top of the scatter plot.

By contrast, Finland and Norway have roughly the same degree of financial assets as a percentage of GDP, but score near the very top of the rankings in terms of financial access, which accounts for their position towards the bottom of the scatter plot. Given the importance of capital access to the end users of capital and businesses that propel an economy, increased understanding of this result and how to better translate financial depth to access could lead to new ways to enhance a financial system's impact as a driver of economic growth.

#### Regional analysis

The preceding examples both across and within the pillars of the FDI illustrate the potential to reframe discussion using the broader dimensions of financial development. The country profiles contained in Part 2 of this

Report provide detailed information with which to undertake this analysis. A summary of highlights drawn from these profiles is presented below by region.

#### **EUROPE AND NORTH AMERICA**

The **United States** takes 1st place in the FDI, driven by its strong showing across all different aspects of financial intermediation. Its banks are ranked as the most efficient in the world in areas such as bank concentration, interest rate spread and operating margins. Similarly, its financial markets emerge as best-in-class overall, with strength across the breadth of equity and bond markets, foreign exchange and derivatives. Non-bank financial intermediaries such as investment banks and insurance companies rank very high, particularly in terms of mergers and acquisitions and securitization activities. The United States performs well with respect to overall measures of size, depth, and access, but these are not quite on par with the performance of its financial intermediaries.

Relatively weaker areas can be seen with respect to the institutional and business environments within the United States. The regulation of security exchanges (24th) and protection of intellectual and property rights (21st and 17th) prove problematic according to participants in the Forum's Survey. Corruption and the regulatory burden were also seen as a development area with the United Sates ranking in the middle of all countries. A lack of judicial independence and irregular payments in judicial decisions were seen as obstacles to improved contract enforcement. The United States, like many developed countries, received high scores for the liberalization of its domestic financial sector and capital account, however, this was accompanied by relatively low scores in areas related to financial stability. Consistent with the ongoing financial crisis, the United States ranked a relatively low 25th with respect to the potential for currency crises and 22nd with respect to the potential for systemic banking crises. Corporate taxation and infrastructure also emerged as areas requiring further attention.

The **United Kingdom** is ranked 2nd overall in the FDI in a virtual tie with the United States. Its financial intermediaries are world class with top ranks for insurance, securitization, and merger and acquisition activity. The international orientation of its financial markets earns it top marks with respect to foreign exchange markets and it ranked first in all measures of foreign exchange and interest rate derivatives turnover except one. The country earned third place in the banking pillar, with efficiency of the sector driving its performance. In terms of capital access and availability, the United Kingdom outperforms the United States with a rank of 4th across the FDI country sample. The overall institutional environment also ranked higher than the

United States with strong marks for corporate governance and contract enforcement. The efficacy of corporate boards, shareholder rights, and the strength of auditing and accounting standards distinguishes the United Kingdom in this area.

As with the United States, key development areas exist with respect to financial stability. The potential for a systemic banking crisis (46th) places a drag on the United Kingdom's performance in this area. The United Kingdom also scores relatively low with respect to corporate taxation (30th) and the associated distortionary effects of taxation and irregular tax payments. The cost of doing business as seen in the cost of obtaining licenses and registering property is also an area that appears to have room for improvement. The burden of government regulation (26th) and lack of centralization in economic policy-making (32nd) also appear to be areas for further development.

**Germany** placed 3rd in the rankings by exhibiting well-rounded performance and a ranking of 10 or higher across all seven pillars of the FDI. Consistent strengths across the institutional and business environments include a top ranking in auditing and accounting standards (1st), excellent protection of property rights, a highly effective judicial system, and high quality infrastructure within the context of a liberalized yet stable financial system. A few potential areas for improvement include better protection of minority and shareholder rights, a lower regulatory burden, and improvements with respect to human capital. Findings with respect to financial intermediation confirm the historic strength of Germany's banking sector but, interestingly, the country also performs equally well (in fact, slightly better) with respect to both nonbank financial institutions and financial markets. While equity markets are ranked 16th, bond markets, derivatives markets and foreign exchange markets are all ranked within the top 10 in their categories.

France (6th) is similar to the United Kingdom and the United States in that the strength of its financial intermediation, particularly that of its non-bank financial institutions and financial markets, is a key driver of its relatively high overall ranking (6th). IPO activity (2nd), M&A activity (4th), and insurance (2nd) are all particular strengths, as are its derivatives and bond markets (3rd and 4th respectively). The country appears less successful across financial system "inputs." France is ranked a relatively low 20th in terms of financial stability, dragged down by a very low score with respect to risk of systemic banking crisis (47th). The business environment also appears to be a weakness with relatively low marks with respect to taxation and the cost of doing business. However, there are also some strengths with respect to the quality of overall infrastructure and management schools. Excessive regulatory burden appears the weakest link in France's institutional environment, as is protection of shareholder and investor rights.

**Switzerland** closely follows France achieving 7th place due in large part to the size (relative to GDP) and stability of its financial system. While achieving the top ranking according to the overall size- and depth-related metrics, this success does not fully translate into improved access for end users of capital where the country ranked 12th. Despite the iconic nature of many of Switzerland's banks, the country's financial markets were ranked considerably higher, particularly its equity and foreign exchange markets (4th and 3rd respectively).

The **Netherlands** makes the top 10 in the overall FDI ranking with a particularly strong showing in both the size and depth of its financial system (2nd) and in the degree of access provided to end users of capital (3rd). The efficiency of its banking system drags down its rank for the banking pillar (19th), while it ranks in the top 10 in terms of its non-bank intermediaries (8th) and financial markets (9th). Although the cost of doing business in the Netherlands seems to be relatively high, the country still demonstrates consistent strength across its institutional environment, business environment and the stability of its financial system. Neighboring **Belgium** (17th) demonstrates consistency across the seven pillars with rankings all falling between 16th and 20th place.

Finland (21st), Sweden(13th), and Norway (15th) do not break into the top 10 in terms of their overall rank, but they generally all score very well across the "inputs" or factors, policies, and institutions that support their financial systems. Particular strengths seen across all three countries include the quality of human capital, the soundness of the legal and regulatory environment, and the quality of their infrastructure. Yet preeminence in these areas contrasts each country's performance with respect to financial intermediation.

While Sweden's financial markets come in at 12th place, those of Norway and Finland did not score as high.

Nearly all of these countries' banks and non-bank intermediaries scored relatively low.

The FDI ranks **Italy** (22nd) the lowest of the Western European countries as a result of its relatively weak institutional and business environments and low rankings in terms of financial stability. Relatively low performance can be seen across all the components of these pillars such as soundness of corporate governance, legal and regulatory issues, and cost of doing business. Despite these obstacles, the country performs consistently well in terms of bank and non-bank financial intermediaries and financial markets. However, strength in financial intermediation does not translate into enhanced capital access where the country scores a relatively low 34th.

Development advantages for the financial system of the **Russian Federation** (36th) can be seen with respect to non-bank activities such as securitizations (7th) and IPOs (6th). By contrast, neither its banks nor its financial markets are highly developed. Its institutional environment is generally weak, characterized by relatively poor protection of property rights, lax auditing and accounting standards, and a heavy burden of government regulation. Its business environment exhibits better performance in terms of information technology infrastructure and the quality of human capital, but the cost of doing business ranks low at 45th. The Russian financial system also receives low marks for capital availability and access (48th).

#### **ASIA AND THE PACIFIC**

Performance across the Asia and Pacific region varies markedly with Asian countries coming in at all levels of the rankings. Japan emerged as the highest ranked Asian country (4th) by delivering well-rounded performance across all pillars within the FDI. Its strongest scores are seen with respect to financial intermediation and in particular its highly efficient banks, IPO and M&A activities, insurance, foreign exchange and derivatives markets. Japan's institutional and business environments appear less successful. Corporate governance is a weak point characterized by a need for greater incentive-based compensation of management and better auditing and accounting standards. A relative lack of centralization of economic policymaking and the need for better regulation of exchanges contribute to lackluster performance with respect to legal and regulatory issues. Japan's large public debt, fueled in part by massive spending on public works projects, goes beyond levels that may be considered healthy for the financial system. Consistent with the high rate of IPO activity, businesses reported a relative ease of access to the local equity markets. But the difficulty of access to private credit, loans, and venture capital places Japan in the bottom half of these measures of capital access.

Despite some areas of integration with China, Hong Kong's financial system is still quite distinct in many respects. The country scores 2nd place with respect to its institutional environment with strong performance spanning shareholder rights, a low regulatory burden, effective regulation of security exchanges, and rigorous contract enforcement. Similar to the mainland there appears a relative need to improve the quality of human capital, however, the country receives high marks for a non-distortionary tax regime and the high quality of its overall infrastructure. Its banking system scores well (5th), driven primarily by the size of its banks. In contrast to the last place ranking of mainland China, Hong Kong scores first place with respect to access to different forms of capital.

Similar to Hong Kong, **Singapore** (10th) delivers a very strong performance in the institutional and business environment pillars with a first place finish in each. The country has the lowest regulatory burden of any country in the Index and ranks highest in terms of the effectiveness of its law making bodies and contract enforcement. It tops the list of countries in the FDI in

terms of financial stability while, in contrast, its banking system is ranked a relatively low 38th resulting in large part from its relative inefficiency. In contrast, neighboring **Malaysia** scores 20th in the Index, with very strong marks for its banking system across size, efficiency and financial disclosure. Non-bank financial institutions delivered less successful results, with relatively low marks related to IPOs, securitization and insurance. Its fully liberalized domestic financial sector (1st) stands in contrast to the relative lack of liberalization of its capital account (34th).

Australia falls just short of the top 10 in the overall ranking (at 11th place), but delivers solid performance across all seven pillars of the FDI. Its financial markets and the associated activities of non-bank financial institutions (particularly IPOs and securitizations) are a particular strength. Australia's banking system does not achieve quite the same levels of success, dragged down by low levels of efficiency (35th). Entry restrictions on banks and rapid real estate appreciation have heightened susceptibility to systemic banking crises (29th), with relatively low scores for risk of a currency crisis as well (37th).

Korea, Rep. came in at 19th in the overall FDI ranking, demonstrating consistent performance across all aspects of the Index. The country receives strong marks for the strength of its human capital, the quality of its technology infrastructure and a low legal and regulatory burden. The performance of its banking system appears to be a development advantage both in terms of its size and efficiency. Non-bank financial institutions are similarly robust, with strength across IPO and securitization activities as well as insurance. Despite the strength of these financial intermediaries, Korea, Rep. does not appear to have fully distanced itself from the financial contagion of the 1990s, earning relatively low marks for risk of currency crisis (35th) and systemic banking crises (40th). However, the degree of centralization in its economic policymaking (7th) is seen as a strength.

China is ranked 24th of the 52 countries in the FDI. Large inflows of capital driven by rapid exportdriven economic growth have promoted the size and depth of its financial markets. The country ranks 2nd in terms of M2 to GDP, 4th in terms of bank deposits to GDP, and 5th in terms of the relative value-added of its financial institutions to GDP. This financial depth has increased the size of its banking sector which, in combination with relatively high levels of banking efficiency, has bolstered its ranking in this category (16th). China shows room for improvement across most aspects of its institutional environment, particularly with respect to the efficacy of its corporate boards, the liberalization of its capital account and domestic financial sector, and shareholder and investor rights. While the cost of doing business is low, the business environment could be improved with more focus on the development of human capital, infrastructure and a more equitable tax

regime. China delivered its worst performance with respect to measures of access to capital, where it came in last of all countries in the FDI.

India came in at 31st in terms of its overall ranking. While India delivered solid results in terms of its financial markets (particularly foreign exchange and derivatives) and its non-bank institutions, its banks appear hamstrung by lack of size, low efficiency and poor information disclosure. Despite this, the banking system is very stable (5th) likely owing in part to sizable capital buffers that help it weather credit cycles. The business environment shows significant room for development, characterized by an inhospitable tax regime and relatively poor contract enforcement. India receives low marks related to the liberalization of its domestic financial sector and capital account. The quality of India's higher education institutions is apparent as seen in the high score for the quality of management schools (8th), but development areas include "brain drain," the ease of hiring foreign talent, and enrollment in tertiary schools.

Neighboring **Pakistan** (34th) comes in a few notches below India, but demonstrates similar strength in its financial markets (17th). Its banking system is also strong, bolstered by very high levels of efficiency (5th). However, Pakistan's institutional and business environments earn very low marks in most areas such as domestic financial sector liberalization and infrastructure.

At 38th, **Indonesia** shows considerable variation across the different aspects of its financial system. Its strong banking system delivers world-class performance in terms of efficiency (1st). Yet, its non-bank financial institutions and financial markets rank among the lowest in the Index (both at 46th). Its relatively strong institutional environment is bolstered by strong corporate governance and regulatory effectiveness, but its business environment ranks as one of the lowest in the FDI (49th) resulting from poor infrastructure and the high cost of doing business.

Kazakhstan (45th), the Philippines (48th), and Vietnam (49th) all scored towards the bottom of the rankings, demonstrating room for improvement across all seven pillars of the FDI. All of these countries are in need of development of their institutional and business environments, and demonstrate a high degree of risk of financial instability. Vietnam exhibits relatively higher strength with respect to its banking system (30th), as well as capital availability and access (36th). The Philippines also shows relative strength with respect to the availability and access of capital (38th).

#### **LATIN AMERICA**

A sound institutional and business environment is a key driver of **Chile's** place as the highest ranked Latin American country on the Index (30th). Liberalization within the context of a sound legal and regulatory

environment has been a key driver of the country's economic growth and also contributes to the success of its financial system. The efficacy of corporate boards (12th) and protection of shareholder rights (1st) foster strong corporate governance, while sound regulatory management of securities exchanges (12th) and a low overall regulatory burden contribute to the country's successful regulatory environment. Chile has yet to fully translate its success in these fundamental aspects of its financial system to high-performing financial intermediaries and markets. Healthy stock market capitalization (16th) is compromised by relatively low turnover (43rd). Chile is closely followed by Panama (32nd) in the overall rankings, which delivers relatively consistent performance across the main pillars of the Index. The exception is financial stability (49th), where it earns low marks for risk of currency and sovereign debt crises.

While **Brazil's** (40th) institutional environment ranks on par with the country's overall score, the country achieves low marks for a high legal and regulatory burden and an ineffective political environment. Relatively stronger scores for its non-bank financial institutions and financial markets contrast the weak position of its banks, which received the lowest possible rank due to their lack of size and low measures of efficiency.

Mexico ranked 43rd in terms of its overall score on the FDI. The country appears to have left the financial turmoil of the mid 1990s well behind, achieving its highest score across the seven pillars in financial stability (27th). While exhibiting some strength with respect to securitizations and foreign exchange, the country generally does not exhibit very strong performance with respect to its financial markets (45th), banks (49th) or non-bank intermediaries (38th). The quality of education underpinning the development of human capital detracts from the business environment, as does the cost of doing business. Relatively weak auditing and accounting standards and the inefficacy of corporate boards contribute to low marks for corporate governance (43rd).

Argentina (47th) has not fully escaped the legacy of the 2001 financial crisis, scoring very low marks for financial stability (50th) and a scarcity of capital evident in the size and depth of its financial markets (43rd). The country ranked second to last in measures of capital access (51st). However, development areas for Argentina exist beyond the short-term implications of financial crises, since it scores generally low marks across its institutional and business environments. Low scores on the legal and regulatory front include a high burden of government regulation, poor property protection and a political environment marked by a low level of trust. Argentina's tertiary and management education is an advantage. However, a distortionary tax regime, among other factors, compromises the country's business environment. Despite these shortcomings, signs of strength in financial intermediation can be seen with respect to

securitization activities and insurance (12th and 29th respectively).

Colombia (44th), Peru (46th) and Venezuela (52nd) round out the bottom of the rankings for Latin American countries on the FDI. All of these countries suffer from poor business environments and undeveloped financial markets. Venezuela was ranked last for its institutional environment, due to weak protection of property rights, highly burdensome government regulation and obstructive involvement in the financial sector.

#### MIDDLE EAST AND NORTH AFRICA

The United Arab Emirates (16th) achieves the highest ranking of all Middle Eastern countries in the FDI, displaying a varied performance across the different elements of its financial system. Its highly efficient banking system (1st) contrasts with poor financial information disclosure (48th). UAE's business environment is strengthened by a highly favorable, non-distortionary tax regime (1st), but is hamstrung by the relatively low quality of training and education underpinning the development of human capital. The institutional environment benefits from a low burden of government regulation (5th), but the country scores low marks for corporate governance dragged down by ineffective corporate boards and a lack of incentive-based compensation. Access to capital is a strong point, particularly to traditional forms of financing such as private credit (5th) and loans (6th).

Israel delivers consistent performance across all the FDI measures to achieve its ranking of 23rd. Its institutional and business environments are generally a strong suit, while the risk of currency crises pulls down its ranking for financial stability (30th). The quality of human capital and a robust information technology infrastructure contribute to its generally favorable business environment. Israel's banks are relatively large but inefficient (43rd), and its financial markets generally less developed (33rd). The availability of venture capital (5th) helped deliver a solid score for capital access.

Like the other Gulf countries, **Kuwait** (26th) offers a highly favorable tax regime that is enhanced by a low cost of doing business. Its equity markets are well developed for a country of its size. However, as with Saudi Arabia, this factor does not translate to successful non-bank intermediaries, which captured the lowest score on the FDI. Its banks are efficient. Similar to the United Arab Emirates, they have low levels of financial disclosure. **Bahrain** placed two places below Kuwait, but shows significant advantages in terms of the quality of its institutional environment, including a fully liberalized domestic financial sector (1st). Its taxes are low and non-distortionary, but the relatively poor quality of human capital proves a disadvantage for the business environment.

Like the United Arab Emirates, **Saudi Arabia** (27th) achieves high marks for the stability of its financial system (3rd). The country's favorable tax regime is an asset to its business environment, but this success is offset by the relatively low quality of human capital (42nd) and infrastructure (35th). Saudi Arabia's well-capitalized stock markets are active, but its non-bank financial intermediaries are weak, particularly with respect to M&A activity, securitization and insurance. Saudi Arabia's active stock exchange does not appear to translate to a high degree of access to the equity markets for end users of capital (40th).

**Egypt** scores 37th on the overall FDI, and most of its scores across the different Index measures are banded relatively closely around this value. Development disadvantages can be seen with respect to financial stability (47th), corporate governance (46th), and access to capital. While there is a low regulatory burden for the financial sector, the country's domestic financial sector remains among the least liberalized in the Index (46th).

#### **SUB-SAHARAN AFRICA**

Only two countries from Sub-Saharan Africa are included in the Index this year.

**South Africa** (25th) achieves solid performance across most of the pillars in the Index. Its insurance markets are highly evolved with a high degree of penetration and healthy growth in premiums. It banks are efficient and equity markets have a very high level of capitalization as a share of GDP (3rd). Its information technology infrastructure generally scores quite low compromising the quality of its business environment. The quality of its human capital is also quite low particularly in terms of the quality of math and science education, tertiary enrollment, and ease of hiring foreign labor.

**Nigeria** ranks 50th in the FDI dragged down by low rankings particularly in terms of capital availability and access and financial intermediation. While the country shows some relative strengths in the areas of contract enforcement (33rd) and corporate governance (41st), this was contrasted by a last place showing in its business environment. While a bright spot would appear to be the stability of its banking sector it is important to note the inherent trade-off in stability and financial returns and innovation described in greater detail in chapter 1.3 of this *Report*. A banking system that is highly regulated and characterized by a high degree of government involvement can be highly stable but lacking in the innovation and competitiveness that can promote better diversification of risk and allocation of capital.

#### Conclusion

The regional summaries above relate only highlights, and users of this report are urged to explore the richness of data in the country profiles and data tables that follow. The data that are included are comprehensive but by no means exhaustive. In making difficult decisions about the selection and organization of data that best proxy for the most important factors in the development of highly complex financial systems, trade-offs had to be made. However, we feel the benefits of providing a comprehensive framework to assess and compare financial systems justify the effort behind this Report. It is our sincere hope that the information it contains will further the potential for global financial systems to bring financial resources to those who most need them and to become an even more powerful facilitator of human endeavor.

#### Notes

- 1 Schumpeter held that financial intermediaries select the firms that utilize an economy's savings. More formally, his view stipulated that financial intermediaries tend to adjust the process of savings allocation rather than alter the savings rate itself. Thus, Schumpeter's notion of finance and development focuses on the effect of financial intermediaries on productivity growth and the rates of technological change.
- 2 For a detailed review of the literature on finance and growth, see Levine 2004.
- 3 Levine 1997.
- 4 La Porta et al. 1997, 1998, 1999; Levine 1998, 1999; and Barth et al. 1999.
- 5 Bekaert et al. 2005 also held explicitly that reforms that strengthen a country's legal environment and investor protection are most likely the true cause for better growth prospects.
- 6 La Porta et al. 1997; King and Levine 1993.
- 7 Schleifer and Vishny 1997.
- 8 Tavares 2002
- 9 Galor and Zeira 1993.
- 10 Fitzgerald 2007.
- 11 See Grilli and Milesi-Ferretti 1995; Kraay 1998; Rodrik 1998; and Edison et al. 2002a for findings related to the positive relationship between liberalization and growth. The works of Quinn 1997; Klein and Olivei 1999; and Quinn and Toyoda 2003 support the relationship. Research presented in Edison et al. 2002b; Chandra 2003; and Arteta et al. 2003 found the relationship to be ambiguous.
- 12 Ito and Chin 2007.
- 13 Levine 1997.
- 14 Outreville 1999
- 15 Barro 1991.
- 16 Beck 2006.
- 17 Loavza and Ranciere 2002
- 18 Barth et al. 2004. The concept of fewer restrictions is represented in terms of lower barriers to bank entry and fewer restrictions on bank activities.
- 19 That such channeling and efficient allocation occurs is emphasized based on two premises: (1) financial intermediaries provide liquidity; and (2) financial intermediaries are capable of altering the riskiness of assets. Claus and Grimes 2003.

- 20 Gerschenkron 1962 in addition to others assert that banks finance growth in a more effective and efficient way as compared to market-based systems, particularly in underdeveloped economies where non-bank financial intermediaries are generally less sophisticated.
- 21 Rajan and Zingales 2001.
- 22 Levine 1997, 2001.
- 23 If foreign ownership of banks is not permitted, it might be a reflection of a weak and inefficient banking system that is requiring protection from international competition. Adrianova et al. 2006.
- 24 Beck et al. 2003.
- 25 Barth et al. 1999.
- 26 Demirgüç-Kunt and Levine 2001.
- 27 Noyer 2006.
- 28 Lin 2007.
- 29 Carmichael and Dissou 2000.
- 30 Vittas 1998
- 31 Levine and Zervos 1996 employed several indicators for stock market indicators spanning size (market capitalization ratio) and liquidity (stock market turnover and stock market value traded both as shares of GDP).
- 32 Arestis et al. 2001. http://www.accessmylibrary.com/coms2/summary 0286-10601330 ITM.
- 33 Demirgüç-Kunt and Levine 2001.
- 34 Fink et al.2003.
- 35 http://imf.org/external/np/speeches/2007/082207.htm.
- 36 Goldsmith 1969.
- 37 Ito and Chinn 2007.
- 38 Fitzgerald 2007
- 39 Khan et al. 2003.
- 40 Levine 2004
- 41 M2 refers to an assessment of the amount of money in coins, currency, checking accounts, savings accounts and deposits.
- 42 Beck et al. 2005.
- 43 Browne and Geiger 2007.
- 44 The following formula was used to adjust for such variables.
  - -6 x (country score sample minimum) + 7
- 45 The average score for the legal and regulatory environment was
- 46 The following formula was used to adjust the values of the two liberalization indexes:

Index $_i$  x  $\frac{\text{(legal and regulatory issues score)}}{\text{(average legal and regulatory issues score)}}$ 

Where *i* is both the domestic financial sector liberalization index and the capital account liberalization index.

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#### Appendix A: Structure of the Financial Development Index 2008

This appendix presents the structure of the Financial Development Index (FDI).

The numbering of the variables matches the numbering of the data tables. The number preceding the period indicates to which pillar the variable belongs (e.g., variable 1.01 belongs to the first pillar).

The hard data indicators used in the FDI are normalized on a 1-to-7 scale in order to align them with the Executive Opinion Survey's results. The Technical Notes and Sources at the end of this *Report* provide detailed information on all the hard data indicators.

The percentage next to each subpillar represents this subpillar's weight within its immediate parent pillar. The computation of the FDI is based on successive aggregations of scores, from the variable level (i.e., the lowest level) all the way up to the overall FDI score (i.e., the highest level), using the weights reported below. For example, the score a country achieves on the bond market development subpillar comprises 30 percent of the country's financial markets pillar (the 6th pillar) score. Likewise, the score a country achieves in the 5th pillar accounts for 14.29 percent of the FDI score.

A dynamic weighting regime removes individual variables from the subpillar and pillar calculations when no data are present. The weight normally attributed to a particular variable will be spread among variables for which data are present. Therefore, the actual weight for each variable by country may not exactly be as noted.

Weight (%) within

	weight (%) within
lst pillar: I	nstitutional environment14.29%
A. Capit	al account liberalization index20.00%
1.01	Capital account liberalization
B. Corpo	prate governance20.00%
1.02	Extent of incentive-based compensation
1.03	Efficacy of corporate boards
1.04	Reliance on professional management
1.05	Willingness to delegate
1.06	Strength of auditing and accounting standards
1.07	Shareholder rights index
1.08	Ethical behavior of firms
1.09	Protection of minority shareholders' interests
C. Legal	and regulatory issues20.00%
1.10	Burden of government regulation
1.11	Centralization of economic policymaking
1.12	Regulation of security exchanges
1.13	Property rights
1.14	Intellectual property protection
1.15	Diversion of public funds

1.16 Public trust of politicians

	D. (	Contr	ract enforcement20.00%
		1.17	Effectiveness of law-making bodies
		1.18	Judicial independence
		1.19	Irregular payments in judicial decisions
			Number of procedures to enforce a contract
		1.21	·
			Cost of enforcing contracts
		1.23	•
		1.24	Time to close a business
	E. I	ome 1.25	estic financial sector liberalization20.00%  Domestic financial sector liberalization
		1.25	Domestic imancial sector liberalization
<b>2</b> n	ıd pi	llar:	Business environment14.29%
	Α. Ι	Huma	an capital25.00%
		2.01	Quality of management schools
		2.02	
		2.03	Extent of staff training
		2.04	· ·
		2.01	services
		2 05	Brain drain and ease of hiring foreign labor
			Tertiary enrollment
			,
			25.00%
		2.07	Irregular payments in tax collection
		2.08	Distortive effect on competition of taxes and subsi-
			dies
		2.09	Corporate tax rate
	C. I	nfras	tructure25.00%
		2.10	Quality of overall infrastructure
		2.11	Quality of telephone/fax infrastructure
		2.12	Internet users
		2.13	Broadband Internet subscribers
		2.14	Telephone lines
		2.15	Mobile telephone subscribers
	D (	Cost	of doing business25.00%
		2.16	<del>-</del>
		2.10	Cost of dealing with licenses
		2.17	•
			31 11 1
			Cost to export
			Cost to import
			Cost of enforcing contracts
		2.22	Cost of closing a business
<b>ي</b> د	d ni	llor I	Financial etability 1/1/200/
)I	-		Financial stability14.29%
			of a currency crisis33.33%
		3.01	Change in real effective exchange rate
		3.02	
			Current account balance to GDP
			Dollarization vulnerability indicator
		3.05A	External debt to GDP (developing economies)
		3.05B	Net international investment position to GDP
			(advanced economies)

#### Appendix A: Structure of the Financial Development Index 2008 (cont'd.)

B. Risk of systemic banking crisis33.33%	B. Derivatives markets20.00%
1. Regulation of financial/banking institutions30.00%	6.04 Interest rate derivatives turnover: Forward rate
3.06 Activity restrictions for banks	agreements
3.07 Entry restrictions for banks	6.05 Interest rate derivatives turnover: Swaps
3.08 Capital restrictions for banks	6.06 Interest rate derivatives turnover: Options
3.09 Official supervisory power	6.07 Foreign exchange derivatives turnover: Currency
3.10 Private monitoring of the banking industry	swaps
2. Frequency of crises20.00%	6.08 Foreign exchange derivatives turnover: Options
3.11 Frequency of banking crises	C. Equity market development30.00%
, ,	6.09 Equity market turnover
3. Stability Index30.00%	7.05 Stock market capitalization to GDP <sup>2</sup>
3.12 Stability Index	D. Bond market development30.00%
4. Appreciation of real estate20.00%	6.10 Private-sector bonds to GDP
3.13 Cumulative real estate appreciation	6.11 Public-sector bonds to GDP <sup>3</sup>
C. Risk of sovereign debt crisis33.33%	6.12 International bonds to GDP
3.14 Local currency sovereign rating	0.12
3.15 Foreign currency sovereign rating	
	7th pillar: Size, depth, and access14.29%
44 000/	A. Size and depth66.67%
4th pillar: Banks14.29%	7.01 M2 to GDP
A. Size index40.00%	7.02 Private debt to GDP
4.01 Size index	7.03 Public debt to GDP
B. Efficiency index40.00%	7.04 Bank deposits to GDP
4.02 Efficiency index	7.05 Stock market capitalization to GDP
4.03 Public ownership of banks	7.06 Relative value-added of financial institutions to GDP
C. Financial information disclosure20.00%	7.07 Private credit to GDP
4.04 Public credit registry coverage	7.08 Stock market value traded to GDP
4.05 Private credit bureau coverage	B. Access33.33%
4.06 Credit Information Index	7.09 Financial market sophistication
	7.10 Venture capital availability
	7.11 Ease of access to credit
5th pillar: Non-banks14.29%	7.12 Ease of access to local equity market
A. IPO activity25.00%	7.13 Bank branches
5.01 IPO market share	7.14 Ease of access to loans
5.02 IPO proceeds amount	
5.03 Share of world IPOs	
B. M&A activity25.00%	
5.04 M&A market share	Notes
5.05 M&A transaction value to GDP	The standard formula for converting hard data is the following:
5.06 Share of total number of M&A deals	The standard formula for converting hard data is the following.
C. Insurance	(acustry acers comple minimum)
5.07 Insurance premiums, direct	6 x (country score – sample minimum) + 1 (sample maximum – sample minimum)
5.08 Insurance density	(Sample maximum – Sample minimum)
5.09 Real growth of direct insurance premiums	The sample minimum and sample maximum are, respectively,
5.10 Insurance penetration	lowest and highest country scores in the sample of countries
5.11 Relative value-added of insurance	ered by the FDI. In some instances, adjustments were made t
	account for extreme outliers. For those hard data variables for
D. Securitization25.00%  5.12 Securitization to GDP	which a higher value indicates a worse outcome (e.g., Frequer of banking crises, Entry restrictions for banks), we rely on a no
5.12 Securitization to GDP 5.13 Share of total number of securitization deals	malization formula that, in addition to converting the series to
3.13 Share of total humber of Securitization deals	to-7 scale, reverses it so that 1 and 7 still correspond to the w
	and best possible outcomes, respectively:
6th pillar: Financial markets14.29%	
A. Foreign exchange markets20.00%	-6 x _(country score - sample minimum) + 7 (sample maximum - sample minimum)
6.01 Spot foreign exchange turnover	(sample maximum – sample minimum)

are, respectively, the mple of countries covents were made to data variables for ome (e.g., Frequency s), we rely on a norrting the series to a 1rrespond to the worst

- 2 Stock market capitalization to GDP is used in both the sixth and seventh pillars and is referred to by the number 7.05 in each
- 3 The normalization formula for some data is adjusted to make the scale non-monotonic. In these instances, the highest normalized score is assigned to the raw score at the 60th percentile of the data, with lower scores assigned as deviations of values from this score increase.

Outright forward foreign exchange turnover

Foreign exchange swap turnover



**CHAPTER 1.2** 

#### Finance, Growth, and the Poor

ROSS LEVINE, Brown University and NBER

The operation of the formal financial system is profoundly important for economic growth and poverty alleviation. It influences how many people are hungry, homeless, and in pain. It shapes the gap between the rich and the poor. It arbitrates who can start a business and who cannot, who can pay for education and who cannot, who can attempt to realize one's dreams and who cannot. Finance affects the degree to which economic success and opportunity are defined by talent and initiative or by parental wealth, racial identity, and social status.

A considerable body of evidence indicates that the formal financial system affects aggregate economic growth.1 Recent research has employed different econometric methodologies and data sets in producing two core results. First, countries with better-developed financial systems tend to grow faster. Specifically, countries with (1) large, privately owned banks that funnel credit to private enterprises and (2) liquid stock exchanges tend to grow faster than countries with corresponding lower levels of financial development. A country's level of banking development and stock market liquidity each exert an independent, positive influence on economic growth. Second, better-functioning financial systems boost growth by enhancing the efficiency of resource allocation, not by increasing savings rates. In particular, financial development makes it easier for the best firms to obtain external finance, which accelerates economic growth.

This paper focuses on the poor. Finance might help the poor by expanding the overall economy. Economic growth might lead directly to a reduction in poverty. Or finance might accelerate growth by disproportionately benefiting the rich without expanding the economic opportunities of the poor. In other words, financial development might increase income inequality. A small, but growing, body of evidence, however, suggests just the opposite: financial development boosts growth by disproportionately benefiting the poor.

I stress the formal financial system, which includes banks, securities markets, and the full range of institutions covered in standard finance textbooks. I largely ignore micro-credit programs and informal systems, which have received considerable attention by development economists. At one level, there is no need to distinguish between formal and informal financial arrangements. Financial development includes contractual and institutional arrangements that lower transaction and information costs associated with evaluating and monitoring of projects and managing risk. It does not matter who provides these services. At another level, there are practical reasons for focusing on formal systems. First, all countries have extensive laws and regulations governing

This paper builds on and borrows heavily from the author's Maxwell Fry Global Finance Lecture at Birmingham Business School on September 14, 2007, which is forthcoming in *The Manchester School* as "Finance and the Poor."

formal financial systems, so this seems to be a natural place to examine the impact of financial policies on the poor. Second, when informal financial arrangements become economically substantive at a national level, these arrangements are moved under the umbrella of formal regulations. Consequently, I focus on the role of formal financial systems—and formal financial sector policies—in affecting poverty and the economic opportunities of the poor.

#### What is poverty?

I use three related definitions of *poverty*. Development economists frequently define the poverty line as those living on less than one dollar per day, though it is becoming increasingly common to use a line of two dollars per day. In the European Union and the United States, essentially nobody lives on less than two dollars per day, so analysts create different poverty lines. While somewhat arbitrary, the poverty line is useful. It identifies how many people are living in conditions that a particular society at a particular time finds abhorrent. Once measured, society has a quantifiable metric of people living in unacceptable conditions.

Nevertheless, the poverty line provides only a limited conception of poverty. It implies that there are no poor people if everyone is above the line. This misses relevant qualities of what we mean by *poverty*. Everyone might be above the poverty line, but the distribution of income might be highly skewed. Everyone might be above the poverty line, but many might be stuck at the bottom with few opportunities to improve their living standards. The poverty line ignores income distribution and the degree of economic opportunity.

Consequently, I also consider *income distribution*, which measures comparative poverty. It quantifies how much of an economy's income goes to the poorest 10 or 20 percent of the population. It gauges how far each country lies from perfect income equality each year. It does not, however, measure hunger, disease, or homelessness. Nevertheless, the distribution of income provides information on a relevant conception of poverty.

We as economists care about income distribution because we as people care about income distribution. Many studies suggest that an individual's welfare depends on comparative income, not simply on the individual's income. If the operation of the financial system influences income distribution, this will affect social welfare beyond poverty considerations. Thus, financial policies should be judged in terms of their distributional effects, not simply their aggregate efficiency effects. Indeed, I will make the more provocative claim that financial policies *primarily* reflect battles over income distribution, not disagreements about efficiency.

The third definition of poverty stresses *economic opportunity*. This concept is the most difficult to measure empirically, but it is typically the most central in theory

and public policy debates. One might define the poor as those whose economic opportunities are severely limited by parental wealth, race, religion, or other traits. Comparatively talented and industrious individuals may face extraordinary obstacles because their parents lack resources or other characteristics. The role of finance in shaping economic opportunities has not yet received much attention in empirical studies of finance and the poor. Below, I present preliminary empirical work on the connections between finance and racial discrimination, which provides some information on finance and opportunity.

#### Theory

Financial market imperfections are a keystone of many influential theories of persistent poverty. What I mean by a *keystone* is that financial market imperfections are necessary for sustaining a persistent class of families who remain poor across generations.

#### **Implications**

In these theories, perfect financial markets imply that individuals have access to capital to fund education, training, or business endeavors based only on individual talent and initiative, not on parental wealth. And in these theories, perfect financial markets equalize opportunities by reducing the importance of parental wealth. From this perspective, financial development might exert a disproportionately positive influence on the poor. Even while holding the median level of income constant, financial development can pull the left part of the distribution of income to the right (i.e., it can increase the proportional distribution to the less wealthy). Furthermore, in some of these theories, better-functioning financial markets imply a more efficient allocation of resources, spurring economic growth and hence reducing the fraction of the population living below any arbitrary poverty line. Financial development might reduce poverty by accelerating aggregate economic growth while holding income distribution constant. Finance can push the whole distribution to the right. Thus, researchers need to dissect the channels linking finance and financial sector policies with the fraction of the population living below the poverty line, the distribution of income, and the distribution of economic opportunities facing different segments of the economy.

#### Basic framework

To better appreciate the mechanisms linking finance and the intergenerational persistence of poverty, consider that the income of a particular generation of a particular family depends on four things: the level of human capital in that generation of the family; the wage rate per unit of human capital, which might be family-specific as I discuss below; dynastic wealth in this family and generation; and the return on assets, which may also vary by

family, as discussed below. With this simple framework, it is easy to see that if the bequest motive that transfers savings from one generation to the next is positively related to parental wealth, so that the bequest rate increases with wealth, then (1) family wealth across generations will not converge in the steady state, (2) wealth differences will persist in the long run, and (3) the long-run distribution of wealth will depend on the initial distribution of wealth.

#### Human capital accumulation

Next, consider human capital as being a positive function of both ability and schooling. Further, assume that ability and schooling are complementary inputs into the production of human capital, so that schooling is particularly beneficial for students of greater ability. Also, existing evidence suggests that ability is not strongly persistent across generations within a family—that is, there are not simply intelligent and unintelligent families.

Thus, to promote economic efficiency, highly capable children should receive lots of schooling. With perfect capital markets, the economy achieves social efficiency. People who can best take advantage of higher education get schooling irrespective of parental wealth, so that schooling is simply a function of ability. An individual's economic opportunities are determined by his or her abilities

With imperfect capital markets, however, schooling is jointly determined by ability and parental wealth. Less capable children of wealthy parents get relatively too much education. Very capable children of economically disadvantaged parents get too little. This occurs because the smart poor cannot borrow to purchase education, while less capable children from wealthy backgrounds have the means to purchase more than is socially optimal. The underdeveloped financial system has two effects. First, it increases the cross-generational persistence of poverty, so that the poor tend to stay poor and rich tend to remain rich. Second, financial underdevelopment slows economic growth since resources (education opportunities) do not flow to where they will have the biggest returns.

Thus, imperfect loan markets both slow economic growth by reducing the efficient allocation of resources and curtail the economic opportunities of the poor, perpetuating cross-family relative income differences.

#### Entrepreneurship

Some theories highlight the role of financial market frictions in determining who can become entrepreneurs and who cannot. With perfect capital markets, those with the most entrepreneurial talent have access to the required funding at the economy-wide interest rate. Entrepreneurial activity is a function of entrepreneurial ability, not familial wealth. Furthermore, society's resources are funneled to those with the most talent, not to those with the most assets.

With imperfect capital markets, however, capital will not simply flow to individuals with the most entrepreneurial talent. With capital market imperfections, lenders will demand collateral and large injections of capital by the entrepreneur before funding a business endeavor. Thus, the accumulated assets of a family will influence the ability of that family to attract outside funding and to open a business. The rate of return on savings depends positively on both entrepreneurial ability and familial assets.

With poorly functioning financial markets, society's resources are not funneled only to those with the most talent. A poor person with a great idea might not be able to get the project funded, while a wealthy person with a mediocre idea might have easier access to credit. Thus, the best projects are not necessarily funded, which slows economic growth. Moreover, the talented poor cannot realize their dreams, curtailing the economic opportunities of large segments of society. Finance exerts a major influence on both aggregate economic growth and the cross-generational persistence of poverty.

#### Discrimination

Finally, consider the wage rate. It is common to think of the wage rate per unit of human capital as not varying across individuals. However, employers might discriminate by particular characteristics, such as race. For example, blacks with exactly the same skills as whites might receive lower wage rates because employers are willing to lose some profits in order to satisfy their preferences for hiring only white workers. Discrimination might contribute to the intergenerational persistence of relative incomes across different groups.

Becker (1957) argues that discrimination is cheaper when there is little competition. When an owner is earning large rents, the marginal cost of hiring a more expensive white worker rather than an equally productive and less expensive black worker is not a very large share of the profits. With more intense competition and smaller profit margins, the cost of discrimination increases. Thus, competition reduces discrimination in wage rates and employment.

Financial policy reforms fit comfortably within Becker's theory of discrimination. Some financial sector reforms will spur financial intermediaries to expend more resources seeking out the best firms rather than simply granting credit to incumbents. For example, if a bank has a monopoly, it might lend comfortably to those with whom it has a long, multidimensional relationship. There might be other existing or potential firms with better ideas, but the bank can earn comfortable profits by lending to its friends. If this bank's monopoly position is threatened by regulatory reforms that expose the bank to more competition, however, the intensified competition might weaken longstanding bonds between the bank and firms. Competition might spur the bank to screen borrowers more carefully. In turn, firms will

compete more intensively to attract bank capital. Firms will have to demonstrate their superiority in product markets to attract bank capital. In this way, intensified competition in banking intensifies competition throughout the economy, which makes discrimination more expensive. As a consequence, financial sector reforms that improve the allocation of capital and intensify competition will tend to reduce discrimination, driving up the wages of the disadvantaged and expanding their opportunities.

#### Alternative views and discussion

Theory does not unambiguously assert that the financial system exerts a first-order, positive impact on the poor. Indeed, if the poor are simply excluded from access to financial services, improvements in the financial system will help only the rich. Financial development might not provide a broad array of new and improved financial services to the poor; financial development might only improve financial services for the rich who were already using financial services. Thus, financial development might increase both the inequality of outcomes and the inequality of opportunities.

#### **Evidence**

On the evidence, I summarize three of my papers that address the different conceptions of poverty: those living below a poverty line, the distribution of income, and economic opportunity. By choosing to discuss my papers, I am not suggesting that my work is the best in this area. Rather, I have a comparative advantage in presenting my research. I emphasize weaknesses in these analyses and urge others to improve the study of how formal financial institutions and policies affect poverty.

#### Cross-country evidence

Beck et al. (2007) examine the relationship between financial development and the fraction of the population living on less than a dollar a day. For a cross-section of up to 68 developing economies, we use data on poverty averaged over the period 1980–2005. Thus, we use one observation per country. We average over this long time period to aggregate away any business cycle fluctuations or crises that might distort our assessment of theories, which focus on the long-run relationship between the operation of the financial system and changes in the fraction of the population living below the poverty line.

In defining financial development, theory focuses on what the financial system does. The financial system ameliorates informational problems before investments are made; it affects corporate governance by reducing informational problems after investments are initiated; it facilitates risk diversification and reduces liquidity risk by lowering transaction costs; and it directly affects the ease of exchange through both information and transaction costs. Obviously, some financial systems perform

the functions comparatively better than others. Poorly functioning financial systems do not effectively reduce information and transaction costs, they do not efficiently allocate resources, and they frequently encourage cronyism in the flow of credit. Other financial systems are better at providing these financial services to the economy. Differences in the ability of financial systems to identify good projects, monitor firms, diversify risk, and ease transactions are what I mean by the level of financial development.

The empirical proxies for financial development, however, do not directly measure these concepts. A common measure of financial development is the variable private credit, which equals the value of credit going to privately owned firms as a fraction of a country's gross domestic product (GDP). Private credit isolates the intermediation of credit that goes to private firms, and it excludes credit flowing to the state or the state-owned enterprises. Nevertheless, private credit is not a direct measure of overcoming information or transaction costs to improve credit allocation, corporate governance, and risk management. The value added of improving our measures of the level of financial development is much greater than the value added of improving the econometric methods used to examine the impact of finance on the economy.

The evidence is quite clear: as financial development increases, poverty decreases. This holds even when controlling for average growth, initial income, initial poverty, and the full range of country traits mentioned above. It is worth emphasizing that the negative relationship between financial development and poverty alleviation holds when controlling for average growth. We are not simply finding that finance accelerates economic growth, which helps the poor. We are finding that finance exerts a disproportionately positive influence on the poor.

Beck et al. (2007) also examine income inequality. Since the data on income inequality run from 1960 to 2005 for 72 countries, we use a dynamic panel instrumental estimator to control for potential endogeneity bias.

There is a strong negative relationship between the level of financial development and income inequality. Finance exerts an especially positive impact on those at the bottom of the distribution of income. These results are also not definitive. The measure of financial development is not closely tied to theory. The study does not examine policy; rather, it examines a proxy for overall financial development that reflects many factors. Future work that develops better measures of financial development and uses exogenous innovations in particular policy changes will substantively improve our understanding.

#### Deregulation across the United States

Beck et al. (2008) test whether a policy reform that improved the quality of banking services increased, decreased, or had no effect on the distribution of income. Individual states within the United States removed regulatory prohibitions on opening branches within state boundaries in different years over a 20-year period, ranging from the mid 1970s to the mid 1990s. We examined the impact of bank deregulation on the distribution of income, which has been the central battle line over bank regulations in the United States since the administration of George Washington.

Methodologically, the deregulation of intra-state branching provides a natural setting for identifying and assessing the impact of regulatory reform on the distribution of income. Kroszner and Strahan (1999) show that national technological innovations triggered deregulation, which was exogenous to income distributional changes within individual states. The invention of automatic teller machines (ATMs), in conjunction with court rulings that ATMs are not bank branches, weakened the geographical bond between customers and banks. Checkable money market mutual funds facilitated banking by mail and telephone, which weakened local bank monopolies. Improvements in communications technology lowered the costs of using distant banks. These innovations reduced the monopoly power of local banks, and therefore weakened their ability and desire to fight deregulation. Kroszner and Strahan (1999) further show that cross-state variation in the timing of deregulation reflects the interactions of these technological innovations with pre-existing conditions. Thus, the driving forces behind deregulation and its timing were largely independent of state-level changes in income distribution. Consequently, we exploit cross-state, crossyear variation in income distribution and deregulation to assess the impact of a single policy change on different state economies.

The paper's major finding is that deregulation of branching restrictions reduced income inequality. After controlling for national trends in income inequality, the Gini coefficient of income inequality drops after bank branch deregulation.

The negative relationship between branch deregulation and inequality is robust to using different measures of income distribution, examining different components of income, controlling for many time-varying state characteristics, and conditioning on state and year fixed effects. While income inequality widened in the United States during this period, we show that branch deregulation lowered income inequality relative to this national trend. The magnitude is consequential: deregulation explains 60 percent of the variation of income inequality during the sample period relative to state and year averages. Furthermore, deregulation reduces income inequality by exerting a disproportionately positive impact on the poor, not by hurting the rich.

Again, the analysis has limitations. This study examines the United States. Do these results hold for other countries? Furthermore, we study one specific regulatory reform. Do these results hold for other policy

reforms that boost competition among banks? Although these shortcomings should be addressed, the empirical results thus far support a class of models predicting that better-functioning financial systems disproportionately help the poor.

#### Discrimination

With Levkov and Rubinstein (2008), I have been examining whether the intensification of bank competition reduces discrimination. Here, we use the deregulation of interstate banking restrictions that were imposed by individual states as an exogenous increase in competition. We have data on hundreds of thousands of individuals across all of the US states for the period 1976 to 2005.

Using standard labor market procedures, we compute the race gap: the difference between the wage rates of white males and black males after controlling for a wide array of personal characteristics. The race gap is the difference between white and black wage rates that is unaccounted for by observable characteristics. As in other studies, we find a positive race gap: white wage rates are above black wage rates when holding other traits constant. Then, controlling for state and year fixed effects, we study how this race gap varies with deregulation.

We find that the race gap falls after deregulation. After controlling for individual characteristics, as well as state and year fixed effects, the race gap drops by about 20 percent after a state removes restrictions on interstate banking. More specifically, before a state deregulates, a white man with identical observable characteristics as a black man earns 14 percent more than the black man. After a state deregulates, the race gap falls to 11 percent. These findings suggest that improving the financial system reduces discrimination, expanding the opportunities of groups that have been disproportionately stuck at the bottom of the distribution of income.

#### **Concluding remarks**

I conclude with two observations about policy.

First, improvements in the financial system can increase both efficiency and equity. For comparison purposes, consider redistributive policies. Many theories motivate redistributive policies as a mechanism for delinking an individual's opportunities from familial wealth. As I mentioned earlier, however, one cannot simply change the distribution of income and hold everything else constant. Redistributive policies create disincentives to work and save, though researchers debate the actual economic magnitudes of these disincentive effects. These tensions between efficiency and equity, however, vanish when focusing on financial sector reforms. Financial developments that expand individual economic opportunity create positive, not negative incentive effects, and avoid the adverse repercussions associated with attempts to equalize outcomes.

My second policy observation is that this assessment of the costs of financial development is too good to be true. The evidence suggests that improvements in the financial system accelerate economic growth, while disproportionately helping the poor. This raises an obvious question: if finance is so beneficial, why do only a handful of countries have well-functioning financial systems?

I believe the answer is also obvious: some people do not want well-functioning financial systems that give the economically disenfranchised greater opportunities. They do not want to compete on equal terms. For some, there are huge costs associated with financial development because well-functioning financial systems will expose them to greater competition. In the United States, monopolistic banks and their clients benefited handsomely for almost a century from bank regulations that protected them from competition. These banks used their monopolistic rents to maintain political support for these regulations. The elite favored protective bank regulations even though these regulations stymied aggregate growth. Indeed, distributional considerations have dominated debates about financial policies since Alexander Hamilton and Thomas Jefferson first tangled over the creation of a national bank.<sup>2</sup> Similar distributional battles shape financial policies around the world.3 Many countries do not have well-functioning financial systems because decision makers do not view it as in their best interests to create well-functioning financial systems. Generating financial reforms, therefore, will involve much more than identifying which financial sector policies are good for economic growth in general and the poor in particular.

#### **Notes**

- 1 See, for example, Levine 1997, 2005.
- 2 See Beck et al. 2008.
- 3 See Barth et al. 2006.

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**CHAPTER 1.3** 

# Financial Crises, Financial Stability, and Reform: Supervision and Regulation of Financial Systems in a World of Financial Globalization

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The issue of financial stability is central to the assessment of the financial development of a country. The experience of the last few decades in both emerging market economies and advanced economies shows the pervasiveness of financial crises. These crises—signals of financial instability and the failure of the proper working of the financial system—have important economic and financial consequences, and usually lead to severe economic contractions—recessions if not depressions—that may be either short lived or persist over time. If these real effects persist, the long-run potential and actual growth rate of an economy may be significantly lowered, which has negative effects on long-term welfare. Financial crises are also expensive, as they are associated with significant bankruptcies among households, corporate firms, and financial institutions, with all the ensuing social deadweight losses from debt restructurings and bankruptcies. Financial crises often lead to expensive government intervention, with ensuing fiscal costs to bail out distressed borrowers (households, firms, and financial institutions). These fiscal costs can be very high—often well above 10 percent of GDP.

Thus, persistent and severe financial instability, as measured by the pervasiveness and severity of financial crises, is a signal of failure of the financial system: failure to properly allocate savings to investment projects and failure of corporate governance. Of course, in a market economy, some degree of bankruptcy is a healthy sign of risk-taking. A financial system so "stable" that no bankruptcy would ever occur would indicate low risk-taking and diminished entrepreneurship; the lack of risky—but potentially high-return—investment projects would decrease long-term economic growth. There is a substantial difference, however, between occasional bankruptcies of firms, households, or banks—bankruptcies that are healthy developments in flexible and dynamic market economies-and a systemic banking or corporate crisis where a large number of financial institutions or corporations go bankrupt. In short, a systemic financial crisis is a sign of the failure of the financial system, the failure of appropriate risk management, and the failure of proper corporate governance.

This chapter will analyze the issue of financial crises, the stability of the financial system, and the foundations of sound regulation and supervision. It starts with an overview of the many financial crises in advanced and emerging market economies in the last few decades and the most recent episode of financial turmoil and distress in advanced economies' financial systems. It next considers the role that asset bubbles and credit bubbles—and their eventual bust—have in financial crises, and then debates whether monetary and credit policy should be used to prevent or control such asset and credit bubbles. Finally, in light of the recent financial crises in advanced economies, it discusses the market failures and regulatory failures that led to this turmoil, and provides an overview of the basic issues and principles that affect the reforms

needed to improve the supervision and regulation of the financial system and make it more stable.

#### The importance of the stability of the financial system

The issue of financial stability is important because of the pervasiveness of episodes of financial crises (systemic banking crises, systemic corporate crises, currency crises, and sovereign debt crises) that have negative effects on economic growth and lead to significant losses to investors. In thinking about financial stability one should think in terms of a tradeoff between risk and return/ innovation. A financial system that is very heavily supervised and regulated may be very stable, but such a controlled system would hamper financial development and the innovation that allows increased returns, better diversification of risks, and better allocation of resources to those investments that provide the highest return. Conversely, a financial system that is free and innovative and very lightly regulated and supervised may eventually become unstable and trigger credit booms and asset bubbles that, when they fail, or go bust, have severe effects on growth, returns, and welfare.

Thus, although there is some tradeoff between the stability of the financial system and its degree of innovation and sophistication, financial stability is a crucial input into the process of financial development. Excessively unstable financial systems—systems that are prone to repeated and virulent financial crises—are less likely to develop soundly. For example, repeated banking crises that cause serious liquidity and credit crunches severely hamper the process of intermediation that allocates savings to the appropriate investment projects. Systemic banking crises are themselves a signal that the allocation of resources was poor in the first place, exhibiting a misallocation to investments with very low returns that then triggers financial crisis. Moreover, as discussed below, financial crises have significant real economic and financial costs.

#### The history of asset and credit bubbles and financial crises in advanced and emerging market economies

Episodes of asset and credit bubbles followed by financial crises have a long history that goes back centuries—as far back as the Renaissance period if not before. Asset bubbles, manias, panics, and financial crashes are well documented, starting with the classic work of Kindleberger.

Financial crises can take various forms. In the recent history of both advanced and emerging market economies, these crises can be generally classified according to the following five categories:

• *currency crises* that occur when a fixed or semi-fixed exchange rate regime becomes unsustainable and the peg, or effective peg, collapses;

- *sovereign debt crises* that occur when a sovereign government is unable to service its debt obligations in time and in full, and thus formally or informally defaults on its debt;
- *systemic banking or financial crises* that occur when a significant number of financial institutions (banks or non-banks) become financially distressed and need to be closed down, merged, or restructured;
- systemic corporate crises that occur when a significant fraction of the corporate sector is financially distressed; and
- systemic household debt crises that occur when a large number of households are unable to service their debts (mortgages and consumer credit).

These crises are often preceded by asset bubbles and the credit bubbles that feed them. Asset bubbles, which go as far back as the Dutch tulip-mania of the 17th century, occur when an asset price rises above its underlying fundamental value. Of course, it is hard to identify an asset bubble while it is emerging because a story about a structural reason for the fundamental increase of the value of an asset can always be told. Usually it is the bursting of the bubble that leads, after the fact, to the recognition that a bubble existed.

Asset bubbles can occur for any financial or real asset, but recent experience shows that they are pervasive in equity markets and in housing and real estate markets. An asset bubble does not require a credit boom to develop because expectations of future increases in the asset price are sufficient to drive a self-fulfilling rise in price. However, many asset bubbles have been associated with episodes of easy monetary policy and excessive credit growth.

The perverse interaction between easy money, asset bubbles, credit growth, and leveraging that feeds asset bubbles has been observed in many episodes. The initial trigger for a bubble may (but not necessarily) be a period of easy money with relatively low real interest rates. Such a low cost of capital and easy liquidity may lead to an initial increase in the asset price above its fundamental value. Since asset purchases are often financed by credit, the initial increase in the asset prices allows borrowers to borrow more as the asset price rise increases the value of the collateral that can be used to increase leverage. With higher asset prices, the collateral value of borrowing to finance further asset purchases is higher, with increased leverage allowing additional asset purchases that further increases the collateral that then allows further borrowing and leveraging, entering into a vicious circle. This credit boom-driven asset bubble is the reason why many asset bubbles are associated with credit booms that become excessive. Thus, easy money and easy credit may be an initial trigger of a process of

asset bubbles and excessive leveraging of the financial system and of the private non-financial sector.

In the mid 1980s in the United States, this credit cycle fed the investment boom in commercial and residential real estate that caused a real estate bubble that went bust in the late 1980s. In the 1990s, the tech and Internet bubble was in part fed by easy monetary policy—with the Federal Reserve (the Fed) worrying about "irrational exuberance" and doing nothing to control it—and by easy credit conditions that allowed investors to use leverage to increase their purchases of high-tech and Internet stocks. In the last decade, the decision of the Fed to keep the Fed Funds rate too low for too long (down to 1 percent until 2004), along with loose regulation of mortgages, created both a credit bubble and a housing bubble.

Eventually, when shocks lead to a bursting of the asset bubble and trigger a process of deleveraging, these unsustainable asset bubbles and credit booms go bust. The fall in the value of the asset that was backed by high leverage leads to margin calls that force borrowers to sell the bubbly asset, which in turn starts to deflate in value. This fall in the asset value now reduces the value of the collateral backing the initial leveraged credit boom. Then, margin calls and the forced fire sale of the asset can drive down its price even below its now lower fundamental value creating a cascading vicious circle of falling asset prices, margin calls, fire sales, deleveraging, and further asset price deflation. The losses that highly leveraged financial institutions then face lead to a significant credit crunch that exacerbates the asset price deflation and leads to lower real spending on capital goodsconsumer durables and investment goods—that may trigger an overall economic contraction. Thus, deleveraging and credit crunches have both financial and real consequences: they trigger financial losses and they can trigger an economic recession that worsens financial losses for debtors and creditors.

These cycles of asset bubbles and credit booms followed by asset busts and credit crunches and deleveraging have occurred in most episodes of asset/credit bubbles and financial crises. The real estate bubble of the 1980s in the United States ended in the savings and loan (S&L) thrifts crisis of the late 1980s—after the Fed tightened policy rates in 1998-89. This eventually caused a credit crunch that tipped the US economy into a recession in 1990-91. The high-tech bubble and leveraged equity market bubble of the mid-to-late 1990s went into a bust in 2001 after the Fed's tightening in 1999–2000; the ensuing collapse of dot-coms, the sharp fall in real investment by the corporate sector, and the collapse of high-tech stocks triggered the US recession of 2001. The ensuing Fed easing, along with poor regulation and supervision of mortgages, triggered another asset bubble in housing that went bust in 2006 after the Fed moved the Fed Funds rate from 1 percent up to 5.25 percent. The resulting bust of the housing market,

the subprime mortgage crisis, and the credit/liquidity crunch and tipped the US economy into a sharp growth slowdown and likely recession by early 2008.

Although financial crises are not necessarily always associated with asset bubbles and credit booms that go bust, frequently such crises do show excessive credit booms, leveraging, and asset bubbles. Indeed, debt crises—sovereign debt crises, systemic corporate crises, household debt crises, and systemic banking crises—are often preceded by a period when governments, non-financial corporations, or households borrow too much and financial institutions lend too much, with poor underwriting and poor collateral of shaky value. The ensuing debt crisis caused by an unsustainable debt burden triggers the financial crisis that hits both excessively indebted borrowers and excessively leveraged lenders.

Asset bubbles, credit bubbles gone bust, and financial crises of different varieties have been pervasive both among advanced economies and emerging market economies for the last few decades. Among advanced economies, such financial crises and episodes of systemic risk have occurred in many different countries. In the United States, the stock market crash of 1987 was a typical episode of systemic risk; the real estate bubble of the 1980s was followed by the S&L bust and credit crunch of 1990-91; the long-term capital management crisis (LTCM) in 1998; the tech bubble of the 1990s was followed by the tech bust of 2000-01; the housing and credit bubble of the 2000s was followed by the housing bust and credit crunch of 2007. Other episodes of systemic crisis and financial crisis include the Japanese real estate bubble and equity bubble of the 1980s that collapsed in 1990 and led to an acute banking and corporate crisis and a severe decade long stagnation during the 1990s decade; the Scandinavian banking crises of the early 1990s; the collapse of the fixed exchange rates within the European Monetary System in 1992-93; and the German real estate bubble and bust that occurred after the German reunification in the early 1990s.

Among emerging market economies, the Latin American sovereign debt crisis that started in 1982 and led to a decade of lost growth in that region in the 1980s was preceded by excessive sovereign borrowing in the late 1970s in the form of syndicated medium- and long-term bank loans. Another cycle of financial crises—a combination of currency crises, sovereign debt, banking, corporate and household debt crises-started in 1994 with the collapse of the Mexican peso currency peg. The following decade showed a variety of financial crises in emerging market economies: East Asia (Indonesia, Korea, Malaysia, Thailand) in 1997-98; Russia in 1998; Brazil in 1999; Ecuador, Pakistan, and Ukraine in 1999–2000; Argentina and Turkey in 2001; Brazil again in 2002; and the Dominican Republic and Uruguay in 2003. Some of these crises were only currency crises (Brazil in 1999); some were twin currency and banking crises (Mexico in 1994-95, Turkey in 2001,

Uruguay and the Dominican Republic in 2003); some were triple currency, banking, and corporate crises (East Asia in 1997–98); and some were currency, banking, corporate, and sovereign crises (Russia in 1998, Argentina in 2001) (see Table 1). The eventual trigger in all of these crises was some combination of macro vulnerabilities (current account deficits and/or fiscal deficits in some episodes), wrong exchange rate regime (fixed or semi-fixed exchange rates associated with unsustainable real appreciation of currencies), and balance sheet vulnerabilities (currency, maturity, and capital structure mismatches).

**Table 1: Types of recent financial crises** 

Crisis	Currency	Banking	Corporate	Sovereign	Household
East Asia (1997–98)	Χ	Χ	Χ		
Brazil (1999 and 2002)	Χ				
Mexico (1994–95)	Χ	Χ			Χ
Russia (1998)	Χ	Χ	Χ	Χ	
Argentina (2001)	Χ	Χ	Χ	Χ	Χ
Turkey (2001)	Χ	Χ	Χ		
Ecuador (1999)	Χ			Χ	
Ukraine (1999)				Χ	
Pakistan (1999-2000)	Χ			Χ	
Uruguay (2002)	Χ	Χ			
Dominican Republic (200	3)	Χ		Χ	

Source: Roubini and Setser, 2005.

Financial crises are pervasive phenomena both among advanced and emerging market economies. Moreover, in spite of the "great moderation" (a sustained period of high growth and low inflation) of the last two decades, financial crises have become more frequent and more virulent rather than less frequent and less severe. Paradoxically, such great moderation may have triggered asset and credit bubbles. Indeed, with low inflation, sustained growth, and lower nominal and real interest rates, given the loose monetary and credit conditions and the ability of borrowers to lever up again, the possibility of asset bubbles and credit booms has increased.

#### Real and financial costs of asset bubbles and credit booms

Asset bubbles and excessive credit booms clearly affect the economy, both on the way up and on the way down. Even though the precise magnitude of their impact may be uncertain, monetary policy needs to take them into account.

If a bursting bubble systematically and appropriately leads to a sharp monetary easing to prevent the systemic and real effects of the crash, the view that many crashes are not costly is irrelevant. In fact, without such a

response, the economic impact of a crash would have been severe. Indeed those who believe that monetary policy should not react to rising bubbles also believe that monetary policy should sharply react to crashing bubbles, because such bubble bursting would otherwise be highly costly. Arguing that bubbles are not costly in practice—after policy has reacted to them—does not imply that they are not very costly in principle and *ex-ante*. In addition, arguing that bubbles are not costly, but that not reacting to bursting bubbles would be costly, is similarly illogical.

Moreover, the argument that rising bubbles that eventually crash are not costly does not seem to be supported by evidence from advanced and emerging economies. A number of studies suggest that both credit and asset price booms and busts can have serious financial and economic consequences. A decade of experience with financial crises in emerging market economies shows that many of these crises are preceded by asset bubbles, credit booms, investment booms, and large and growing external current account imbalances that become eventually unsustainable. In many episodes, such bubbles and imbalances lead to grave economic and financial crises that have sharp impacts on economic growth. Thus, there is prima facie evidence that asset bubbles, whether caused by a prior monetary easing or not, can have critical real and financial consequences.

#### Cost of credit and asset bubbles that go bust

Credit and asset bubbles that go bust have significant real economic cost as they are often associated with recessions. They also have serious fiscal costs in the form of the fiscal cost of bailing out borrowers and/or lenders who are overextended. This bailout is often expensive and leads to higher fiscal deficits and public debt. The history of most financial and banking crises suggests that, in almost every episode, the resolution of the crisis entails a significant amount of government intervention that is fiscally costly. For example, if banks—as in most countries—have implicit and/or explicit deposit insurance, insolvency of some banks requires the government to bail out the depositors of the banks when the banks' assets fall below its liabilities. Similarly, the financial distress of other institutions or borrowers (households with mortgages that they can no longer afford, corporate debts that are unsustainable, etc.) often leads to government intervention to reduce such debt burdens. Such intervention effectively implies significant fiscal bailout costs.

The fiscal bailout costs of banking and financial crises can be staggering. Work done by the World Bank estimates such costs to have been extremely high in a number of episodes (see Table 2).

Table 2: Total government cost of fiscal bailouts

Country	Period	Total costs of fiscal bailout as percentage of GDP
·		· · · · · ·
China	1990s	47
Korea	Late 1990s	28
Malaysia	Late 1990s	16
Thailand	Late 1990s	35
Bulgaria	1995-97	13
Czech Republic	1991–94	12
Hungary	1991-95	10
Russia	1998–99	5–7
Turkey	2000-03	30
Finland	1991–94	11
Japan	1990s	24
Spain	1977–85	175
Argentina	1980-82	55
Chile	1982–86	55
Ecuador	Late 1990s	20
Jamaica	1995–2000	44
Mexico	1994–97	18
United States	1984–91	3
Venezuela	1994–95	18

Source: Caprio and Klingebiel, 2003.

These fiscal bailout costs are a significant social burden. The added public debt needed to bail out borrowers and/or lenders has to be serviced over time, which means that the social costs of systemic banking and financial crises are very serious in the affected economies.

#### Asset and credit bubbles and monetary policy: Pros and cons

Given the real and financial risks that result from credit booms and asset bubbles that go bust, should monetary policy respond to asset prices and asset bubbles? This is a highly controversial issue, both from an academic research perspective and, more importantly, from a policy perspective. There is broad evidence that asset bubbles do occur from time to time, and that such bubbles may lead to economic distortions as well as financial and real economy instability. It can be argued that optimal monetary policy requires monetary policy authorities to react to such bubbles over and above the effects they have on current output growth, aggregate spending, and expected inflation. It can also be argued that monetary policy should not react to asset prices or bubbles beyond the direct effect that such asset price movements have on inflation, aggregate spending, and economic growth.

There are many good arguments in favor of targeting asset prices; the arguments against it are, in many dimensions, not robust enough. Arguments in favor of targeting asset prices are:

 First, a wide range of analytical models suggests that optimal monetary policy should react to asset prices and exogenous asset bubbles (i.e., bubbles whose

- evolution does not depend on monetary policy) above and beyond its reaction to the deviation of growth and inflation from their target.
- Second, uncertainty about the existence of a bubble does not undermine the arguments in favor of asset price targeting. Like many other types of data uncertainty, uncertainty about the existence and size of an asset bubble only reduces the quantitative degree of response of optimal monetary policy to asset bubbles.
- Third, uncertainty about whether bubbles can have damaging effects on the economy is not a good argument against targeting such bubbles because (1) there is a wide body of evidence that such bubbles and their aftermath are costly, and (2) uncertainty about the economic effects of bubbles only reduces the degree of optimal interest rate response, but does not eliminate completely such a response.
- Fourth, analytical models suggest that if a bubble is endogenous (i.e., its probability and size can be affected by monetary policy), optimal monetary policy requires an attempt to affect it (i.e., to try to "prick" or "burst" it).
- Fifth, the argument that trying to affect a bubble would require such a large interest response that a severe recession would be triggered is found to be incorrect both in theory and practice. Conceptually, a moderate interest rate response can have an impact on bubbles and reduce the economic distortions caused by them. Empirically, the recent experience of the United Kingdom, Australia, and New Zealand shows that monetary authorities can successfully control bubbles with monetary tightening without causing severe recession or financial distress.
- Sixth, the Greenspan and Bernanke doctrine that the Fed should not react to rising bubbles but should be ready to dampen the real costs of bursting bubbles (i.e., an asymmetric response to bubbles) is inefficient and, possibly, a source of moral hazard distortions. It is certainly warranted for monetary authorities to react to bursting bubbles that may cause acute liquidity seizures, systemic risk, and risk of large economic contraction. But in order to prevent such a response from creating distorted incentives, monetary policy authorities should also be willing to respond to rising bubbles. Although a symmetric response to rising and bursting bubbles is appropriate, an asymmetric response is conceptually flawed, liable to create distorted incentives, and likely to induce cycles of rising and crashing bubbles that may have damaging economic and financial effects.

The uncertainties about bubbles and the other factors discussed above suggest that monetary policy should respond to asset bubbles in a cautious and moderate manner—an aggressive monetary policy approach to asset bubbles is not needed. Some of the arguments presented to justify the resistance to fighting rising bubbles have logic and legitimacy. However, although cautiousness is warranted, arguments that there is no case for responding to asset bubbles tend to be incorrect.

Also, the practice of the US Fed over the last two decades of not reacting to rising asset bubbles (the hightech stock bubble of the late 1990s and the housing bubble of the last few years) while aggressively countering bursting bubbles and episodes of systemic risk (in 1987, 1998, 2000, and 2001-03) has contributed to the asset bubbles and economic imbalances that ended up in episodes of economic and financial crisis. The real estate bubble of the 1980s culminated in the S&L crisis of the late 1980s, which eventually triggered a credit crunch and a recession in 1990. In the 1990s, Alan Greenspan warned about "irrational exuberance" when high-tech stocks started to skyrocket in the mid 1990s, but then did nothing to control this bubble apart from a token 25 basis points policy rate hike in early 1997. The hightech bubble festered and grew even larger after the Fed eased interest rates by 75 bps following the Long Term Capital Management (LTCM) hedge fund near collapse; it went bust in 2000 after the Fed tightened interest rates by 175 bps between mid 1999 and mid 2000, thus triggering the 2001 recession.

The Fed responded to this bubble bust and recession by aggressively easing the policy rate from 6.5 percent in early 2001 to 1 percent by 2004. This aggressive policy ease, of keeping the Fed Funds rate too low for too long, then contributed to a new asset bubble— the housing bubble—that was exacerbated by the failure of the Fed and other regulators to properly regulate and supervise mortgages. By 2006, this housing bubble went bust, triggering a severe liquidity and credit crunch, a serious financial crisis, and an economic contraction that is still ongoing. The Fed reacted to this financial crisis, and the risks to economic growth, by aggressively reducing the Fed Funds rate from 5.25 percent in the fall of 2007 to 2 percent by the spring of 2008, and introducing a whole host of new liquidity facilities for both banks and systemically important non-bank institutions.

It can be argued that this latest policy easing, together with the exchange rate policies of emerging market economies, contributed to another asset bubble: the sharp rise in oil, energy, food, and other commodity prices in 2006–08. This commodity price surge may now lead to a generalized increase in global inflation, both among advanced economies and emerging market economies.

#### The use of credit policy instruments

In considering an appropriate policy response to asset bubbles and credit bubbles, one should not be limited to traditional monetary policy alone. If there is an asset bubble driven by a credit bubble, the appropriate response may be a combination of tighter monetary policy in the form of a higher policy rate as well as an appropriate credit policy that limits the extent of a credit boom that is becoming excessive. Appropriate regulation and supervision of the banking and financial system is an important complementary tool that is essential in controlling credit and asset bubbles. At times monetary policy, although a necessary instrument to control bubbles, may not be the most appropriate tool if used alone.

In the United States, for example, the real estate bubble of the 1980s was in part the result of loosening the regulation and supervision of S&L thrifts in the early 1980s. This led to excesses in commercial and residential mortgage underwriting. In the 1990s, a more aggressive Fed tightening, intended to control the "irrational exuberance" in high-tech stocks, would have been beneficial but limited: if investors expected a 50 to 100 percent a year return on bubbly high-tech stocks, a 50 bps or even 100 or 150 bps policy rate tightening would have had limited effect. Rather, in addition to that monetary policy tightening, regulations that tightened the ability of investors to borrow on margin and highly leverage themselves in their purchase of high-tech stocks would have been more targeted and effective tools to deal with the high-tech bubble. Thus, inappropriate regulation and supervision of such leveraged lending was one factor that allowed the bubble to fester.

Similarly, in the last decade the Fed certainly made a mistake in keeping the Fed Funds rate too low for too long, thus feeding the housing bubble. But with households expecting bubbly home prices to rise 20 percent per year, raising the Fed Funds rate sooner would have had only a limited effect in controlling such a bubble. An additional policy failure was the laissez-faire approach of the Fed and of other banking and financial regulators, which allowed toxic mortgage underwriting to occur without restraint. Thus, in addition to tighter monetary policy, better supervision and regulation of mortgage lending would have been the appropriate response. More generally, since asset bubbles are usually fed by credit bubbles, the appropriate response to such excesses is usually a combination of tighter monetary policy along with more prudent regulation and supervision of the financial system to limit these credit cycles. Such appropriate regulation includes policies to make capital requirements for financial firms more procyclical.

Arguing that policy should react to credit and asset bubbles means finding the appropriate combination of traditional monetary policy and credit policy (including appropriate regulation and supervision of financial firms) that can control excessive booms in credit, lending, leverage, and asset prices.

#### Recent crises of the Western financial system

The decade from 1994 until 2003 was one of repeated financial crises in emerging market economies: Mexico in 1994; Thailand, Indonesia, Malaysia, and Korea in 1997–98, Russia in 1998; Brazil, Ecuador, Pakistan, and Ukraine in 1999; Turkey and Argentina in 2001; and Uruguay and the Dominican Republic in 2003. These crises were caused by a combination of macroeconomic weaknesses, policy mistakes, inappropriate exchange rate policies, balance sheet vulnerabilities, poor corporate governance, and weak and poorly supervised and regulated financial systems.

Although not every one of these financial crises ended up in a systemic crisis of the banking or financial system or the corporate system, many of them did. The weaknesses in corporate governance, the emergence of credit and asset bubbles, the poor supervision and regulation of financial institutions, the distorted incentives for financial institutions (in part because of moral hazard distortions created by implicit and/or explicit government bailout guarantees), and phenomena such as directed and connected lending combined led to credit, debt, and financial excesses that eventually triggered systemic banking and corporate crises.

The resolution of these crises implied a variety of policy actions, including structural reforms to make corporate and financial systems less vulnerable and more resilient as well as fundamental reforms of financial regulation and supervision. At the time of these crises, the International Monetary Fund (IMF), the United States, and the G7 countries were highly critical of the financial weaknesses—particularly the quality of institutions, regulations, and governance—that had been triggering factors in these crises. The fact that structural reforms in the financial sector of these economies did occur—on top of macro and policy changes—explains the high growth rate of emerging market economies in the last few years and their resilience, in spite of global shocks that have hit advanced economies and their financial markets in the last few years.

It is thus somehow ironic and paradoxical that, while a decade ago (1997–98), the United States and other G7 policymakers were lecturing East Asian and other emerging market policymakers about the structural weaknesses of their financial systems and prodding them to implement structural reform, today the financial turmoil and stress is at the core of the financial systems of the most advanced economies and financial markets in the world: those in the United States, in the United Kingdom, and, to a smaller extent, in the euro zone.

The severe liquidity and credit crunch that started with the housing bust and the collapse of the subprime mortgage market in the United States revealed a much larger credit and asset bubble and financial excesses of leverage that went well beyond subprime mortgages. Excessive debt accumulation and risky leverage occurred in subprime mortgages, near prime mortgages, prime

mortgages, commercial real estate, the whole plethora of securitized products associated with mortgages and other asset-backed securities (ABSs), structured finance products (mortgage-backed securities [MBSs], collateralized debt obligations [CDOs], constant proportion debt obligations [CPDOs], collateralized mortgage obligations [CMOs], collateralized loan obligations [CLOs]), unsecured consumer credit (credit cards, auto loans, student loans), leveraged loans financing excessively leveraged leveraged buy-outs (LBOs), muni bonds, industrial and commercial loans, junk corporate bonds, and credit default swaps (CDSs). This credit house of cards began to sway in 2007 and collapsed in 2008. The excesses were not limited to the United States but extended to other advanced economies; housing bubbles and credit booms in consumer credit were widespread in the United Kingdom, Spain, Ireland, and—in minor part other euro zone economies. The financial turmoil and credit/liquidity crunch triggered by the subprime meltdown revealed fundamental weaknesses in the operation of advanced economies' financial markets and in the system of supervision and regulation of the financial system, including banks and non-bank financial institutions

This crisis has led to the recognition that fundamental reforms of the regulation and supervision of the financial systems of advanced economies are necessary in a world of financial globalization. A plethora of proposals for reform have been advanced by a number of institutions: the Financial Stability Forum, the Fed, the US Treasury, the G7, the FSA and other policy bodies in the United Kingdom, the BIS, the IMF. It is clearly recognized that the system of regulation and supervision of financial institutions is in trouble and in need of serious reform.

Which reforms are most appropriate? Instead of considering the specific reforms suggested by individual institutions and regulatory bodies, it makes sense to analyze the fundamental weaknesses, distortions, and open issues in the advanced economies' financial markets, and thus what the appropriate principles for a new system of regulation and supervision may be. The rest of this chapter considers the most important issues related to reform of the regulation and supervision of financial institutions in a world of financial globalization.

#### Issues of reform in a world of financial globalization

Given the ongoing financial crisis in the United States and parts of other advanced economies' financial systems, the need for the appropriate reform of the system of supervision and regulation of financial institutions has become a core and urgent subject of debate among scholars, market experts, and policymakers.

To understand what the appropriate system of regulation and supervision of financial institutions may be in a world of financial globalization, one needs to analyze

(1) the problems that an increasingly complex and globalized financial system faces and (2) the shortcomings of the current system of financial regulation and supervision, both in the United States and around the world. Only a detailed consideration of such problems and shortcomings can lead to the recognition of the appropriate reforms of the system.

We consider in more detail such problems and shortcomings of the financial system and of the current supervisory and regulatory regime. These can be categorized according to 10 issues:

#### 1. The compensation system

The system of compensation of bankers and agents within the financial system is flawed. It is characterized by moral hazard in the form of "gambling for redemption." The typical agency problems between a financial firm's shareholders and the firm's managers/bankers/ traders are exacerbated by the way the latter are compensated. Because a large fraction of such compensation is in the form of bonuses tied to short-term profits, and because such bonuses are one-sided (positive in good times and at most zero when returns are poor), managers/bankers/traders have a huge incentive to take larger risks than warranted by the goal of shareholders' value maximization. Potential solutions to this gamblingfor-redemption bias are varied. Among possible solutions are the use of restricted stock that has to be maintained for a number of years, and a pool of cumulated bonuses that is not cashed out yearly but that can grow or shrink depending on medium-term returns to particular investments.

But, even leaving aside the problem of how to change such compensation in a highly competitive market for talent in the financial sector, it is not obvious that the suggested solutions would fully work. For example, in the case of the recent crisis at Bear Stearns, about 30 percent of the firm was owned by its employees as restricted stock. However, this system of compensation did not prevent Bear Stearns from making reckless investments and loans that eventually made it insolvent. Possibly this was the case because the individual compensation was not tied to the individual investing/lending decision. Still, compensation of bankers/traders should be considered a crucial factor that distorts lending and investment decisions in financial markets.

#### 2. The Originate and Distribute Securitization Model

The current model of securitization (the Originate and Distribute Model) has serious flaws because it reduces the incentives for the originator of the claims to monitor the creditworthiness of the borrower. In the securitization food chain for US mortgages, every intermediary in the chain was making a fee; eventually the credit risk got transferred to those least able to understand it. The mortgage broker, the home appraiser, the bank originating the mortgages and repackaging them into

MBSs, the investment bank repackaging the MBSs into CDOs, CDOs of CDOs, and even CDOs cubed, the credit rating agencies giving their AAA blessing to such toxic instruments—each of these intermediaries was earning income from charging fees for their step of the intermediation process and transferring the credit risk down the line.

One possible solution to this lack of incentives to undertake proper monitoring of the borrower would be to force the originating bank and the investment bank intermediaries to hold some of the credit risk; this could take the form of some part of the equity tranche in the CDOs (i.e., the most junior tranche of the CDO that is the one taking the first loss when the value of the underlying collateral falls) or a portion of some of the MBSs that they originate so they have "some skin in the game." But it is not obvious that such solutions would fully resolve the moral hazard problems faced by financial intermediaries. In fact, although the securitization process implied a partial transfer of the credit risk from the mortgage originators and the managers of the CDOs to final investors, the reality is that banks and other financial institutions maintained a significant exposure to mortgages, MBSs, and CDOs. Indeed, in the United States about 47 percent of all the assets of major banks are real estate related; the figure for smaller banks is closer to 67 percent. The model of "originate and distribute" securitization did not fully transfer the credit risk of mortgages to capital market investors. Banks and broker dealers (e.g., Bear Stearns) did maintain a significant portion of that credit risk across a variety of instruments. Indeed, if that credit risk had been fully transferred, such banks and other financial intermediaries would have not suffered the hundreds of billions of dollars of losses that they have incurred so far and will have to recognize in the future.

Thus, excessive risk taking and gambling for redemption did occur in spite of the fact that financial institutions were holding part of the credit risk. Therefore, proposing that such institutions hold some of that risk rather than try to transfer it all does not seem to be a solution that will fully resolve the problems stemming from misaligned incentives and poor risk management. If the fundamental problem is one of moral hazard originating from the way that bankers are compensated, forcing financial institutions to hold more of the credit risk will not resolve the problem of inadequate monitoring of the creditworthiness of the borrowers and poor underwriting standards.

#### 3. Regulatory arbitrage and the instability of the shadow banking system

The regulation and supervision of banks and the lighter—or in cases such as that of hedge funds, nonexistent—regulation and supervision of non-bank financial institutions has led to significant regulatory arbitrage. This arbitrage takes the form of the transfer of a large

fraction of financial intermediation to non-bank financial institutions, such as broker dealers, hedge funds, money market funds, SIVs (Structured Investment Vehicles), conduits, and so on.

The problems with this financial innovation are twofold. First, some of the institutions in this shadow banking system (or shadow financial system) are systemically important. Second, most of these institutions are at risk of bank-like runs on their liabilities as they borrow in short and liquid ways, are highly leveraged, and invest in longer and more illiquid ways.

The risk of runs is significantly decreased for banks by the existence of deposit insurance and by the lender-of-last-resort support that the central bank can provide. Publicly provided deposit insurance is generally not warranted for non-bank financial institutions, because the protection of small investors or depositors (those who do not have the expertise to monitor the lending or investment decisions of banks) is not generally an issue for such non-banks. But, as the recent Bear Stearns episode and the run on and collapse of other components of the shadow financial system suggest, bank-like runs on non-banks can occur. In fact, they are more likely to occur if such institutions do not properly manage their liquidity and credit risks.

Although serving as lender of last resort to many non-bank institutions is not warranted, such support may be warranted for the few institutions that are systemically important. Indeed, two recent US Fed actions—the US\$30 billion rescue of Bear Stearns, and the establishment of two new facilities that allow non-bank primary dealers to access the Fed's discount window and to swap their illiquid MBS products for safe Treasury Bonds—imply that the lender-of-last-resort support of the Fed has been now extended to systemically important non-bank institutions. Thus, the same regulation and supervision that is applied to banks should also be applied to these systemically important financial firms, not just in periods of turmoil (as recommended by the US Treasury), but on a more permanent basis.

Thus, while the safety net of the Fed and other central banks should remain restricted to banks and depository institutions and—subject to some constructive ambiguity—to systemically important non-bank firms, the regulatory and supervisory framework should be similar for banks and non-bank financial institutions; regulatory capital, type of supervision, liquidity ratios, compliance and disclosure standards, and so on should be similar for banks and other financial institutions. If not, then regulatory arbitrage will shift financial intermediation and risks to other more lightly regulated smaller broker deals and other non-bank financial institutions.

To take just one example, the loophole that allowed SIVs and conduits to operate with little supervision and no capital standard under the pretense that these were off-balance sheet units—while the sponsoring bank was

providing large credit enhancements and systematic liquidity lines that made these units de facto on-balance sheet assets and liabilities—was deeply flawed. Unless these and a whole host of other special purpose vehicles are regulated and supervised as if they are on-balance sheet units, this type of regulatory arbitrage will lead again to the disaster that SIVs created.

Moreover, a comprehensive supervisory and regulatory regime that covers both banks and non-banks would also allow better monitoring and assessment of systemic financial risks that at the moment are not properly supervised. Providing regulators and supervisors as well as investors with adequate reporting and disclosure of the information required to assess systemic financial risks will be essential.

Poor liquidity risk management and the risk of bank-like runs on non-bank financial institutions have been shown to be a severe problem in the shadow financial system. The entire SIV/conduit regime has recently collapsed given the roll-off of their asset-backed commercial paper liabilities; hedge funds and private equity funds collapsed because of risky investments and redemptions or roll-off of short-term credits; money market funds whose net asset value fell below par had to be rescued to avoid a run on them; Bear Stearns collapsed because of poor credit/investment choices but also because of a sudden run on its liquidity. Although banks are fundamentally maturity-mismatched because of their reliance on short-term deposits, there is no reason for non-bank financial institutions to have liquidity or rollover risk, especially as they do not have deposit insurance and do not have access—apart from the systemically important institutions—to the central banks' lender-of-last-resort support.

Thus, an essential element of the common regulation of all non-bank financial institutions should be a greater emphasis given to the management of liquidity risk. Such financial firms should be asked to significantly lengthen the maturity and duration of their liabilities in order to reduce their liquidity risk. A firm that makes money only because it borrows very short, has little capital, leverages a lot, and lends long and in illiquid ways is reckless in its risk management. It should certainly disclose fully both to supervisors and to investors the liquidity and other risks that it is undertaking. But it should also be required to reduce its liquidity risk with a variety of tools that provide it with a greater liquidity buffer.

#### 4. Self-regulation versus rules-based regulation

Most regulatory and supervisory regimes have moved in the direction of emphasizing self-regulation and market discipline rather than rigid regulations. One of the arguments in favor of this market discipline approach is that financial innovation is always one or more steps ahead of regulation; thus, one needs to design a regime that does not rely on rigid rules that would be easily avoidable via financial innovation.

This market discipline approach—which relies on principles rather than rigid rules, on internal models of risk assessment and management in determining how much capital a firm needs, and on rating agency assessments of creditworthiness—is a key element of the philosophy behind the Basel II agreement. But this market discipline model has been proven to be vastly flawed because of the way bankers are compensated and because of the way the Originate and Distribute Model provides incentives to ignore internal risk managers in good times when "the music plays and you gotta dance" (as the former CEO of Citigroup put it). Similarly the conflicts of interest of rating agencies lead to mis-ratings of new and exotic financial instruments.

Thus, while reliance on principles is useful to deal with financial innovation and regulatory arbitrage, a more robust set of rules that go with the grain of principles-based regulation and supervision is necessary. Strict reliance on market discipline has been proven ineffective in a world where bankers are improperly compensated, agency problems lead to poor monitoring of lending, flawed transfers of credit risk to those least able to understand it and manage it occur, and regulatory arbitrage is rampant.

#### 5. Procyclical capital requirements and other issues with Rasel II

Even before being fully implemented, the Basel II agreement has shown its flaws. These include capital adequacy ratios that are procyclical and promote credit booms in good times and credit busts in bad times, low emphasis on liquidity risk management, excessively low capital ratios given the risks faced by banks, excessive reliance on internal risk management models, and excessive importance given to the rating agencies. These are serious shortcomings of the new capital regime for large internationally active banks and depository institutions.

How to reform Basel II given the current severe financial crisis is not an easy task, but the urgency of this reform is undeniable. Particular importance should be given to measures that would reduce the procyclicality of capital standards that are a source of booms and busts in credit cycles and to measures that increase—rather than decrease—the overall amount of capital held by financial institutions. As recent history suggests, most financial institutions have been vastly undercapitalized given the kind of market, liquidity, credit, and operational risks that they have faced in an increasingly globalized financial system.

#### 6. Credit rating agencies

By now the conflicts of interest and informational problems that led the rating agencies to rate—or, better, to mis-rate—many MBSs and CDOs and other ABS products highly are well known. With a large fraction of their revenues and profits coming from the rating of complex structured finance products and the consulting and modeling services provided to the issuers of such complex and exotic instruments, it is clear that rating agencies are ripe with conflicts of interest. This is compounded by a system where competition in the rating market is limited by the regulatory barriers to entry. Also the semi-official role that rating agencies have, in general and in Basel II in particular, exacerbates the potential biases of a system where rating agencies are paid by issuers rather than the investors, and underscores the informational problems of raters that know little about the underlying risks of new, complex, and exotic instruments.

What are the potential solutions to these conflicts of interest and other problems? Solutions could be to open up competition in the rating agency business, to drop the semi-official role that rating agencies have in Basel II and in the investment decisions of asset managers, to forbid activities (such as consulting or modeling) that cause conflicts of interest, and to drop the reliance on ratings paid by issuers rather than by investors (the free-riding problem of having investors pay for ratings can be solved by pooling the investors' resources in a pool that can be used to collectively purchase the ratings). Certainly the reputations of the rating agencies have been badly damaged in the ABS ratings fiasco, and only serious and credible reforms—not just cosmetic changes—will be required to restore their credibility in the rating business.

#### 7. Asset valuation and fair value accounting

There are fundamental accounting issues about how to value securities, especially in periods of market volatility and illiquidity when the fundamental long-term value of the asset differs from its market price. The current fair value approach to valuation stresses the use of mark-to-market valuation where, as much as possible, market prices should be used to value assets, whether they are illiquid or not.

There are two possible situations where mark-tomarket accounting may distort valuations: first, when there are bubbles and the market value may be above fundamental value; second, when bubbles burst and, because of market illiquidity, asset prices are potentially below fundamental value. The latter case has become a concern in the latest episode of market turmoil as markto-market accounting may force excessive writedowns and margin calls that may lead to further fire sales of illiquid assets that, in turn, could cause a cascading fall in asset prices well below long-term fundamentals. However, mark-to-market accounting may also create serious distortions during bubbles when its use may lead to excessive leverage as high valuation allows investors to borrow more and leverage more, thus feeding the asset bubble. In either case, mark-to-market accounting

leads to procyclical capital bank capital requirements given the way that the Basel II capital accord is designed.

The shortcomings of mark-to-market valuation are known. The main issue is whether one can find an alternative that is not subject to gaming by financial institutions. Some have suggested the use of historical cost to value assets (where assets are booked at the price at which they were bought); others propose the use of a discounted cash flow (DCF) model where long-run fundamentals—cash flows—would have a greater role. Historical cost does not seem to be an appropriate way to value assets given the potential for increased inaccuracy over the long term. The use of a DCF model may seem more appealing, but it is not without flaws either. How should we properly estimate future cash flows? Which discount rate should we apply to such cash flows? How should we avoid a situation where users subjectively game the model to achieve the valuations that they want by manipulating assumptions about future cash flows and the appropriate discount factor? Possibly, mark-to-market may be a better approach when securities are held in a trading portfolio, and DCF may be more appropriate when such securities are held as a long-term investment, that is, until maturity. But the risk of a DCF approach is that different firms will value identical assets very differently and that firms will use any approach different from mark-to-market to manipulate their financial results.

The other difficult problem that one has to consider is that any suspension of mark-to-market accounting in periods of volatility would reduce, rather than enhance, investors' confidence in financial institutions. Part of the recent turmoil and increase in risk aversion can be seen as an investors' backlash against an opaque and nontransparent financial system where investors cannot properly know the size of the losses experienced by financial institutions and who are holding the "toxic waste." Mark-to-market accounting at least imposes some discipline and transparency.

One view is that the problem is not mark-to-market accounting but the procyclical capital requirements of Basel II; that is correct. But even without such procyclical distortions there is a risk that financial institutionsnot just banks—would retrench too much and too fast with respect to their leverage and credit positions during periods of turmoil when they become more risk averse. Thus, the issue remains open as to whether there are forms of regulatory forbearance that do not destroy confidence and that can be used in periods of turmoil to avoid a cascading and destructive fall in asset prices. But certainly solutions should be symmetrical—that is, they should be applied both during periods of rising asset prices and bubbles (when market prices are above fundamentals) and when such bubbles go bust (and asset prices may fall below fundamentals). So far, however, there is no clear and sensible alternative to mark-tomarket accounting.

#### 8. Lack of transparency in financial markets

The recent financial markets crisis and turmoil has been partly caused by the fact that, over the last few years, financial markets have become less transparent in a number of ways. These include the development of new exotic and illiquid financial instruments that are hard to value and price, the development of increasingly complex derivative instruments, the fact that many of these instruments trade over the counter rather than on an exchange, the fact that there is little information and disclosure about such instruments and who is holding them, and the fact that many new financial institutions are opaque with little or no regulation (hedge funds, private equity, SIVs, and other off-balance sheet special purpose vehicles). These factors have all contributed to a lack of financial market transparency and increased opacity of such markets.

But private financial markets cannot function properly unless there is enough information, reporting, and disclosure both to market participants and to relevant regulators and supervisors. How much reporting and disclosure, and to whom, is a difficult question. But it is clear that for the last few years financial markets have become excessively opaque in ways that are destructive of investors' confidence. When investors cannot appropriately price complex new securities, they cannot properly assess the overall losses faced by financial institutions, and when they cannot know who is holding the risk for "toxic waste," this turns into generalized "uncertainty" (which cannot be priced, unlike financial "risk" that can be priced if the statistical distribution of risky events is known). The outcome is an excessive increase in risk aversion, lack of trust and confidence in counterparties, and a massive seizure of liquidity in financial markets. Greater transparency and information, including the use of fair value accounting (that, in spite of its shortcomings, is still the best way to value assets), along with prompt recognition by financial institutions of their exposures and losses, are essential to restore investors' confidence in financial markets.

One way to make new, complex, and exotic financial instruments more liquid and easier to price might include standardizing such instruments and having them traded in clearing house—based exchanges rather than over the counter. The benefits of standardization are clear: it would allow investors to compare securities with similar characteristics and would thus improve their liquidity. Moreover, instruments that are exchange-traded through a clearing house would have much lower counterparty risk, would be subject to appropriate margin requirements, and would be appropriately marked-to-market on a daily basis.

#### 9. Inadequate regulatory regime

In a world of financial innovation and globalization, what are the appropriate institutions for financial regulation and supervision? And in what sort of system should they operate? The different models that exist each have their pros and cons.

An increasingly popular model is that of a unique and centralized financial regulator and supervisor, as in the case of the United Kingdom's FSA where all financial policies—for banks, securities firms, other financial institutions, insurance companies, and so on—are under one umbrella. Another model is that of the United States, where more than half a dozen financial regulators and supervisors exist at the federal level, and another layer is found at the state level. Some have argued that the US system fosters beneficial competition and propagation of best practices among different regulators. The shortcomings of the system, including an incoherent set of overlapping regulations and a "race to the bottom" rather than to the top—in terms of excessively deregulatory competition, have now become clear. One overall financial regulator may be too little but 60-plus of them is obviously too many. A streamlining of such institutions and a concentration of most regulatory and supervisory activities among a smaller number of institutions is certainly necessary.

Further, the questions of whether supervisory and regulatory power over banks, and possibly other systemically important financial institutions, should be kept within the central bank (as in the United States) or whether such power should be given to another regulator (as in the case of the United Kingdom's FSA) is a difficult and controversial issue. Some worry that taking such power away from the central bank while maintaining its role as the lender of last resort would reduce the ability of the central bank to oversee financial vulnerabilities in specific institutions and in the overall financial system (systemic risk). But as long as there is a proper exchange of information between the regulator and supervisor of banks and of other financial institutions and the central bank, these informational issues can be properly managed. The UK debacle over Northern Rock was caused not by the existence of a single financial authority (the FSA) but rather—in part—by the lack of coordination and proper information exchange between the FSA, the Bank of England, and the UK Treasury. Thus, the UK model of a single financial regulator/supervisor is, in principle, superior to a model where such powers are fragmented among many and different institutions. But proper coordination and information exchange is essential to make this system work.

#### 10. Lack of international coordination

Finally, reforms of financial regulation and supervision cannot be done only at the national level because regulatory arbitrage may lead financial intermediation to move to jurisdictions with a lighter and less appropriate regulatory approach. Indeed, the recent US debate on reforming capital markets was driven—before the current market turmoil—by concerns that a tighter regulatory approach in the United States (such as the

Sarbanes-Oxley legislation) was leading to a competitive slippage of New York relative to London in the provision of financial services.

In a world of financial globalization, mobile capital, and lack of capital controls, capital and financial intermediation may move to more lightly regulated shores. Although the idea of a global financial regulator or "sheriff" is, for the time being, a bit far-fetched, a much stronger degree of coordination of financial regulation and supervision policies is necessary to avoid a race to the bottom in financial regulation and supervision and to prevent excessive regulatory arbitrage. Such international coordination of financial policies is currently occurring on a very limited scale and will have to be seriously enhanced over time. In the euro zone, bank supervision and regulation occurs only at the national level, while the European Central Bank would serve as the lender of last resort in the case of a systemic banking crisis or when a major systemically important crossborder institution gets into trouble. This remains an untested model. Over time, financial supervision and regulation within the euro zone will have to move from the national level to a euro zone-wide level.

One further crucial set of issues that is left open is the difficult one of "quis custodiet ipsos custodes?" or "who will regulate the regulators?" How do we ensure that we have a system where the regulators are not effectively captured by the financial industry that they regulate? How do we ensure that financial innovation is not always a step ahead of regulation via regulatory arbitrage? And how do we ensure that the regulators have the necessary skills and expertise to correctly implement the appropriate regulations and supervision? These issues of regulatory capture and the limited skills of regulators and supervisors in the face of constant financial innovation have been behind the regulatory failures that have caused many of the recent financial crises, including the recent one in the United States.

Indeed, while the recent financial crisis suggests that self-regulation, market discipline, internal risk management, and reliance only on principles rather than rules does not work, the issue remains open of how to ensure that new rules are actually implemented without further regulatory arbitrage and regulatory capture of the regulators. This is a most difficult question for which there is no simple answer. The suggestion has been made that as long as regulation is relatively simple, appropriate liquidity requirements and capital sufficiency ratios are possibly cyclically adjusted, and as long as reporting requirements are made clear (among other things), the possibility of regulatory arbitrage and regulatory capture is limited. But this approach suggests moving away from principles and relying somewhat more on simple rather than complex—rules that cannot be easily manipulated by the regulated entities or by the regulators. Still, appropriate regulation and especially appropriate supervision require an element of thoughtful value

judgment and assessment of risks that cannot be resolved with excessively simple rules.

#### Conclusions

Financial stability is an important factor in assessing the degree of development of a financial system. Excessive stability may result in excessive regulation and restrictions on financial innovation and risk taking, and thus may reduce the opportunities for long-run growth. However, lack of stability that triggers financial crises (banking crises, sovereign debt crises, systemic corporate crises, household debt crises, and currency crises) is also costly and inefficient, as it leads to severe economic downturns and the large economic and fiscal costs of cleaning up a financial system in distress and crisis. Thus, financial stability is an important component of financial development.

This chapter surveyed the causes and implications of financial crises in both advanced and emerging market economies in the last few decades. It also discussed the main issues involved in reforming the regime of regulation and supervision of the financial system to make it more resilient in a world of financial globalization. While financial crises will never be altogether eliminated, the frequency and severity of booms and busts of asset prices and credit that cause financial crises and cause costly financial instability can be reduced if appropriate supervision and regulation is applied.

#### Notes

- 1 Even authors who argue against monetary policy targeting of asset prices (Bernanke and Gertler 1999, 2001; Ferguson 2005; Kohn 2004, among others) tend to acknowledge the analytical channels (wealth effects and credit constraints effects on consumption and investment) that link asset bubbles to real and financial variables. Also Greenspan referred to the link between housing prices, private savings and the current account, a pretty clear evidence of the impact of the recent US housing boom on the real economy. And there is a general consensus among many that monetary policy should care about the broader goal of financial stability.
- 2 See IMF 2000, 2003; Bordo and Jeanne 2002; Borio and Lowe 2002; Bordo 2003; and Helbling and Bayoumi 2003.
- 3 See Kawai et al. 2001. See also the exhaustive study of emerging market crises by Roubini and Setser 2004.
- 4 The exchange rate policies of emerging economies can include pegging their currency to the US dollar or providing very aggressive foreign exchange intervention to manage their currency value and control the rate of appreciation relative to the US dollar.
- 5 See Prince 2007

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## Part 2

Country/Economy Profiles



#### **How to Read the Country/Economy Profiles**

The Country Profiles section presents a four-page profile for each of the 52 countries covered by the *Financial Development Report 2008*.

#### Page 1

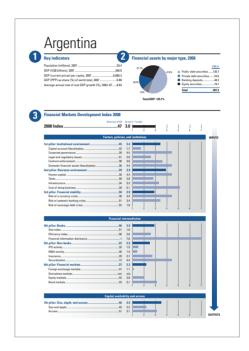
#### Key indicators

The first section of the Country/Economy Profile presents a selection of key indicators:

 Population, GDP, and related figures come from the International Monetary Fund's World Economic Outlook of April 2008.

#### 2 Financial assets by major type, 2006

- Public debt figures are from the Economist Intelligence Unit's CountryData Database, as accessed in July 2008. Private debt data come from the Bank of International Settlements Quarterly Review, December 2007. Data on bank deposits are from the IMF International Financial Statistics database, electronic version, accessed July 2008 or the July 2007 PDF version. Equity securities data were downloaded from the market capitalization dataset on the World Bank's World Development Indicators database in July 2008.
- The four financial asset indicators (public and private debt securities, banking deposits, and equity securities) are added to measure total financial assets in the Index countries. The share of depth attributable to each component is displayed in the pie chart. Percentages displayed may not add to 100% due to rounding. Private debt data were not available for Nigeria or Vietnam.
- The total financial assets figure is shown as a percentage of GDP, using the GDP figure from the Key Indicators section.
- The pie chart shows the share of total financial assets attributable to each of the four types of financial asset indicators in a given economy.



#### 3 Financial Development Index

This section details the country's performance on the various components of the Financial Development Index (FDI). At the top is the country's overall rank out of 52 countries, its score on the 1-to-7 scale, and a graphical representation of the score.

Below, the seven pillars of the index are organized thematically. The three themes—factors, policies, and institutions; financial intermediation; and capital availability and access—are displayed according to their role in the continuum of the financial system from inputs to outputs.

Each pillar and subpillar is listed under the appropriate theme. After the pillar or subpillar name, the first column shows each country's ranks among the 52 countries for that pillar or subpillar. The second column presents the score for that pillar or subpillar on the 1-to-7 normalized scale. On the right, the normalized score is represented graphically. For more information on the methodology and results of the FDI, please refer to Chapter 1.1 of this *Report*.

#### Page 2

#### 4 The Financial Development Index in detail

This page presents the rank achieved by a country on each of the indicators entering the composition of the FDI. Indicators are organized by pillar. Please refer to Appendix A of Chapter 1.1 for a detailed structure of the FDI.

Next to the rank, a colored square indicates whether the indicator constitutes an advantage (blue square) or a disadvantage (black square) for the country. In order to identify variables as advantages or disadvantages, the following rules were applied:

- For those economies ranked in the top 10 in the overall FDI, individual variables ranked between 1 and 10 are considered to be advantages. Any variables below 10 are considered to be disadvantages. For instance, in the case of Switzerland, which is ranked 7 overall, its 5th rank in the variable Bank deposits to GDP makes this variable a competitive advantage, whereas Foreign exchange derivatives turnover: Currency swaps, on which it ranks 23rd, constitutes a competitive disadvantage for the country.
- For those economies ranked from 11 to 25 in the overall FDI, variables ranked higher than the economy's overall rank are considered to be advantages. Any variables ranked equal to or lower than the economy's overall rank are considered to be disadvantages. In the case of Malaysia, ranked 20th overall, its 10th rank in the variable Bank deposits to GDP makes this variable a competitive advantage, whereas Foreign exchange derivatives turnover: Currency swaps, on which it ranks 29th, constitutes a competitive disadvantage for the country.
- For those economies ranked lower than 25 in the overall FDI, any individual variables ranked 25 or higher are considered as advantages. Any variables ranked 26th or lower are considered to be disadvantages. For Argentina, ranked 47th overall, its rank of 19th in *Relative value-added of insurance* constitutes a competitive advantage for the country, whereas its 47th rank in the variable *Bank deposits to GDP* makes this variable a competitive disadvantage.
- After the advantage/disadvantage marker is the raw score of the listed indicator for the profiled economy. For more information on the significance of the raw score, such as the units in which it is measured or the source, please see the data tables in Part 3 of this *Report*.



• In the gray box at the right of the profile is the name and raw score for the top ranked economy of the given indicator. For indicators in which there is a tie for the top rank, the word "Multiple" appears with the number of economies which share that score in parentheses.

#### **List of Countries/Economies**

Country/Economy	Page
Argentina	52
Australia	56
Austria	60
Bahrain	64
Belgium	68
Brazil	72
Canada	76
Chile	80
China	84
Colombia	88
Czech Republic	92
Egypt	96
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France	104
Germany	108
Hong Kong SAR	112
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Israel	132
Italy	136
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Panama	180
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Saudi Arabia	200
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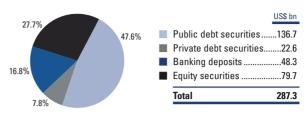
Country/Economy	Page
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Switzerland	224
Thailand	228
Turkey	232
Ukraine	236
United Arab Emirates	240
United Kingdom	244
United States	248
Venezuela	252
Vietnam	256

### Argentina

#### **Key indicators**

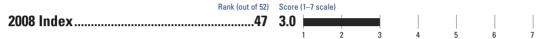
Population (millions), 2007	39.4
GDP (US\$ billions), 2007	260.0
GDP (current prices, US\$) per capita, 2007	.6,606.3
GDP (PPP) as share (%) of world total, 2007	0.80
Average annual rate of real GDP growth (%), 2003-07	8.83

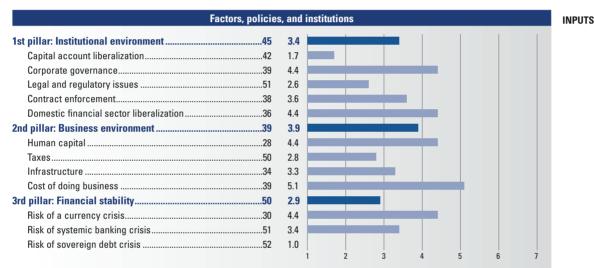
#### Financial assets by major type, 2006

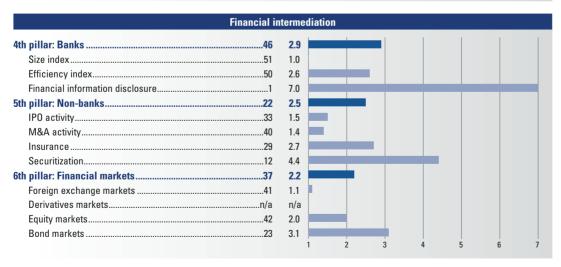


Total/GDP: 135.1%

#### **Financial Development Index 2008**











## Argentina

#### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52		SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment					
	Capital account liberalization					
01	Capital account liberalization	42		0.1	Multiple (15)	2.
	Corporate governance					
02	Extent of incentive-based compensation	26		4.7	France	5.
03	Efficacy of corporate boards				Sweden	6.
04	Reliance on professional management	31		4.9	Sweden	6.
05	Willingness to delegate	35		4.0	Sweden	6.
06	Strength of auditing and accounting standards	48		4.0	Germany	6.
07	Shareholder rights index	9		4.0	Multiple (8)	5.
08	Ethical behavior of firms	49		3.5	Finland	6.
09	Protection of minority shareholders' interests	50		3.6	Sweden	6.
	Legal and regulatory issues					
10	Burden of government regulation	45		2.5	Singapore	5
11	Centralization of economic policymaking				Switzerland	
12	Regulation of security exchanges				Sweden	
13	Property rights				Germany	
14	Intellectual property protection				Germany	
15	Diversion of public funds				Finland	
16	Public trust of politicians				Singapore	
	'				omgaporo	
_	Contract enforcement		_			
17	Effectiveness of law-making bodies				Singapore	
18	Judicial independence				Germany	
19	Irregular payments in judicial decisions				Finland	
20	Number of procedures to enforce a contract				Ireland	
21	Time to enforce a contract				Singapore	
22	Cost of enforcing contracts				China	
23	Strength of investor protection				Singapore	
24	Time to close a business	28		2.8	Ireland	0.
	Domestic financial sector liberalization					
25	Domestic financial sector liberalization	36		1.0	Multiple (34)	1.
	2nd pillar: Business environment					
	2nd pillar: Business environment Human capital					
01	•	24		4.9	France	6.
	Human capital				France	
)2	Human capital Quality of management schools	41		3.3		6.
)2 )3	Human capital Quality of management schools Quality of math and science education	41 41		3.3	Singapore	6. 5.
02 03 04	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training	41 41 32		3.3 3.6 4.3	Singapore Switzerland	6. 5.
02 03 04 05	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services	41 41 32 31		3.3 3.6 4.3	Singapore Switzerland Switzerland	6. 5. 6.
02 03 04 05	Human capital  Quality of management schools	41 41 32 31		3.3 3.6 4.3	Singapore	6. 6. 5.
02 03 04 05 06	Human capital  Quality of management schools	41 32 31 13		3.3 3.6 4.3 4.3 63.8	Singapore	6. 6. 5.
02 03 04 05 06	Human capital  Quality of management schools	4141323113		3.3 3.6 4.3 63.8	Singapore	
02 03 04 05 06 07	Human capital  Quality of management schools	4132311313		3.3 3.6 4.3 63.8 3.9 2.8	Singapore	
02 03 04 05 06 07	Human capital  Quality of management schools	4132311313		3.3 3.6 4.3 63.8 3.9 2.8	Singapore	
02 03 04 05 06 07 08 09	Human capital  Quality of management schools	41 32 31 13 47 .s50		3.3 3.6 4.3 63.8 63.8 3.9 2.8 35.0	Singapore	
02 03 04 05 06 07 08 09	Human capital  Quality of management schools	4132311347s47474747		3.3 3.6 4.3 63.8 63.8 3.9 2.8 35.0	Singapore	
02 03 04 05 06 07 08 09	Human capital  Quality of management schools	414132311347 s5047 4241		3.3 3.6 4.3 63.8 63.8 3.9 2.8 35.0	Singapore	
02 03 04 05 06 07 08 09	Human capital  Quality of management schools	4132311347 s5047 424133		3.3 3.6 4.3 63.8 63.8 3.9 35.0 35.0	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland Netherlands	
02 03 04 05 06 07 08 09	Human capital  Quality of management schools	414132311347		3.3 3.6 4.3 63.8 3.9 35.0 35.0	Singapore Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland Netherlands Netherlands	
01 02 03 04 05 06 07 08 09 11 12 13 14 15	Human capital  Quality of management schools	41		3.3 3.6 4.3 63.8 3.9 35.0 35.0 35.0	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland Netherlands	

## Argentina

	ial Development Index in detail (cor	72 4.7	_ Bovolopinon	t <b>Advantage</b> Developme	Jii Diodava
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
16	Cost of starting a business	28	9.7	Ireland	0.3
17	Cost of dealing with licenses	38	234.1	United Arab Emirates	31.5
18	Cost of registering property	44■	7.6	Saudi Arabia	0.0
19	Cost to export	45	1,325.0	China	390.0
20	Cost to import	47	1,825.0	Singapore	367.0
21	Cost of enforcing contracts	15	16.5	China	8.8
22	Cost of closing a business	24■.	12.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis			Argentina	
01	Change in real effective exchange rate	1■	8.5	Russian Federation	15.4
02	External vulnerability indicator			Kuwait	46.
03	Current account balance to GDP	19■.	3.8	Multiple (2)	0.0
04	Dollarization vulnerability indicator			Saudi Arabia	9.0
ōΑ	External debt to GDP (developing economies)	24■.	51.0	Switzerland	121.3
5B	Net int'l investment position to GDP (adv. econor	mies)n/a	n/a		
	Risk of systemic banking crisis			Indonesia	16.0
06	Activity restrictions for banks	8	11.0	Multiple (24)	8.0
07	Entry restrictions for banks	25	7.0	Multiple (3)	9.0
80	Capital restrictions for banks	18	5.0	Multiple (3)	14.0
09	Official supervisory power	20	11.0	South Africa	9.0
10	Private monitoring of the banking industry	10	7.0	Multiple (11)	0.0
11	Frequency of banking crises	52	4.0	India	7.2
12	Stability Index	28	4.7	Russian Federation	68.
13	Cumulative real estate appreciation	n/a	n/a		
	Risk of sovereign debt crisis			Multiple (15)	20.0
14	Local currency sovereign rating	52	6.0	Multiple (15)	
15	Foreign currency sovereign rating				
	Ç , Ç				
	4th pillar: Banks				
	Size index			Hong Kong SAR	10.8
01	Size index	51■.	3.6		
	Efficiency index			United Arab Emirates	s6.8
02	Efficiency index	48	3.9	Multiple (11)	0.0
03	Public ownership of banks			,	
	•				

4.02 4.03	Efficiency index  Efficiency index		United Arab Emirates6.8 Multiple (11)0.0
4.04 4.05 4.06	Financial information disclosure  Public credit registry coverage	100.0	Belgium
	5th pillar: Non-banks		France
5.01	•	0.0	Kazakhstan4.4
5.01	IPO market share		Japan14.2
5.02	Share of world IPOs		Japan14.2
5.03	Stidle of world fros		
	M&A activity		United States44.4
5.04	M&A market share	0.1	United Kingdom14.6
5.05	M&A transaction value to GDP37	1.9	United States33.2
5.06	Share of total number of M&A deals33	0.3	

# Argentina

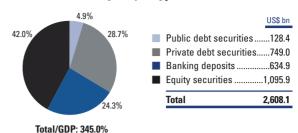
## Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52		SCORE	BEST PERFORMER	SCOR
	5th pillar: Non-banks (cont'd.)					
	Insurance					
07	Insurance premiums, direct	32		5,631.5	United States1	,170,100.
80	Insurance density	35		143.9	United Kingdom	
09	Real growth of direct insurance premiums	7		15.6	India	
10	Insurance penetration	36		2.6	United Kingdom	16.
11	Relative value-added of insurance	19		1.3	Switzerland	4.
	Securitization					
12	Securitization to GDP	26		1 9	United States	22
13	Share of total number of securitization deals				United States	
	6th pillar: Financial markets					
	Foreign exchange markets					
)1	Spot foreign exchange turnover	37		0.1	United Kingdom	26.
)2	Outright forward foreign exchange turnover				United Kingdom	
03	Foreign exchange swap turnover				United Kingdom	
	Derivatives markets				·	
)4	Interest rate derivatives turnover:					
)4	Forward rate agreements	n/a		n/a	United Kingdom	45
)5	Interest rate derivatives turnover: Swaps				United Kingdom	
)6	Interest rate derivatives turnover: Options				United States	
)7	Foreign exchange derivatives turnover: Currency swap				United Kingdom	
)8	Foreign exchange derivatives turnover: Options				United Kingdom	
,0					Offica Kingdom	∓∠.
	Equity market development		_			
)9	Equity market turnover				Pakistan	
)5	Stock market capitalization to GDP	44		29.7	Hong Kong SAR	/13.
	Bond market development					
10	Private-sector bonds to GDP	26		8.4	United States	
11	Public-sector bonds to GDP				France	
12	International bonds to GDP	14		41.6	Netherlands	121.
	7th pillar: Size, depth, and access					
	Size and depth					
)1	M2 to GDP	35		28.7	Hong Kong SAR	252.
)2	Private debt to GDP	33		10.5	Netherlands	216.
03	Public debt to GDP	3		6.9	Austria	7.
)4	Bank deposits to GDP	47		20.7	Hong Kong SAR	250.
)5	Stock market capitalization to GDP	44		29.7	Hong Kong SAR	713.
06	Relative value-added of financial institutions to GDP	30		3.3	Panama	9.
)7	Private credit to GDP	47		11.4	United States	193.
80	Stock market value traded to GDP	46		2.1	Saudi Arabia	356.
	Access					
)9	Financial market sophistication	44		3.9	Switzerland	6
0	Venture capital availability				United States	
11	Ease of access to credit				Slovak Republic	
12	Ease of access to local equity market				Sweden	
13	Bank branches				Spain	
14	Ease of access to loans				Norway	
					,	

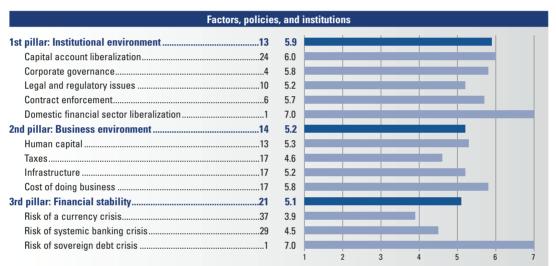
### **Key indicators**

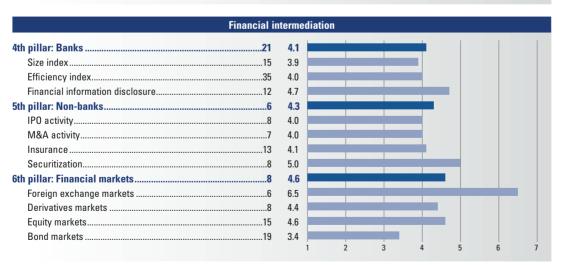
Population (millions), 2007	21.0
GDP (US\$ billions), 2007	908.8
GDP (current prices, US\$) per capita, 2007	43,312.3
GDP (PPP) as share (%) of world total, 2007	1.18
Average annual rate of real GDP growth (%), 2003-0	73.27

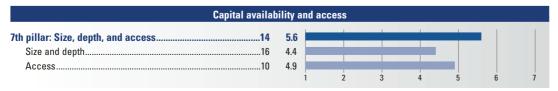
### Financial assets by major type, 2006



## **Financial Development Index 2008**









**INPUTS** 

## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52		SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment					
	Capital account liberalization					
1.01	Capital account liberalization	24		1.2	Multiple (15)	2.6
	Corporate governance					
1.02	Extent of incentive-based compensation	18		5.0	France	5
1.03	Efficacy of corporate boards				Sweden	6.
1.04	Reliance on professional management				Sweden	
1.05	Willingness to delegate				Sweden	6.3
1.06	Strength of auditing and accounting standards				Germany	6.3
1.07	Shareholder rights index				Multiple (8)	5.0
1.08	Ethical behavior of firms	9		6.1	Finland	
1.09	Protection of minority shareholders' interests	6		5.9	Sweden	6.4
	Legal and regulatory issues					
1.10	Burden of government regulation	30		3.0	Singapore	5 ′
1.11	Centralization of economic policymaking				Switzerland	
1.12	Regulation of security exchanges				Sweden	
1.13	Property rights				Germany	
1.14	Intellectual property protection				Germany	
1.15	Diversion of public funds				Finland	
1.16	Public trust of politicians				Singapore	
1.10	·				onigaporo	
1 17	Contract enforcement	0	_		C:	0
1.17	Effectiveness of law-making bodies				Singapore	
1.18	Judicial independence				Germany	
1.19	Irregular payments in judicial decisions					
1.20	Number of procedures to enforce a contract				Ireland	
1.21	Time to enforce a contract				Singapore	
1.22	Cost of enforcing contracts				China	
1.23	Strength of investor protection				Singapore	
1.24	Time to close a business	8		1.0	Ireland	0.2
1.25	Domestic financial sector liberalization  Domestic financial sector liberalization	1		1.0	Multiple (34)	1 (
	2nd pillar: Business environment					
	2nd pillar: Business environment Human capital					
2.01	•	15		5.4	France	6.(
2.01 2.02	Human capital				France	
	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training	15 16		5.1 5.0		6.3
2.02	Human capital  Quality of management schools  Quality of math and science education	15 16		5.1 5.0	Singapore	5.9
2.02 2.03	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training	15 16 15		5.1 5.0 5.2	Singapore Switzerland	6.3 5.9
2.02 2.03 2.04	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services	15 16 15 33		5.1 5.0 5.2 4.3	Singapore Switzerland Switzerland	
2.02 2.03 2.04 2.05	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor	15 16 15 33		5.1 5.0 5.2 4.3	Singapore Switzerland Switzerland Kuwait	
2.02 2.03 2.04 2.05	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor  Tertiary enrollment	15 16 15 33 7		5.1 5.0 5.2 4.3 72.7	Singapore Switzerland Switzerland Kuwait	6.3 6.1 5.8 93.2
2.02 2.03 2.04 2.05 2.06	Human capital  Quality of management schools	15 1615 33 77		5.1 5.0 5.2 4.3 72.7	Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08	Human capital  Quality of management schools	15		5.1 5.0 5.2 4.3 72.7 6.6	Singapore	
2.02 2.03 2.04 2.05 2.06	Human capital  Quality of math and science education	15		5.1 5.0 5.2 4.3 72.7 6.6	Singapore Switzerland Switzerland Kuwait Sinland Sweden Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of math and science education	15		5.1 5.0 5.2 4.3 72.7 6.6 4.7 30.0	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4)	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools	15		5.1 5.0 5.2 4.3 72.7 6.6 4.7 30.0	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09 2.10 2.11	Human capital  Quality of management schools	1515		5.1 5.0 5.2 4.3 72.7 6.6 4.7 30.0	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland	6.3 5.4 6.6 93.2 6.6 6.6 6.6
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09 2.10 2.11 2.12	Human capital  Quality of management schools	1516		5.1 5.0 5.2 4.3 72.7 6.6 4.7 30.0	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland Netherlands	6.3 6.4 6.5 93.2 6.6 6.6 6.6 85.
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09 2.10 2.11	Human capital  Quality of management schools	15		5.1 5.0 5.2 4.3 72.7 6.6 4.7 30.0 5.4 6.2 52.0 19.1	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland	6.5 5.9 6.0 93.2 6.8 6.8 6.8 31.8

#### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage INDICATOR BEST PERFORMER 2nd pillar: Business environment (cont'd.) Cost of doing business 2.16 Ireland......0.3 United Arab Emirates ......1.5 2.17 Saudi Arabia ......0.0 2.18 China ......390.0 Singapore ......367.0 2.20 2.21 Multiple (4) ......1.0 2.22 3rd pillar: Financial stability Risk of a currency crisis 3.01 Argentina .....-8.5 3.02 Russian Federation......15.4 3.03 Current account balance to GDP......45 .........45 ...... Kuwait ......46.1 Multiple (2) ......0.0 External debt to GDP (developing economies) ......n/a .....n/a Saudi Arabia ......9.6 3.05A 3.05B Net int'l investment position to GDP (adv. economies)......13.....■.....-60.6 Switzerland......121.3 Risk of systemic banking crisis 3.06 Indonesia......16.0 3.07 Multiple (24) ......8.0 3.08 Multiple (3) ......9.0 Multiple (3) .....14.0 3.09 South Africa.....9.0 3.10 3.11 Multiple (11) ......0.0 3.12 India.....7.2 Russian Federation.....-68.4 3 13 Risk of sovereign debt crisis 3.14 Multiple (15) .....20.0 3.15 Multiple (15) ......20.0 4th pillar: Banks Size index 4.01 Hong Kong SAR .....10.8 Size index Efficiency index United Arab Emirates ..........6.8 4.02 Multiple (11) ......0.0 4.03 Financial information disclosure 4.04 Belgium ......57.2 Multiple (7) ......100.0 4.05 Multiple (14) ......6.0 4.06 5th pillar: Non-banks IPO activity 5.01 France 31.0 Kazakhstan ......4.4 Japan .....14.2 M&A activity M&A market share 9 2.0 5.04 United States ......44.4 5.05 United Kingdom .....14.6 5.06 United States ......33.2

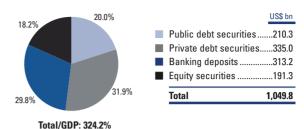
## Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52		SCORE	BEST PERFORMER	SCOR
	5th pillar: Non-banks (cont'd.)					
	Insurance					
.07	Insurance premiums, direct	12		.52,561.1	United States1,1	70.100.6
08	Insurance density				United Kingdom	
09	Real growth of direct insurance premiums			•	India	
10	Insurance penetration				United Kingdom	
11	Relative value-added of insurance	8		2.4	Switzerland	
	Securitization					
12	Securitization to GDP	7		8.2	United States	22 (
13	Share of total number of securitization deals				United States	
	Cab willow Financial mankets					
	6th pillar: Financial markets					
	Foreign exchange markets		_			
01	Spot foreign exchange turnover				United Kingdom	
02	Outright forward foreign exchange turnover				United Kingdom	
03	Foreign exchange swap turnover	7		5.2	United Kingdom	42.0
	Derivatives markets					
04	Interest rate derivatives turnover:					
	Forward rate agreements	9		1.1	United Kingdom	45.0
05	Interest rate derivatives turnover: Swaps				United Kingdom	46.0
06	Interest rate derivatives turnover: Options	11		0.5	United States	42.0
07	Foreign exchange derivatives turnover: Currency swa				United Kingdom	47.
80	Foreign exchange derivatives turnover: Options	8		1.9	United Kingdom	42.0
	Equity market development					
09	Equity market turnover	22		77.3	Pakistan	374.
05	Stock market capitalization to GDP	13		118.3	Hong Kong SAR	713.
	Bond market development					
10	Private-sector bonds to GDP	10		39.1	United States	114.
11	Public-sector bonds to GDP	37		2.2	France	7.
12	International bonds to GDP	15	■	39.3	Netherlands	121.
	7th pillar: Size, depth, and access					
	Size and depth					
01	M2 to GDP	12		75.7	Hong Kong SAR	252.3
02	Private debt to GDP	12		97.5	Netherlands	
03	Public debt to GDP	45		2.2	Austria	7.0
04	Bank deposits to GDP	18		75.2	Hong Kong SAR	250.4
05	Stock market capitalization to GDP				Hong Kong SAR	
06	Relative value-added of financial institutions to GDP	10		5.5	Panama	
07	Private credit to GDP	14		107.5	United States	193.
80	Stock market value traded to GDP	17		84.1	Saudi Arabia	356.
	Access					
09	Financial market sophistication	7		6.3	Switzerland	6
10	Venture capital availability				United States	
11	Ease of access to credit				Slovak Republic	
12	Ease of access to local equity market				Sweden	
13	Bank branches				Spain	
14	Ease of access to loans				Norway	
				-	·	

## **Key indicators**

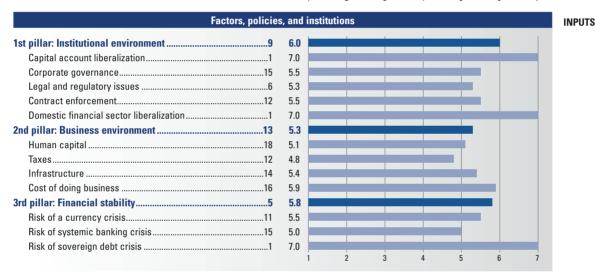
Population (millions), 2007	8.3
GDP (US\$ billions), 2007	373.9
GDP (current prices, US\$) per capita, 200745	,181.1
GDP (PPP) as share (%) of world total, 2007	0.49
Average annual rate of real GDP growth (%), 2003-07	2.46

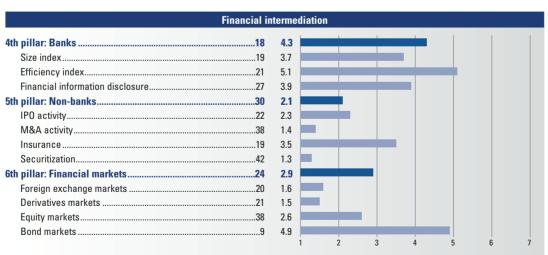
## Financial assets by major type, 2006



## **Financial Development Index 2008**

2008 Index Score (1–7 scale)
4.6 4.6 5 6









## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

		RANK/52	SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment				
	Capital account liberalization		_		
.01	Capital account liberalization	1	2.3	Multiple (15)	2.6
	Corporate governance				
.02	Extent of incentive-based compensation			France	
.03	Efficacy of corporate boards			Sweden	
.04	Reliance on professional management			Sweden	
.05	Willingness to delegate			Sweden	
.06	Strength of auditing and accounting standards	5	6.2	Germany	
.07	Shareholder rights index			Multiple (8)	
.08	Ethical behavior of firms			Finland	
.09	Protection of minority shareholders' interests	5	5.9	Sweden	6.4
	Legal and regulatory issues				
.10	Burden of government regulation	14	3.7	Singapore	5.3
.11	Centralization of economic policymaking			Switzerland	5.9
.12	Regulation of security exchanges	15	5.8	Sweden	6.3
.13	Property rights	3	6.5	Germany	6.7
.14	Intellectual property protection	10	5.9	Germany	6.5
.15	Diversion of public funds	8	5.9	Finland	6.5
.16	Public trust of politicians	10	4.7	Singapore	6.4
	Contract enforcement				
.17	Effectiveness of law-making bodies	16	15	Singapore	6.1
.17	Judicial independence			Germany	
.10	Irregular payments in judicial decisions			Finland	
.20	Number of procedures to enforce a contract			Ireland	
.21	Time to enforce a contract			Singapore	
.22	Cost of enforcing contracts			China	
.23	Strength of investor protection			Singapore	
.23 .24	Time to close a business			Ireland	
.24				ireland	
	Domestic financial sector liberalization				
.25	Domestic financial sector liberalization		1.0	Multiple (34)	1.0
	2nd pillar: Business environment				
	2nd pillar: Business environment Human capital				
.01	Human capital  Quality of management schools			France	
	Human capital  Quality of management schools  Quality of math and science education	16	5.1	Singapore	6.3
.02	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training	16	.■5.1 .■5.6	Singapore	6.3
.02	Human capital  Quality of math and science education	16 5 14	. <b>.</b> 5.1 . <b></b> 5.6 . <b></b> 5.3	Singapore Switzerland Switzerland	6.3 5.9
.02 .03 .04 .05	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor	16 5 14 28		Singapore	6.3 5.9 6.0
.02 .03 .04 .05	Human capital  Quality of math and science education	16 5 14 28		Singapore Switzerland Switzerland	6.3 5.9 6.0
.02 .03 .04 .05	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor	16 5 14 28		Singapore	6.3 5.9 6.0
.02 .03 .04 .05	Human capital  Quality of management schools	16 14 28 25	5.1 5.6 5.3 4.4 4.9	Singapore	6.3 6.0 5.8 93.2
.02 .03 .04 .05 .06	Human capital  Quality of management schools	16 5 14 28 25	5.1 5.6 5.3 4.4 4.9 6.6	Singapore	
.02 .03 .04 .05 .06	Human capital  Quality of management schools	16 5 14 28 25 5 s19	5.1 5.6 5.3 4.4 4.9 6.6 4.6	Singapore Switzerland Switzerland Kuwait Sinland Sweden	
.02 .03 .04 .05 .06	Human capital  Quality of management schools	16 5 14 28 25 5 s19	5.1 5.6 5.3 4.4 4.9 6.6 4.6	Singapore	
.02 .03 .04 .05 .06 .07 .08	Human capital  Quality of management schools	16	5.1 5.6 5.3 4.4 4.9 6.6 4.6 25.0	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4)	
.02 .03 .04 .05 .06 .07 .08 .09	Human capital  Quality of management schools	16	5.1 5.6 5.3 4.4 49.9 6.6 4.6 25.0	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland	6.3 5.9 6.0 5.8 93.2 6.8 5.7 6.8
.02 .03 .04 .05 .06 .07 .08 .09	Human capital  Quality of management schools	16	■	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland	6.3 5.9 6.0 93.2 6.8 5.7 6.8 6.6 6.7
.02 .03 .04 .05 .06 .07 .08 .09	Human capital  Quality of management schools	16	5.1 5.6 5.3 4.4 4.9 6.6 4.6 25.0 6.8 5.3	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland Netherlands	
.01 .02 .03 .04 .05 .06 .07 .08 .09	Human capital  Quality of management schools	16	■	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland	

(Cont'd.)

	ial Development Index in detail (con	Lu./	Developmen	t <b>Advantage</b> Developm	ent <b>Disadvant</b> a
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of starting a business	18■	5.4	Ireland	0.3
2.17	Cost of dealing with licenses	22	73.7	United Arab Emirate	s1.5
2.18	Cost of registering property	31	4.5	Saudi Arabia	0.0
2.19	Cost to export	24	843.0	China	390.0
2.20	Cost to import	20	843.0	Singapore	367.0
2.21	Cost of enforcing contracts	8■	12.7	China	8.8
2.22	Cost of closing a business	33■	18.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	21	0.4	Argentina	8.5
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP			Kuwait	
3.04	Dollarization vulnerability indicator	1	n/a	Multiple (2)	0.0
05A	External debt to GDP (developing economies)	n/a	n/a	Saudi Arabia	9.6
05B	Net int'l investment position to GDP (adv. econom	nies)n/a	n/a	Switzerland	121.3
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks	29	7.0	Indonesia	16.0
3.07	Entry restrictions for banks			Multiple (24)	0.8
3.08	Capital restrictions for banks			Multiple (3)	9.0
3.09	Official supervisory power	22	10.5	Multiple (3)	14.0
3.10	Private monitoring of the banking industry	n/a	n/a	South Africa	9.0
3.11	Frequency of banking crises	1■	0.0	Multiple (11)	0.0
3.12	Stability Index			India	7.2
3.13	Cumulative real estate appreciation	16■	15.0	Russian Federation	68.4
	Risk of sovereign debt crisis				
3.14	Local currency sovereign rating			Multiple (15)	
3.15	Foreign currency sovereign rating	1	20.0	Multiple (15)	20.0
	4th pillar: Banks				
	Size index				
4.01	Size index	19	6.9	Hong Kong SAR	10.8
	Efficiency index				
4.02	Efficiency index			United Arab Emirate	
1.03	Public ownership of banks	12■	0.0	Multiple (11)	0.0
	Financial information disclosure				
1.04	Public credit registry coverage	18■	1.3	Belgium	57.2
1.05	Private credit bureau coverage	24	40.6	Multiple (7)	100.0
1.06	Credit Information Index	1■	6.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share			France	31.0
5.02	IPO proceeds amount	12■	0.9	Kazakhstan	4.4
5.03	Share of world IPOs	24	0.6	Japan	14.2
	M&A activity				
5.04	M&A market share			United States	44.4
5.05	M&A transaction value to GDP	40	1.7	United Kingdom	14.6
5.06	Share of total number of M&A deals	00 =	0.5	United States	22.2

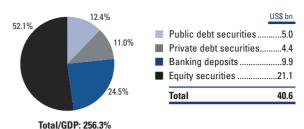
## Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER S	COR
	5th pillar: Non-banks (cont'd.)				
	Insurance				
07	Insurance premiums, direct	22	19 567 6	United States1,170,1	100
08	Insurance density		•	United States	
09	Real growth of direct insurance premiums			India	
10	Insurance penetration			United Kinadom	
11	Relative value-added of insurance	13	 1.9	Switzerland	4.
	Securitization				
12	Securitization to GDP	11	0.6	United States	22
13	Share of total number of securitization deals			United States	
	6th pillar: Financial markets				
	Foreign exchange markets				
)1	Spot foreign exchange turnover	19	 0.4	United Kingdom	.26.
02	Outright forward foreign exchange turnover	18	 0.5	United Kingdom	.29.
03	Foreign exchange swap turnover	19	 0.5	United Kingdom	.42.
	Derivatives markets				
)4	Interest rate derivatives turnover:				
	Forward rate agreements	19	 0.2	United Kingdom	.45.
)5	Interest rate derivatives turnover: Swaps			United Kingdom	.46
)6	Interest rate derivatives turnover: Options	19	 0.1	United States	.42.
)7	Foreign exchange derivatives turnover: Currency sw	aps17	 0.5	United Kingdom	.47
8(	Foreign exchange derivatives turnover: Options	15	 0.3	United Kingdom	.42
	Equity market development				
)9	Equity market turnover	30	 43.0	Pakistan3	374.
)5	Stock market capitalization to GDP			Hong Kong SAR7	713.
	Bond market development				
10	Private-sector bonds to GDP	a	30.0	United States1	111
11	Public-sector bonds to GDP			France	
12	International bonds to GDP			Netherlands1	
	7th pillar: Size, depth, and access				
	Size and depth				
)1	M2 to GDP	n/a .	 n/a	Hong Kong SAR2	252.
)2	Private debt to GDP			Netherlands2	
)3	Public debt to GDP			Austria	
)4	Bank deposits to GDP			Hong Kong SAR2	
)5	Stock market capitalization to GDP			Hong Kong SAR7	
)6	Relative value-added of financial institutions to GDP			Panama	
)7	Private credit to GDP.			United States1	
8(	Stock market value traded to GDP	38	 15.0	Saudi Arabia3	356.
	Access				
9	Financial market sophistication	18	 5.8	Switzerland	
0	Venture capital availability			United States	
11	Ease of access to credit			Slovak Republic	
12	Ease of access to local equity market			Sweden	
13	Bank branches			Spain	
14	Ease of access to loans	24	 4.3	Norway	5

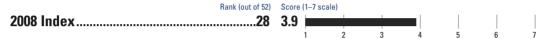
### **Key indicators**

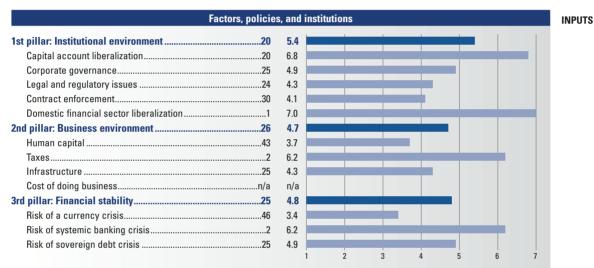
Population (millions), 2007	0.8
GDP (US\$ billions), 2007	19.7
GDP (current prices, US\$) per capita, 2007	25,730.5
GDP (PPP) as share (%) of world total, 2007	0.04
Average annual rate of real GDP growth (%), 2003–0	76.78

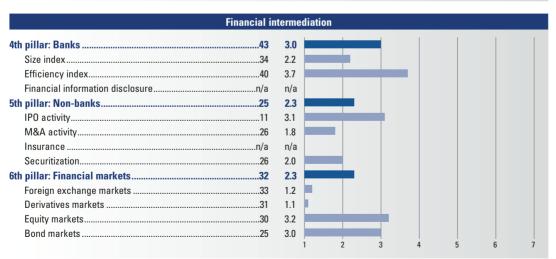
## Financial assets by major type, 2006

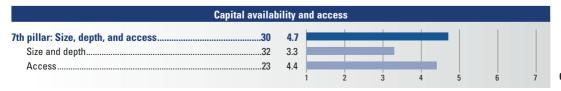


## **Financial Development Index 2008**











## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment				
	Capital account liberalization				
01	Capital account liberalization	20■	2.3	Multiple (15)	2.6
	Corporate governance				
02	Extent of incentive-based compensation	37	4.3	France	5.
03	Efficacy of corporate boards	30■	4.9	Sweden	6.
04	Reliance on professional management	32■	4.9	Sweden	6.
05	Willingness to delegate	39■	3.8	Sweden	6.
06	Strength of auditing and accounting standards			Germany	
07	Shareholder rights index		, -	Multiple (8)	
80	Ethical behavior of firms			Finland	
09	Protection of minority shareholders' interests	18■	5.4	Sweden	6.
	Legal and regulatory issues				
10	Burden of government regulation			Singapore	5.
11	Centralization of economic policymaking	43	2.6	Switzerland	5.
12	Regulation of security exchanges	18■	5.7	Sweden	6.
13	Property rights			Germany	6.
14	Intellectual property protection			Germany	
15	Diversion of public funds			Finland	
16	Public trust of politicians	24■	3.2	Singapore	6.
	Contract enforcement				
17	Effectiveness of law-making bodies	39■	3.1	Singapore	6.
18	Judicial independence	32■	4.1	Germany	6.
19	Irregular payments in judicial decisions	24	5.2	Finland	6.
20	Number of procedures to enforce a contract	n/a	n/a	Ireland	20.
21	Time to enforce a contract	n/a	n/a	Singapore	120.
22	Cost of enforcing contracts	n/a	n/a	China	8.
23	Strength of investor protection	n/a	n/a	Singapore	9.
24	Time to close a business	n/a	n/a	Ireland	0.
	Domestic financial sector liberalization				
25	Domestic financial sector liberalization	1■	1.0	Multiple (34)	1.
	2nd pillar: Business environment				
	Human capital				
01	Quality of management schools	47	27	France	6
02	Quality of math and science education			Singapore	
03	Extent of staff training			Switzerland	
04	Local availability of research and training services		3.4	Switzerland	
05	Brain drain and ease of hiring foreign labor			Kuwait	
06	Tertiary enrollment			Finland	
	,				
27	Taxes	10	0.4	Curadan	6
)7 )0	Irregular payments in tax collection			Sweden	
38	Distortive effect on competition of taxes and subsit			Singapore	
)9	Corporate tax rate		0.0	Multiple (4)	0.
	Infrastructure				
	Quality of overall infrastructure			Switzerland	
	Quality of telephone/fax infrastructure			Switzerland	
	•	20	28.4	Netherlands	
11 12	Internet users				
10 11 12 13	Internet users	27		Netherlands	
11 12	Internet users	27 <b>2</b> 7 <b>3</b> 0 <b>1</b>	26.3	Netherlands	66.9

#### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage INDICATOR BEST PERFORMER 2nd pillar: Business environment (cont'd.) Cost of doing business 2.16 Ireland......0.3 United Arab Emirates ......1.5 2.17 Cost of registering property ......n/a .....n/a Saudi Arabia ......0.0 2.18 Cost to export......n/a ......n/a China ......390.0 Singapore ......367.0 2.20 2.21 Multiple (4) ......1.0 Cost of closing a business ......n/a .....n/a 2.22 3rd pillar: Financial stability Risk of a currency crisis Change in real effective exchange rate......4.....4..... 3.01 Argentina .....-8.5 3.02 Russian Federation......15.4 3.03 Kuwait ......46.1 Multiple (2) ......0.0 Saudi Arabia ......9.6 3.05A 3.05B Net int'l investment position to GDP (adv. economies) ......n/a ......n/a Switzerland......121.3 Risk of systemic banking crisis 3.06 Indonesia......16.0 3.07 Multiple (24) ......8.0 3.08 Multiple (3) ......9.0 Multiple (3) .....14.0 3.09 South Africa.....9.0 3.10 3.11 Multiple (11) ......0.0 3.12 Cumulative real estate appreciation ......n/a .....n/a Russian Federation.....-68.4 3 13 Risk of sovereign debt crisis 3.14 Multiple (15) .....20.0 3.15 Multiple (15) ......20.0 4th pillar: Banks Size index 4.01 Hong Kong SAR .....10.8 Size index Efficiency index United Arab Emirates ......6.8 4.02 Multiple (11) ......0.0 4.03 Financial information disclosure 4.04 Belgium ......57.2 Multiple (7) ......100.0 4.05 Credit Information Index.....n/a .....n/a Multiple (14) ......6.0 4.06 5th pillar: Non-banks IPO activity 5.01 France 31.0 Kazakhstan ......4.4 Japan .....14.2 M&A activity 5.04 United States ......44.4 5.05 United Kingdom .....14.6 5.06 United States ......33.2

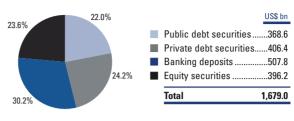
## Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	5th pillar: Non-banks (cont'd.)				
	Insurance				
5.07	Insurance premiums, direct	n/a	n/a	United States	1,170,100.6
5.08	Insurance density	n/a	n/a	United Kingdom	6,466.7
5.09	Real growth of direct insurance premiums	n/a	n/a	India	52.6
5.10	Insurance penetration	n/a	n/a	United Kingdom	16.5
5.11	Relative value-added of insurance	n/a	n/a	Switzerland	4.8
	Securitization				
5.12	Securitization to GDP	17	■3.3	United States	22.9
5.13	Share of total number of securitization deals	44	0.0	United States	64.9
	6th pillar: Financial markets				
	Foreign exchange markets				
6.01	Spot foreign exchange turnover	33	0.1	United Kingdom	26.6
6.02	Outright forward foreign exchange turnover			United Kingdom	
6.03	Foreign exchange swap turnover			United Kingdom	
	Derivatives markets				
6.04	Interest rate derivatives turnover:				
0.04	Forward rate agreements	n/a	n/a	United Kingdom	45.6
6.05	Interest rate derivatives turnover: Swaps			United Kingdom	
6.06	Interest rate derivatives turnover: Options			United States	
6.07	Foreign exchange derivatives turnover: Currency swa			United Kingdom	
6.08	Foreign exchange derivatives turnover: Options	•		United Kingdom	
	Equity market development				
6.09	Equity market turnover	46	<b></b> 4.6	Pakistan	374.3
7.05	Stock market capitalization to GDP	12	120.2	Hong Kong SAR	713.3
	Bond market development				
6.10	Private-sector bonds to GDP	n/a	n/a	United States	114.0
6.11	Public-sector bonds to GDP			France	7.0
6.12	International bonds to GDP	18	29.9	Netherlands	121.7
	7th pillar: Size, depth, and access				
	Size and depth				
7.01	M2 to GDP	18	65.7	Hong Kong SAR	252.3
7.02	Private debt to GDP			Netherlands	
7.03	Public debt to GDP			Austria	
7.04	Bank deposits to GDP			Hong Kong SAR	
7.05	Stock market capitalization to GDP	12	120.2	Hong Kong SAR	713.3
7.06	Relative value-added of financial institutions to GDP	n/a	n/a	Panama	9.2
7.07	Private credit to GDP	, .	, ,	United States	193.7
7.08	Stock market value traded to GDP	43	<b></b> 5.5	Saudi Arabia	356.2
	Access				
7.09	Financial market sophistication	19	<b>1</b> 5.8	Switzerland	6.7
7.10	Venture capital availability	28	3.8	United States	5.3
7.11	Ease of access to credit			Slovak Republic	
7.12	Ease of access to local equity market			Sweden	
7.13	Bank branches			Spain	
7.14	Ease of access to loans	23	■4.3	Norway	5.5

## **Key indicators**

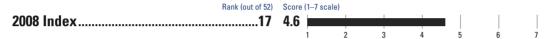
Population (millions), 2007	10.7
GDP (US\$ billions), 2007	453.6
GDP (current prices, US\$) per capita, 2007	.42,556.9
GDP (PPP) as share (%) of world total, 2007	0.58
Average annual rate of real GDP growth (%), 2003-0	72.27

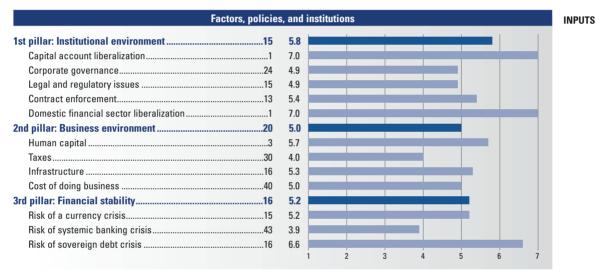
### Financial assets by major type, 2006

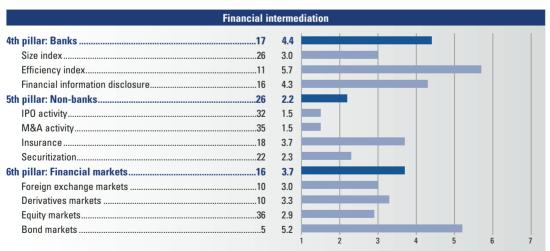


Total/GDP: 421.7%

## **Financial Development Index 2008**











### **Financial Development Index in detail**

1st pillar: Institutional environment Capital account liberalization

Corporate governance

Legal and regulatory issues

Contract enforcement

INDICATOR

1.01

1.02

1.03

1 04

1.05

1.06

1.07 1.08

1.09

1 10

1 11

1.12

1.13

1.14

1.15

1.16

1 17

1 18

1 19

1.20 1.21

1.22

1.23

1.24

1.25

■ Development Advantage ■ Development Disadvantage BEST PERFORMER Multiple (15) ......2.6 France......5.7 Sweden ......6.1 Germanv......6.3 Multiple (8) ......5.0 Sweden ......6.4 Singapore ......5.3 Switzerland......5.9 Sweden ......6.3 Germanv......6.7 Germany......6.5 Finland......6.5 Singapore ......6.4 Singapore ......6.1 Germany......6.5 Finland ......6.8 Ireland......20.0 Singapore ......120.0 China ......8.8 Singapore ......9.3 Ireland......0.4 Domestic financial sector liberalization Multiple (34) ......1.0 France......6.0 

### 2nd pillar: Business environment

Human capital

	Traman Suprius		
2.01	Quality of management schools	2	6.0
2.02	Quality of math and science education	2	6.3
2.03	Extent of staff training	11	5.4
2.04	Local availability of research and training services	8	5.7
2.05	Brain drain and ease of hiring foreign labor	24	4.5
2.06	Tertiary enrollment	14	62.8
	Taxes		
2.07	Irregular payments in tax collection	21	5.9
2.08	Distortive effect on competition of taxes and subsidies	30	4.1
2.09	Corporate tax rate	39	33.0
	Infrastructure		
2.10	Quality of overall infrastructure	12	5.9
2.11	Quality of telephone/fax infrastructure	14	6.6
2.12	Internet users	18	
2.13	Broadband Internet subscribers	9	22.6
2.14	Telephone lines	15	45.3
2.15	Mobile telephone subscribers	23	92.6

Switzerland	5.9
Switzerland	6.0
Kuwait	5.8
Finland	93.2
Sweden	6.8
Singapore	5.7
Multiple (4)	0.0
Switzerland	6.7
Switzerland	6.9
Netherlands	85.7
Netherlands	31.8
Switzerland	66.9
Italy	135.1

(Cont'd.)

Financial Development Index in detail (cont'd.)  ■ Development Advantage ■ Development Disadvanta	Financial Development Index in detail	(cont'd.)	■ Development <b>Advantage</b>	Development <b>Disadvanta</b>
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2nd pillar: Business environment (cont'd.)				
· · · · · · · · · · · · · · · · · · ·				
Cost of doing business				
Cost of starting a business	17■	5.3	Ireland	0.3
Cost of dealing with licenses	19■	63.7	United Arab Emirates	1.5
Cost of registering property	50■	12.7	Saudi Arabia	0.0
Cost to export	48	1,600.0	China	390.0
Cost to import	46	1,600.0	Singapore	367.0
Cost of enforcing contracts	17■	16.6	China	8.8
Cost of closing a business	5■	4.0	Multiple (4)	1.0
3rd pillar: Financial stability				
-	00 =	0.5	A	0.5
			· ·	
•				
			· ·	
inet int i investment position to GDP (adv. economies	s)n/a	n/a	Switzerland	121.3
Risk of systemic banking crisis				
,				
Entry restrictions for banks	1■	0.8	Multiple (24)	0.8
·			Multiple (3)	9.0
			· ·	
			· ·	
,				
Cumulative real estate appreciation	27■	42.9	Russian Federation	68.4
Risk of sovereign debt crisis				
Local currency sovereign rating	16■	19.0	Multiple (15)	20.0
Foreign currency sovereign rating	16■	19.0	Multiple (15)	20.0
4th pillar: Banks				
Size index				
Size index	26■	6.1	Hong Kong SAR	10.8
Efficiency index				
•	12	5.6	United Arab Emirates	6.8
•				
'				
	1 -	F7.0	Deleitore	F7.0
			-	
•			·	
Credit information index	31■	4.0	iviuitipie (14)	
5th nillar: Non-hanks				
•		0 -	-	04.5
•				
M&A activity	<u> </u>	2 -	11 % 10%	
			~	
Share of total number of M&A deals	23	8.0	United States	33.2
	Cost of registering property Cost to export Cost to import Cost of enforcing contracts Cost of enforcing contracts Cost of closing a business  Cost of closing a business  Cost of closing a business  Change in real effective exchange rate External vulnerability indicator Current account balance to GDP Dollarization vulnerability indicator External debt to GDP (developing economies) Net int'l investment position to GDP (adv. economies)  Risk of systemic banking crisis Activity restrictions for banks Capital restrictions for banks Copital restrictions for banks Copital restrictions for banks Copital restrictions for banks Copital restrictions for banks Capital restrictions for banks Copital restrictions for banks Capital restrictions for banks Copital restrictions for banks Capital restrictions for banks Copital restrictions for banks Capital restrictions Cap	Cost to export	Risk of a currency crisis	Cost of registering property

## Financial Development Index in detail (cont'd.)

■ Development Advantage ■ Development Disadvantage

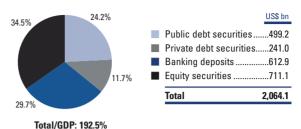
Insurance density Real growth of direct Insurance penetration Relative value-added Securitization Securitization to GDP Share of total numbe  6th pillar: Financial r Foreign exchange m Spot foreign exchange outright forward fore Foreign exchange sw Derivatives markets Interest rate derivativ Forward rate agreem Interest rate derivativ Foreign exchange der Foreign exchange agreem Interest rate derivativ Foreign exchange der Foreign exchange market develop Foreign exchange Foreign exch					
Insurance premiums, Insurance density Real growth of direct Insurance penetration Relative value-added Securitization Securitization to GDP Share of total numbe  6th pillar: Financial r Foreign exchange m Spot foreign exchange m Coutright forward fore Foreign exchange sw Derivatives markets Interest rate derivative Forward rate agreem Interest rate derivative Foreign exchange der Foreign exchange agreem Interest rate derivative Foreign exchange der Foreign exchange der Foreign exchange der Foreign exchange der Foreign exchange agreem Interest rate derivative Foreign exchange Interest rate derivative Foreign exchange Interest rate derivativ	Non-banks (cont'd.)				
Insurance premiums, Insurance density Real growth of direct Insurance penetration Relative value-added Securitization Securitization to GDP Share of total numbe  6th pillar: Financial r Foreign exchange m Spot foreign exchange m Coutright forward fore Foreign exchange sw Derivatives markets Interest rate derivative Forward rate agreem Interest rate derivative Foreign exchange der Foreign exchange agreem Interest rate derivative Foreign exchange der Foreign exchange der Foreign exchange der Foreign exchange der Foreign exchange agreem Interest rate derivative Foreign exchange Interest rate derivative Foreign exchange Interest rate derivativ	•				
Real growth of direct Insurance penetration Relative value-added Securitization Securitization Securitization to GDP Share of total numbe 6th pillar: Financial r Foreign exchange m 1 Spot foreign exchange 2 Outright forward fore 3 Foreign exchange sw Derivatives markets 1 Interest rate derivative Forward rate agreem Interest rate derivative Foreign exchange der Fo	premiums, direct	17	l37,888.6	United States1	.170.100.0
Real growth of direct Insurance penetration Relative value-added Securitization Securitization Securitization to GDP Share of total numbe 6th pillar: Financial r Foreign exchange m 1 Spot foreign exchange 2 Outright forward fore 3 Foreign exchange sw Derivatives markets 1 Interest rate derivative Forward rate agreem Interest rate derivative Foreign exchange der Fo	density			United Kingdom	
Insurance penetration Relative value-added Securitization Securitization Securitization to GDP Share of total numbe  6th pillar: Financial r Foreign exchange m Spot foreign exchange sw Derivatives markets Interest rate derivative Forward rate agreem Interest rate derivative Foreign exchange der Foreign exchange agreem Interest rate derivative Foreign exchange der Foreign exchange agreem Interest rate derivative Foreign exchan	th of direct insurance premiums			India	
Securitization Securitization to GDP Share of total numbe  6th pillar: Financial r Foreign exchange m Spot foreign exchange outright forward fore Foreign exchange sw Derivatives markets Interest rate derivativ Forward rate agreem Interest rate derivativ Foreign exchange der Foreign exchange agreem Interest rate derivativ Foreign exchange Foreign exchange Interest rate derivativ Foreign ex	penetration			United Kingdom	16.
6th pillar: Financial I Foreign exchange m Spot foreign exchange m Outright forward fore Foreign exchange sw Derivatives markets Interest rate derivativ Forward rate agreem Interest rate derivativ Foreign exchange der Foreign exchange exchange exchange der Foreign exchange exchange exchange exchange der Foreign exchange exchange exchange exchange der Foreign exchange exchange exchange exchange exchange der Foreign exchange excha	alue-added of insurance	17	l1.5	Switzerland	
6th pillar: Financial I Foreign exchange m Spot foreign exchange m Outright forward fore Foreign exchange sw Derivatives markets Interest rate derivativ Forward rate agreem Interest rate derivativ Foreign exchange der Foreign exchange exchange exchange der Foreign exchange exchange exchange exchange der Foreign exchange exchange exchange exchange der Foreign exchange exchange exchange exchange exchange der Foreign exchange excha	ation				
6th pillar: Financial I Foreign exchange m Spot foreign exchange m Outright forward fore Foreign exchange sw Derivatives markets Interest rate derivativ Forward rate agreem Interest rate derivativ Foreign exchange der Foreign exchange ser Foreign exchange sw Foreign	tion to GDP	13	3.6	United States	22
6th pillar: Financial I Foreign exchange m Spot foreign exchange 2 Outright forward fore Foreign exchange sw Derivatives markets Interest rate derivativ Forward rate agreem Interest rate derivativ Foreign exchange der Foreign exchange der Foreign exchange der Equity market devel Equity market turnov Stock market capitaliz Bond market devel Private-sector bonds 1 International bonds to  7th pillar: Size, depth Size and depth M2 to GDP Private debt to GDP Private debt to GDP Bank deposits to GDI Stock market capitaliz Relative value-added Private credit to GDP Stock market value tr Access Financial market soph Venture capital availal Ease of access to cre Ease of access to loc Bank branches	otal number of securitization deals			United States	
Foreign exchange m Spot foreign exchange Outright forward fore Foreign exchange sw Derivatives markets Interest rate derivativ Forward rate agreem Interest rate derivativ Foreign exchange der Foreign exchange der Foreign exchange der Foreign exchange der Equity market devel Guity market capitalix Bond market devel Private-sector bonds to International bonds to  7th pillar: Size, depth Size and depth M2 to GDP			_		
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Outright forward fore Foreign exchange sw Derivatives markets Interest rate derivativ Forward rate agreem Interest rate derivativ Foreign exchange der Foreign exchange der Foreign exchange der Equity market devel Equity market turnow Stock market capitalia Bond market devel Private-sector bonds to International bonds to  7th pillar: Size, depth Size and depth M2 to GDP Private debt to GDP Bank deposits to GDI Stock market capitalia Relative value-added Private credit to GDP Stock market value tr Access Financial market soph Venture capital availal Ease of access to cre Ease of access to loc Bank branches	gn exchange turnover	12	I1.2	United Kingdom	26
Derivatives markets Interest rate derivative Forward rate agreem Interest rate derivative Interest rate derivative Foreign exchange der Foreign exchange der Equity market devel Equity market turnove Stock market capitalia Bond market devel Private-sector bonds to International bonds to  7th pillar: Size, depth Size and depth M2 to GDP Private debt to GDP Bank deposits to GDI Stock market capitalia Relative value-added Private credit to GDP Stock market value tr Access Financial market soph Venture capital availal Ease of access to cre Ease of access to loc Bank branches	orward foreign exchange turnover			United Kingdom	
Derivatives markets Interest rate derivative Forward rate agreem Interest rate derivative Foreign exchange der Foreign exchange der Equity market devel Equity market turnove Stock market capitaliz  Bond market devel Private-sector bonds to International bonds to  7th pillar: Size, depth Size and depth M2 to GDP Private debt to GDP Bank deposits to GDI Stock market capitaliz Relative value-added Private credit to GDP Stock market value tr Access Financial market soph Venture capital availal Ease of access to cre Ease of access to loc Bank branches	change swap turnover			United Kingdom	
Interest rate derivative Forward rate agreem Interest rate derivative Interest rate derivative Foreign exchange de					
Forward rate agreem Interest rate derivativ Interest rate derivativ Foreign exchange der Fore					
Interest rate derivative Interest rate derivative Interest rate derivative Foreign exchange der Foreign exchange d		40	0.5	11.5. 112.	4.5
Interest rate derivative Foreign exchange der Full grivate development of the sector bonds of the s	ate agreements			United Kingdom	
Foreign exchange dei Foreign exchange dei Foreign exchange dei Fquity market devel Equity market turnow Stock market capitaliz  Bond market develc Private-sector bonds to the total total International bonds to the total to	te derivatives turnover: Swaps			United Kingdom	
Equity market devel Equity market devel Equity market turnovi Stock market capitalia Bond market develo Private-sector bonds to International bonds to  7th pillar: Size, depth Size and depth M2 to GDP	te derivatives turnover: Options			United States	
Equity market devel Equity market turnovi Stock market capitalia Bond market devel Private-sector bonds International bonds to  7th pillar: Size, depth Size and depth M2 to GDP	schange derivatives turnover: Currency swa	•		United Kingdom	
Equity market turnovices tock market capitalizes  Bond market develor private-sector bonds to public-sector bonds	change derivatives turnover: Options	14	I0.6	United Kingdom	42.
Stock market capitaliz  Bond market develo Private-sector bonds to Public-sector bonds to International bonds to  7th pillar: Size, depth Size and depth M2 to GDP	•				
Private-sector bonds to Public-sector bonds to Public-sector bonds to International bonds to Public-sector bonds to Public-sector bonds to Public-sector bonds to International bonds to Public-sector bonds to Private depth to GDP	rket turnover			Pakistan	
Private-sector bonds Public-sector bonds to International Bonds to I	ket capitalization to GDP	22	l85.5	Hong Kong SAR	713.
7th pillar: Size, depth Size and depth 1 M2 to GDP 2 Private debt to GDP 3 Public debt to GDP 4 Bank deposits to GDI 5 Stock market capitalis 6 Relative value-added 7 Private credit to GDP 8 Stock market value tr Access 9 Financial market soph Venture capital availal 1 Ease of access to cre 2 Ease of access to loc 8 Bank branches	rket development				
7th pillar: Size, depth Size and depth 1 M2 to GDP	ctor bonds to GDP	11	l35.2	United States	114.
7th pillar: Size, depth Size and depth 1 M2 to GDP	tor bonds to GDP	16	l5.1	France	7.
Size and depth  M2 to GDP	nal bonds to GDP	3	l82.0	Netherlands	121.
Size and depth  M2 to GDP	Size, denth, and access				
M2 to GDP	•				
Private debt to GDP.  Public debt to GDP  Bank deposits to GDI  Stock market capitalia  Relative value-added  Private credit to GDP  Stock market value to GDP  Stock market value to GDP  Stock market value to GDP  Venture capital availal  Ease of access to cre  Ease of access to loc  Bank branches	Р	n/a	n/a	Hong Kong SAR	252.
Public debt to GDP  Bank deposits to GDI  Stock market capitalia Relative value-added Private credit to GDP  Stock market value tr  Access Financial market soph Venture capital availal Ease of access to cre Ease of access to loc Bank branches	bt to GDP			Netherlands	
Bank deposits to GDI Stock market capitaliz Relative value-added Private credit to GDP Stock market value tr Access Financial market soph Venture capital availal Ease of access to cre Ease of access to loc Bank branches	ot to GDP			Austria	_
Stock market capitalia Relative value-added Private credit to GDP Stock market value tr Access Financial market soph Venture capital availal Ease of access to cre Ease of access to loc Bank branches	osits to GDP			Hong Kong SAR	
Relative value-added Private credit to GDP Stock market value tr Access Financial market soph Venture capital availal Ease of access to cre Ease of access to loc Bank branches	ket capitalization to GDP			Hong Kong SAR	
7 Private credit to GDP 8 Stock market value tr Access 9 Financial market soph 10 Venture capital availal 11 Ease of access to cre 22 Ease of access to loc 23 Bank branches	alue-added of financial institutions to GDP			Panama	
Access Financial market soph Venture capital availal Ease of access to cre Ease of access to loc Bank branches	edit to GDP			United States	
Access Financial market soph Venture capital availal Ease of access to cre Ease of access to loc Bank branches	ket value traded to GDP			Saudi Arabia	
9 Financial market soph 10 Venture capital availal 11 Ease of access to cre 12 Ease of access to loc 13 Bank branches					
Venture capital availal Ease of access to cre Ease of access to loc Bank branches	market sophistication	16		Switzerland	6
1 Ease of access to cre 2 Ease of access to loc 3 Bank branches					
Ease of access to loc Bank branches	apital availability			United States Slovak Republic	
Bank branches	ccess to creditccess to local equity market				
	, ,			Sweden	
# Ease of access to loa	ches			Spain	
	ccess to loans	20	4.3	Norway	5.

## Brazil

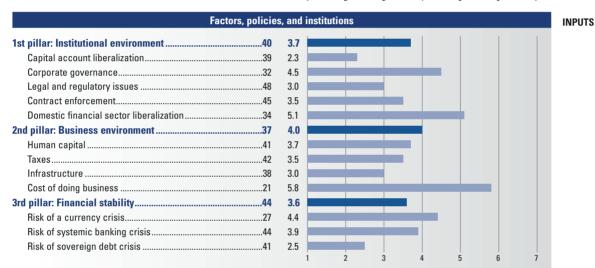
## **Key indicators**

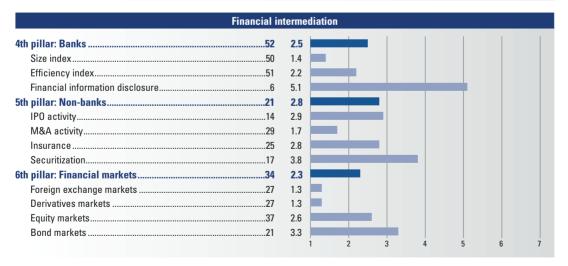
Population (millions), 2007	189.3
GDP (US\$ billions), 2007	1,313.6
GDP (current prices, US\$) per capita, 2007	6,937.9
GDP (PPP) as share (%) of world total, 2007	2.81
Average annual rate of real GDP growth (%), 2003-07	3.84

### Financial assets by major type, 2006



## **Financial Development Index 2008**









## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment				
	Capital account liberalization				
01	Capital account liberalization	39	0.2	Multiple (15)	2.
	Corporate governance				
02	Extent of incentive-based compensation	36	4.4	France	5.
03	Efficacy of corporate boards	40	4.6	Sweden	6.
04	Reliance on professional management	29	5.0	Sweden	6.
05	Willingness to delegate	29	4.2	Sweden	6.
06	Strength of auditing and accounting standards	36	4.8	Germany	6.
07	Shareholder rights index			Multiple (8)	
80	Ethical behavior of firms			Finland	
09	Protection of minority shareholders' interests	28	4.8	Sweden	6.
	Legal and regulatory issues				
10	Burden of government regulation			Singapore	5.
11	Centralization of economic policymaking	40	2.7	Switzerland	
12	Regulation of security exchanges			Sweden	
13	Property rights			Germany	6.
14	Intellectual property protection			Germany	
15	Diversion of public funds			Finland	
16	Public trust of politicians	51	1.4	Singapore	6.
	Contract enforcement				
17	Effectiveness of law-making bodies	49	2.2	Singapore	6.
18	Judicial independence	44	3.1	Germany	6.
19	Irregular payments in judicial decisions	36	4.2	Finland	6.
20	Number of procedures to enforce a contract	47	45.0	Ireland	20.
21	Time to enforce a contract	40	616.0	Singapore	120.
22	Cost of enforcing contracts	15	16.5	China	8.
23	Strength of investor protection	30	5.3	Singapore	9.
24	Time to close a business	39	4.0	Ireland	0.
	Domestic financial sector liberalization				
25	Domestic financial sector liberalization	34	1.0	Multiple (34)	1.
	2nd pillar: Business environment				
	Human capital				
01	Quality of management schools	38	<i>1</i> 1	France	6
02	Quality of math and science education			Singapore	
03	Extent of staff training			Switzerland	
)4	Local availability of research and training services			Switzerland	
05	Brain drain and ease of hiring foreign labor	29	4.3	Kuwait	5.
06	Tertiary enrollment			Finland	
	Taxes				
07	Irregular payments in tax collection	42	1.1	Sweden	6
37	Distortive effect on competition of taxes and subsid			Singapore	
09	Corporate tax rate			Multiple (4)	
	·			111diapio (17	
10	Infrastructure	47	0.7	Considerate and	0
10	Quality of overall infrastructure			Switzerland	
11	Quality of telephone/fax infrastructure			Switzerland	
12	Internet users			Netherlands	
13	Broadband Internet subscribers			Netherlands	
1 4	Telephone lines	34	20.5	Switzerland	66.
14 15	Mobile telephone subscribers		== =	Italy	405

# Brazil

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
16	Cost of starting a business	29■	10.4	Ireland	0.3
.17	Cost of dealing with licenses			United Arab Emirates	
.18	Cost of registering property			Saudi Arabia	
.19	Cost to export			China	
2.20	Cost to import	39	1,240.0	Singapore	367.0
2.21	Cost of enforcing contracts	15	16.5	China	8.8
2.22	Cost of closing a business	24■	12.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	47	9.0	Argentina	8.5
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP			Kuwait	
3.04	Dollarization vulnerability indicator			Multiple (2)	
05A	External debt to GDP (developing economies).	5	18.0	Saudi Arabia	
05B	Net int'l investment position to GDP (adv. econ			Switzerland	121.3
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks	22	9.0	Indonesia	16.0
3.07	Entry restrictions for banks			Multiple (24)	
3.08	Capital restrictions for banks			Multiple (3)	
3.09	Official supervisory power			Multiple (3)	
3.10	Private monitoring of the banking industry			South Africa	
3.10	Frequency of banking crises			Multiple (11)	
3.12	Stability Index			India	
3.13	Cumulative real estate appreciation			Russian Federation	
	• •	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, G	Tracolari i odoration	00. 1
	Risk of sovereign debt crisis	40	0.0	A 4 101 1 (4 E)	00.0
3.14	Local currency sovereign rating			Multiple (15)	
3.15	Foreign currency sovereign rating	42	8.9	Multiple (15)	20.0
	4th pillar: Banks				
	Size index				
4.01	Size index	50	4.1	Hong Kong SAR	10.8
	Efficiency index				
1.02	Efficiency index	51	3.7	United Arab Emirates	6.8
4.03	Public ownership of banks			Multiple (11)	
	,			manapio (11/ mmmm	
104	Financial information disclosure	10 -	474	Doloises	F7.0
1.04	Public credit registry coverage			Belgium	
4.05	Private credit bureau coverage			Multiple (7)	
1.06	Credit Information Index	15■	5.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	8■	2.8	France	31.0
5.02	IPO proceeds amount	18	0.7	Kazakhstan	4.4
5.03	Share of world IPOs			Japan	14.2
	M&A activity				
5.04	M&A market share	1Ω ■	0.7	United States	11 1
5.05	M&A transaction value to GDP			United States United Kingdom	
,.UU	IVIOA HAIISACHOII VAIUE 10 GDF		0.8	United States	

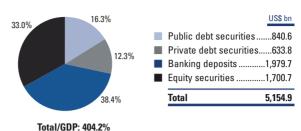
## Brazil

#### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage INDICATOR BEST PERFORMER 5th pillar: Non-banks (cont'd.) Insurance 5.07 United States ......1,170,100.6 United Kingdom ......6,466.7 5.09 India.....52.6 United Kingdom ......16.5 Switzerland......4.8 Securitization 5.12 United States ......22.9 5.13 United States ......64.9 6th pillar: Financial markets Foreign exchange markets 6.01 United Kingdom ......26.6 Outright forward foreign exchange turnover ......34 ..... 34 ..... United Kingdom .....29.9 6.02 United Kingdom ......42.0 6.03 **Derivatives markets** 6.04 Interest rate derivatives turnover: Forward rate agreements......n/a United Kingdom ......45.6 6.05 United Kingdom ......46.0 United States ......42.6 6.06 United Kingdom ......47.6 6.07 6.08 United Kingdom ......42.6 **Equity market development** 6.09 Pakistan......374.3 Hong Kong SAR .....713.3 7.05 Bond market development 6.10 United States ......114.0 6 1 1 France......7.0 Netherlands ......121.7 6.12 7th pillar: Size, depth, and access Size and depth 7.01 Hong Kong SAR .....252.3 7.02 Netherlands ......216.2 Austria ......7.0 7.04 Hong Kong SAR .....250.4 7.05 Hong Kong SAR ......713.3 7.06 Relative value-added of financial institutions to GDP ..........17 ..................4.4 Panama......9.2 7.07 United States ......193.7 Saudi Arabia ......356.2 7.08 Access Switzerland......6.7 7.09 United States ......5.3 7.10 7.11 Slovak Republic ......5.9 Sweden ......6.2 7.12 Spain......95.9 7 13 Fase of access to loans 48 28 Norway......5.5

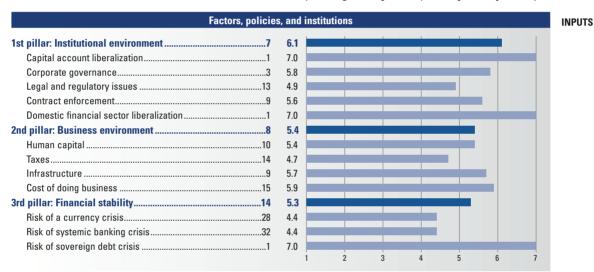
## **Key indicators**

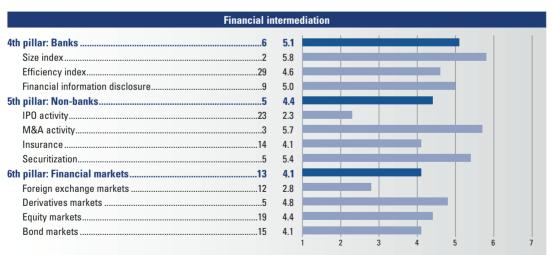
Population (millions), 2007	32.9
GDP (US\$ billions), 2007	1,432.1
GDP (current prices, US\$) per capita, 2007	.43,484.9
GDP (PPP) as share (%) of world total, 2007	1.96
Average annual rate of real GDP growth (%), 2003-03	72.69

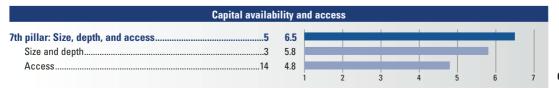
## Financial assets by major type, 2006



## **Financial Development Index 2008**









## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment				
	Capital account liberalization				
.01	Capital account liberalization	1	2.6	Multiple (15)	2.6
	Corporate governance				
.02	Extent of incentive-based compensation	7	.■5.4	France	5.7
.03	Efficacy of corporate boards			Sweden	6.1
.04	Reliance on professional management			Sweden	6.4
.05	Willingness to delegate	9	5.3	Sweden	6.3
.06	Strength of auditing and accounting standards	13	6.1	Germany	6.3
.07	Shareholder rights index	1	5.0	Multiple (8)	5.0
.08	Ethical behavior of firms	10	.■5.9	Finland	6.6
.09	Protection of minority shareholders' interests	11	5.6	Sweden	6.4
	Legal and regulatory issues				
.10	Burden of government regulation	20	3.5	Singapore	5.3
.11	Centralization of economic policymaking	6	4.7	Switzerland	5.9
.12	Regulation of security exchanges	20	5.6	Sweden	6.3
.13	Property rights	13	6.1	Germany	6.7
.14	Intellectual property protection			Germany	6.5
.15	Diversion of public funds	16	5.1	Finland	6.5
.16	Public trust of politicians	16	3.7	Singapore	6.4
	Contract enforcement				
.17	Effectiveness of law-making bodies	9	5.0	Singapore	6.1
.18	Judicial independence			Germany	
.19	Irregular payments in judicial decisions			Finland	
.13	Number of procedures to enforce a contract			Ireland	
.21	Time to enforce a contract			Singapore	
.22	Cost of enforcing contracts			China	
.23	Strength of investor protection			Singapore	
.24	Time to close a business			Ireland	
.25	Domestic financial sector liberalization  Domestic financial sector liberalization	1	1.0	Multiple (34)	1.0
.25		1	1.0	Multiple (34)	1.(
.25		1	1.0	Multiple (34)	1.0
.25	Domestic financial sector liberalization	1	1.0	Multiple (34)	1.0
	Domestic financial sector liberalization			Multiple (34)	
2.01	2nd pillar: Business environment  Human capital  Quality of management schools	4	. <b>■</b> 5.9		6.0
2.01	2nd pillar: Business environment Human capital Quality of management schools	4	. <b>■</b> 5.9	France	6.0 6.3
2.01 2.02 2.03	2nd pillar: Business environment  Human capital  Quality of management schools	4 12 20	■5.9 ■5.2 ■4.9	France	6.6 6.3
2.01 2.02 2.03 2.04	2nd pillar: Business environment  Human capital  Quality of management schools  Quality of math and science education.  Extent of staff training.	4 12 20 10	■5.9 ■5.2 ■4.9 ■5.7	France Singapore Switzerland	6.3 5.5
2.01 2.02 2.03 2.04 2.05	2nd pillar: Business environment  Human capital  Quality of management schools  Quality of math and science education	4 12 20 10		FranceSingaporeSwitzerlandSwitzerland	6.0 6.3 5.9 6.0
2.01 2.02 2.03 2.04 2.05	2nd pillar: Business environment  Human capital  Quality of management schools	4 12 20 10		FranceSingaporeSwitzerlandSwitzerland	6.0 6.3 5.9 6.0
2.01 2.02 2.03 2.04 2.05 2.06	2nd pillar: Business environment  Human capital  Quality of management schools	4 20 10 22 15		FranceSingaporeSwitzerlandSwitzerland	
2.01 2.02 2.03 2.04 2.05 2.06	2nd pillar: Business environment  Human capital  Quality of management schools	4		France	
2.01 2.02 2.03 2.04 2.05 2.06	2nd pillar: Business environment  Human capital Quality of management schools	4		France	
2.01 2.02 2.03 2.04 2.05 2.06	2nd pillar: Business environment  Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor  Tertiary enrollment  Taxes  Irregular payments in tax collection  Distortive effect on competition of taxes and subsidie Corporate tax rate	4		France	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08	2nd pillar: Business environment  Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor  Tertiary enrollment  Taxes  Irregular payments in tax collection  Distortive effect on competition of taxes and subsidie Corporate tax rate  Infrastructure	4	■	France	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	2nd pillar: Business environment  Human capital Quality of management schools Quality of math and science education Extent of staff training Local availability of research and training services Brain drain and ease of hiring foreign labor Tertiary enrollment  Taxes Irregular payments in tax collection Distortive effect on competition of taxes and subsidie Corporate tax rate Infrastructure Quality of overall infrastructure	4 12 10 15 15 13 14		France	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	2nd pillar: Business environment  Human capital Quality of management schools Quality of math and science education Extent of staff training Local availability of research and training services Brain drain and ease of hiring foreign labor Tertiary enrollment  Taxes Irregular payments in tax collection Distortive effect on competition of taxes and subsidie Corporate tax rate Infrastructure Quality of overall infrastructure. Quality of telephone/fax infrastructure.	4 12 10 15 13 13 14 10		France	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09 2.10 2.11	2nd pillar: Business environment  Human capital Quality of management schools Quality of math and science education Extent of staff training Local availability of research and training services Brain drain and ease of hiring foreign labor Tertiary enrollment  Taxes Irregular payments in tax collection Distortive effect on competition of taxes and subsidie Corporate tax rate Infrastructure Quality of overall infrastructure Quality of telephone/fax infrastructure Internet users	4 12 10 15 13 14 10 13		France	6.0 6.3 5.9 6.0 93.2 6.8 6.7 6.8 85.7
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	2nd pillar: Business environment  Human capital Quality of management schools Quality of math and science education Extent of staff training Local availability of research and training services Brain drain and ease of hiring foreign labor Tertiary enrollment  Taxes Irregular payments in tax collection Distortive effect on competition of taxes and subsidie Corporate tax rate Infrastructure Quality of overall infrastructure. Quality of telephone/fax infrastructure.	4 12 10 15 13 14 10 13 		France	

(Cont'd.)

#### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage INDICATOR BEST PERFORMER 2nd pillar: Business environment (cont'd.) Cost of doing business 2.16 Ireland......0.3 United Arab Emirates ......1.5 2.17 Saudi Arabia ......0.0 2.18 China ......390.0 Singapore ......367.0 2.20 2.21 Multiple (4) ......1.0 2.22 3rd pillar: Financial stability Risk of a currency crisis 3.01 Argentina .....-8.5 3.02 Russian Federation......15.4 3.03 Kuwait ......46.1 Multiple (2) ......0.0 External debt to GDP (developing economies) ......n/a .....n/a Saudi Arabia ......9.6 3.05A 3.05B Net int'l investment position to GDP (adv. economies)......9....■.....-12.6 Switzerland......121.3 Risk of systemic banking crisis 3.06 Indonesia......16.0 3.07 Multiple (24) ......8.0 3.08 Multiple (3) ......9.0 Multiple (3) .....14.0 3.09 Private monitoring of the banking industry ......n/a .....n/a South Africa.....9.0 3.10 3.11 Multiple (11) ......0.0 3.12 Russian Federation.....-68.4 3 13 Risk of sovereign debt crisis 3.14 Multiple (15) .....20.0 Multiple (15) ......20.0 3.15 4th pillar: Banks Size index 4.01 Hong Kong SAR .....10.8 Size index Efficiency index United Arab Emirates ......6.8 4.02 Multiple (11) ......0.0 4.03 Financial information disclosure 4.04 Belgium ......57.2 Multiple (7) ......100.0 4.05 Multiple (14) ......6.0 4.06 5th pillar: Non-banks IPO activity 5.01 France 31.0 Kazakhstan ......4.4 Japan .....14.2 M&A activity 5.04 United States ......44.4 5.05 United Kingdom .....14.6 5.06 United States ......33.2

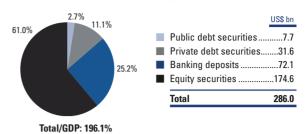
#### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage INDICATOR BEST PERFORMER 5th pillar: Non-banks (cont'd.) Insurance 5.07 United States ......1,170,100.6 United Kingdom ......6,466.7 5.09 India.....52.6 United Kingdom ......16.5 Switzerland......4.8 Securitization 5.12 United States ......22.9 5.13 United States ......64.9 6th pillar: Financial markets Foreign exchange markets 6.01 Spot foreign exchange turnover......14.....14 United Kingdom ......26.6 United Kingdom .....29.9 6.02 United Kingdom ......42.0 6.03 **Derivatives markets** 6.04 Interest rate derivatives turnover: United Kingdom ......45.6 6.05 United Kingdom ......46.0 United States ......42.6 6.06 United Kingdom ......47.6 Foreign exchange derivatives turnover: Currency swaps ......4 .......................4.3 6.07 6.08 United Kingdom ......42.6 **Equity market development** 6.09 Pakistan......374.3 Hong Kong SAR .....713.3 7.05 Bond market development 6.10 United States ......114.0 6 1 1 France......7.0 Netherlands ......121.7 6.12 7th pillar: Size, depth, and access Size and depth 7.01 Hong Kong SAR .....252.3 7.02 Netherlands ......216.2 Austria ......7.0 7.04 Hong Kong SAR .....250.4 7.05 Hong Kong SAR ......713.3 7.06 Panama......9.2 7.07 United States ......193.7 Saudi Arabia ......356.2 7.08 Access Switzerland......6.7 7.09 United States ......5.3 7.10 7.11 Slovak Republic ......5.9 Sweden ......6.2 7.12 Spain......95.9 7 13 Norway......5.5

## Chile

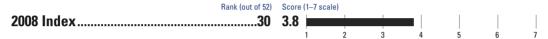
## **Key indicators**

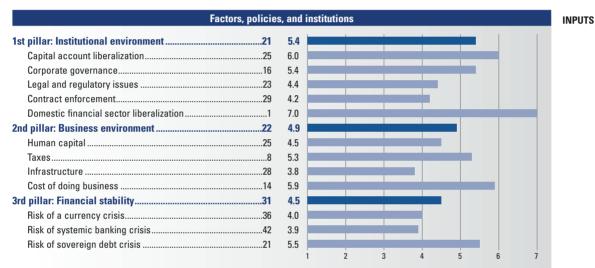
Population (millions), 2007	16.6
GDP (US\$ billions), 2007	163.8
GDP (current prices, US\$) per capita, 2007	.9,879.1
GDP (PPP) as share (%) of world total, 2007	0.36
Average annual rate of real GDP growth (%), 2003-07	4.93

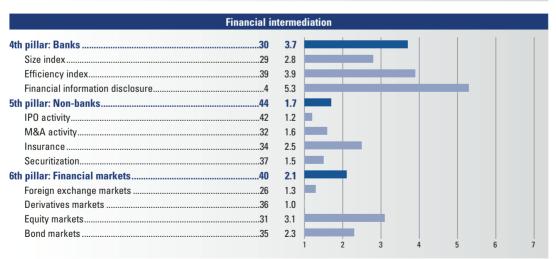
## Financial assets by major type, 2006

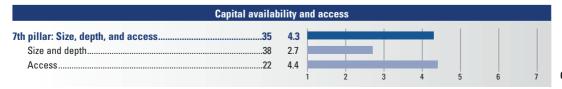


## **Financial Development Index 2008**











# Chile

## Financial Development Index in detail ■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment				
	Capital account liberalization				
.01	Capital account liberalization	25	<b>1</b> 1.8	Multiple (15)	2.6
	Corporate governance				
.02	Extent of incentive-based compensation	19	<b></b> 5.0	France	5.7
.03	Efficacy of corporate boards	12	<b>1</b> 5.5	Sweden	6.1
.04	Reliance on professional management	20	<b>1</b> 5.5	Sweden	6.4
.05	Willingness to delegate	27	<b>1</b> 4.3	Sweden	6.3
.06	Strength of auditing and accounting standards	22	<b>1</b> 5.5	Germany	6.3
.07	Shareholder rights index	1	<b>1</b> 5.0	Multiple (8)	5.0
.08	Ethical behavior of firms	14	<b>1</b> 5.5	Finland	6.6
.09	Protection of minority shareholders' interests	22	<b></b> .5.3	Sweden	6.4
	Legal and regulatory issues				
.10	Burden of government regulation	12	■3.8	Singapore	5.3
.11	Centralization of economic policymaking	33	<b></b> 3.0	Switzerland	5.9
.12	Regulation of security exchanges			Sweden	6.3
.13	Property rights	25	<b>1</b> 5.4	Germany	6.7
.14	Intellectual property protection	30	4.0	Germany	6.5
.15	Diversion of public funds	22	<b>1</b> 4.6	Finland	6.5
.16	Public trust of politicians	17	<b></b> 3.7	Singapore	6.4
	Contract enforcement				
.17	Effectiveness of law-making bodies	30	<b>1</b> 3.8	Singapore	6.1
.18	Judicial independence			Germany	
.19	Irregular payments in judicial decisions			Finland	
.20	Number of procedures to enforce a contract			Ireland	20.0
.21	Time to enforce a contract			Singapore	
.22	Cost of enforcing contracts			China	
.23	Strength of investor protection			Singapore	
.24	Time to close a business			Ireland	
	Domestic financial sector liberalization				
.25	Domestic financial sector liberalization	1	<b>1</b> 1.0	Multiple (34)	1.C
	0.1.11				
	2nd pillar: Business environment				
	Human capital			-	
2.01	Quality of management schools			France	
2.02	Quality of math and science education			Singapore	
2.03	Extent of staff training			Switzerland	
.04	Local availability of research and training services			Switzerland	
2.05	Brain drain and ease of hiring foreign labor			Kuwait	
.06	Tertiary enrollment	27	46.6	Finland	93.2
	Taxes		_		0.0
2.07	Irregular payments in tax collection			Sweden	
.08	Distortive effect on competition of taxes and subsidie			Singapore	
.09	Corporate tax rate	/	17.0	Multiple (4)	0.0
	Infrastructure				
	Quality of overall infrastructure			Switzerland	
		17	<b>1</b> 6.5	Switzerland	
2.11	Quality of telephone/fax infrastructure			N   - +       -	05.7
2.11 2.12	Internet users	30		Netherlands	
2.10 2.11 2.12 2.13	Internet users	30 25	<b></b> .5.9	Netherlands	31.8
2.11 2.12	Internet users	30 25 35	5.9 20.2		31.8 66.9

(Cont'd.)

# Chile

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of starting a business	27■	8.6	Ireland	0.3
2.17	Cost of dealing with licenses			United Arab Emirates	s1.5
2.18	Cost of registering property			Saudi Arabia	0.0
2.19	Cost to export			China	390.0
2.20	Cost to import			Singapore	
2.21	Cost of enforcing contracts			China	
2.22	Cost of closing a business	26	15.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	38	4 2	Argentina	-8.5
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP			Kuwait	
3.04	Dollarization vulnerability indicator			Multiple (2)	
05A	External debt to GDP (developing economies)			Saudi Arabia	
05B	Net int'l investment position to GDP (adv. economic			Switzerland	
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks	2	1/1 0	Indonesia	16.0
3.07	Entry restrictions for banks			Multiple (24)	
3.08	Capital restrictions for banks			Multiple (3)	
3.09	Official supervisory power			Multiple (3)	
3.10	Private monitoring of the banking industry			South Africa	
3.10	Frequency of banking crises			Multiple (11)	
3.12	Stability Index			India	
3.12	Cumulative real estate appreciation			Russian Federation	
0.10			, u	riassian reacration	00
3.14	Risk of sovereign debt crisis  Local currency sovereign rating	17	19.0	Multiple (15)	20.0
3.15	Foreign currency sovereign rating			Multiple (15)	
	4th pillar: Banks				
	Size index				
4.01	Size index	29	5.7	Hong Kong SAR	10.8
	Efficiency index				
4.02	Efficiency index	40	4.5	United Arab Emirates	s6.8
4.03	Public ownership of banks	24	17.0	Multiple (11)	0.0
	Financial information disclosure				
1.04	Public credit registry coverage	E <b>=</b>	26.2	Belgium	E7 2
4.05	Private credit bureau coverage			Multiple (7)	
4.06	Credit Information Index			Multiple (14)	
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	41	0 1	France	31 0
5.02	IPO proceeds amount			Kazakhstan	
5.02	Share of world IPOs			Japan	
				,	
5.04	M&A activity M&A market share	22 =	0.2	United States	44.4
	M&A transaction value to GDP				
5.05 5.06	Share of total number of M&A deals			United Kingdom United States	
J.UU	Share of total number of Max deals			Officed States	

Financial Development Index in detail	(cont'd.)	■ Development <b>Advantage</b>	■ Development <b>Disadvanta</b> g
rinanciai Development Index in detail	(cont a.)	Development Advantage	Development Disadvanta

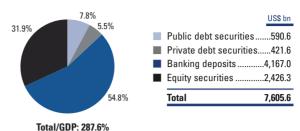
nc	cial Development Index in detail (c	ont'd.)	Development	t <b>Advantage</b> Developme	Development Disadvantage	
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE	
	5th pillar: Non-banks (cont'd.)					
	Insurance					
07	Insurance premiums, direct	36■	4,704.1	United States	1,170,100.6	
80	Insurance density			United Kingdom		
.09	Real growth of direct insurance premiums			India		
.10	Insurance penetrationRelative value-added of insurance			United Kingdom		
.11		15	1.0	Switzerland	4.8	
4.0	Securitization	05	4.0	11.3. 10	00.0	
.12 .13	Securitization to GDP			United States United States		
.10	Share of total number of Securitization deals			Officed States	04.9	
	6th pillar: Financial markets					
	Foreign exchange markets					
5.01	Spot foreign exchange turnover			United Kingdom		
5.02	Outright forward foreign exchange turnover			United Kingdom		
6.03	Foreign exchange swap turnover	38	0.0	United Kingdom	42.0	
	Derivatives markets					
5.04	Interest rate derivatives turnover:			11.5 116 1	45.0	
. 0.	Forward rate agreements			United Kingdom		
6.05 6.06	Interest rate derivatives turnover: Swaps Interest rate derivatives turnover: Options			United Kingdom United States		
5.00	Foreign exchange derivatives turnover: Current			United Kingdom		
5.08	Foreign exchange derivatives turnover: Options			United Kingdom		
	Equity market development					
5.09	Equity market turnover	43■	14.8	Pakistan	374.3	
7.05	Stock market capitalization to GDP	16■	103.5	Hong Kong SAR		
	Bond market development					
5.10	Private-sector bonds to GDP	18■	19.9	United States	114.0	
5.11	Public-sector bonds to GDP	35■	2.7	France	7.0	
6.12	International bonds to GDP	32■	9.7	Netherlands	121.7	
	7th pillar: Size, depth, and access					
7.04	Size and depth	0.4	40.7		050.0	
7.01	M2 to GDP			Hong Kong SAR		
7.02 7.03	Private debt to GDP			Netherlands Austria		
7.03 7.04	Bank deposits to GDP			Hong Kong SAR		
7.05	Stock market capitalization to GDP			Hong Kong SAR		
7.06	Relative value-added of financial institutions to			Panama		
7.07	Private credit to GDP			United States	193.7	
7.08	Stock market value traded to GDP	36■	19.7	Saudi Arabia	356.2	
	Access					
7.09	Financial market sophistication	21■	5.5	Switzerland	6.7	
7.10	Venture capital availability	24■	3.9	United States	5.3	
7.11	Ease of access to credit			Slovak Republic		
7.12	Ease of access to local equity market			Sweden		
7.13	Bank branches			Spain		
7.14	Ease of access to loans	22■	4.3	Norway	5.5	

## China

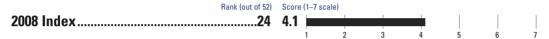
## **Key indicators**

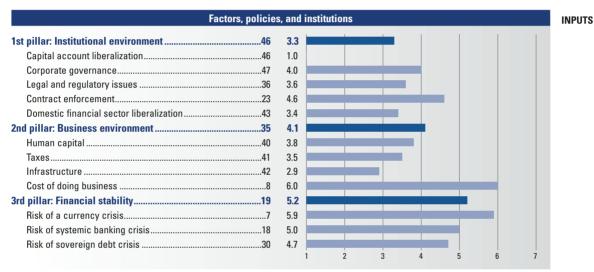
Population (millions), 2007	.1,321.1
GDP (US\$ billions), 2007	.3,250.8
GDP (current prices, US\$) per capita, 2007	.2,460.8
GDP (PPP) as share (%) of world total, 2007	10.83
Average annual rate of real GDP growth (%), 2003–07	10.60

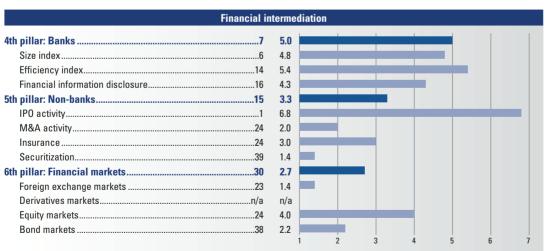
### Financial assets by major type, 2006

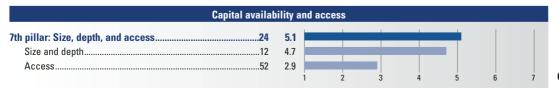


## **Financial Development Index 2008**











## Financial Development Index in detail

■ Development **Advantage** ■ Development **Disadvantage** 

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment				
	Capital account liberalization				
1.01	Capital account liberalization	46	 1.1	Multiple (15)	2.6
	Corporate governance				
1.02	Extent of incentive-based compensation	29	 4.6	France	5.7
1.03	Efficacy of corporate boards	51	 4.0	Sweden	6.
1.04	Reliance on professional management	38	 4.5	Sweden	6.4
1.05	Willingness to delegate	42	 3.8	Sweden	6.3
1.06	Strength of auditing and accounting standards			Germany	6.3
1.07	Shareholder rights index			Multiple (8)	
1.08	Ethical behavior of firms			Finland	
1.09	Protection of minority shareholders' interests	49	 3.6	Sweden	6.4
	Legal and regulatory issues				
1.10	Burden of government regulation	18	 3.6	Singapore	
1.11	Centralization of economic policymaking			Switzerland	5.9
1.12	Regulation of security exchanges			Sweden	
1.13	Property rights			Germany	
1.14	Intellectual property protection			Germany	
1.15	Diversion of public funds			Finland	
1.16	Public trust of politicians	26	 3.1	Singapore	6.4
	Contract enforcement				
1.17	Effectiveness of law-making bodies	23	 4.1	Singapore	6.
1.18	Judicial independence	42	 3.4	Germany	6.!
1.19	Irregular payments in judicial decisions	37	 4.1	Finland	6.8
1.20	Number of procedures to enforce a contract	27	 35.0	Ireland	20.0
1.21	Time to enforce a contract	18	 406.0	Singapore	120.0
1.22	Cost of enforcing contracts	1	 8.8	China	8.8
1.23	Strength of investor protection	34	 5.0	Singapore	9.3
1.24	Time to close a business	17	 1.7	Ireland	0.4
	Domestic financial sector liberalization				
1.25	Domestic financial sector liberalization	43	 2.0	Multiple (34)	1.0
	2nd pillar: Business environment				
	•				
2.01	Human capital	49	 3.6	France	6.0
	•			FranceSingapore	
2.02	Human capital Quality of management schools	31	 4.4		6.3
2.02 2.03	Human capital Quality of management schools Quality of math and science education	31	 4.4	Singapore	6.3
2.02 2.03 2.04	Human capital  Quality of management schools  Quality of math and science education.  Extent of staff training.	31 36 28	 4.4 3.8 4.4	Singapore Switzerland	6.3 5.9
2.02 2.03 2.04 2.05	Human capital  Quality of math and science education  Extent of staff training  Local availability of research and training services	31 36 28 27	4.4 3.8 4.4	Singapore Switzerland Switzerland	
2.02 2.03 2.04 2.05	Human capital  Quality of management schools	31 36 28 27	4.4 3.8 4.4	Singapore	
2.01 2.02 2.03 2.04 2.05 2.06	Human capital  Quality of management schools	31 36 28 27 45	 4.4 3.8 4.4 4.4 21.6	Singapore	6.3 6.6 5.8 93.2
2.02 2.03 2.04 2.05 2.06	Human capital  Quality of management schools	313628274540	4.4 3.8 4.4 21.6	Singapore	6.6.6
2.02 2.03 2.04 2.05 2.06 2.07 2.08	Human capital  Quality of management schools	313628274545	4.4 3.8 4.4 21.6 4.4 4.4	Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08	Human capital  Quality of math and science education	313628274545	4.4 3.8 4.4 21.6 4.4 4.4	Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools	31 36 28 27 45 40 39	4.4 3.8 4.4 21.6 21.6 4.4 33.0	Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools	31 28 27 45 40 s28 39	4.4 3.8 4.4 21.6 4.4 4.2 33.0	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland	6.5 
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools	31 36 28 27 45 40 39 35 39	4.4 3.8 4.4 21.6 4.4 33.0 3.6 5.5	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland	6.5 6.0 5.8 93.2 6.8 6.8 6.8 6.6
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09 2.10 2.11 2.12	Human capital  Quality of management schools	31 36 28 27 45 40 39 35 39	4.4 3.8 4.4 21.6 4.4 33.0 3.6 5.5 10.4	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland Netherlands	6.5 5.9 6.0 93.2 6.6 6.6 6.6 85.7
2.02 2.03 2.04 2.05	Human capital  Quality of management schools	31 36 28 27 45 40 39 35 40 45 30	4.4 3.8 4.4 21.6 4.4 33.0 3.6 5.5 10.4 3.8	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland	6.8 6.8 6.8 93.2 6.8 6.8 6.8 31.8

# China

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
16	Cost of starting a business	26■	8.4	Ireland	0.3
17	Cost of dealing with licenses	47	840.2	United Arab Emirates	1.5
18	Cost of registering property	27	3.6	Saudi Arabia	0.0
19	Cost to export	1■	390.0	China	390.0
20	Cost to import	4	430.0	Singapore	367.0
21	Cost of enforcing contracts	1	8.8	China	8.8
22	Cost of closing a business	40	22.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
01	Change in real effective exchange rate	11	1.9	Argentina	8.5
02	External vulnerability indicator	23	21.4	Russian Federation	15.4
03	Current account balance to GDP	11	9.8	Kuwait	46.1
04	Dollarization vulnerability indicator	n/a	n/a	Multiple (2)	0.0
5A	External debt to GDP (developing economies)	2■	12.8	Saudi Arabia	9.6
ōΒ	Net int'l investment position to GDP (adv. econom	ies)n/a	n/a	Switzerland	121.3
	Risk of systemic banking crisis				
06	Activity restrictions for banks	n/a	n/a	Indonesia	
07	Entry restrictions for banks			Multiple (24)	
80	Capital restrictions for banks			Multiple (3)	9.0
09	Official supervisory power	n/a	n/a	Multiple (3)	14.0
10	Private monitoring of the banking industry			South Africa	9.0
11	Frequency of banking crises	12■	1.0	Multiple (11)	0.0
12	Stability Index			India	
13	Cumulative real estate appreciation	3■	13.1	Russian Federation	68.4
	Risk of sovereign debt crisis				
14 15	Local currency sovereign rating  Foreign currency sovereign rating			Multiple (15)	
	Total graduates and the second gradual				20.0
	4th pillar: Banks				
01	Size index Size index	6 -	0.2	Hong Kong SAR	10 0
JI			0.∠	Tiong Rong SAR	10.8
02	Efficiency index Efficiency index	14	5.5	United Arab Emirates	6.8
02	Public ownership of banks			Multiple (11)	
00	·		I/a	ividitiple (11)	0.0
0.4	Financial information disclosure		40.0	Delein	
04	Public credit registry coverage			Belgium	
05	Private credit bureau coverage			Multiple (7)	
06	Credit Information Index	31	4.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
01	IPO market share			France	
02	IPO proceeds amount			Kazakhstan	
03	Share of world IPOs	4	9.4	Japan	14.2
	M&A activity				
04	M&A market share			United States	
05	M&A transaction value to GDP			United Kingdom	
06	Share of total number of M&A deals	10	2.4	United States	33.2

Financial Development Index in detail	(cont'd.)	Development Advantage	■ Development <b>Disadvantage</b>
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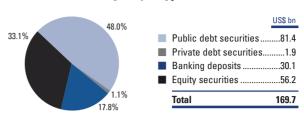
nc	cial Development Index in detail (c	ont'd.)	■ Development <b>Advantage</b> ■ Development <b>Disadvantage</b>				
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE		
	5th pillar: Non-banks (cont'd.)						
	Insurance						
.07	Insurance premiums, direct	9	70,805.5	United States1	,170,100.6		
5.08	Insurance density	42■	53.5	United Kingdom	6,466.7		
.09	Real growth of direct insurance premiums			India	52.6		
.10	Insurance penetration			United Kingdom			
.11	Relative value-added of insurance	31■	0.9	Switzerland	4.8		
	Securitization						
5.12	Securitization to GDP			United States			
.13	Share of total number of securitization deals	22■	0.2	United States	64.9		
	6th pillar: Financial markets						
	Foreign exchange markets						
5.01	Spot foreign exchange turnover	16■	0.7	United Kingdom	26.6		
.02	Outright forward foreign exchange turnover	39■	0.0	United Kingdom	29.9		
5.03	Foreign exchange swap turnover	35■	0.0	United Kingdom	42.0		
	Derivatives markets						
6.04	Interest rate derivatives turnover:						
	Forward rate agreements			United Kingdom			
3.05	Interest rate derivatives turnover: Swaps			United Kingdom			
3.06	Interest rate derivatives turnover: Options			United States			
6.07 6.08	Foreign exchange derivatives turnover: Currence Foreign exchange derivatives turnover: Options			United Kingdom United Kingdom			
	Equity market development						
6.09	Equity market turnover	19■	81.9	Pakistan			
7.05	Stock market capitalization to GDP	n/a	n/a	Hong Kong SAR	713.3		
	Bond market development						
5.10	Private-sector bonds to GDP	·····		United States			
5.11	Public-sector bonds to GDP			France			
.12	International bonds to GDP	47■	1.2	Netherlands	121.7		
	7th pillar: Size, depth, and access						
	Size and depth						
7.01	M2 to GDP			Hong Kong SAR			
.02	Private debt to GDP			Netherlands			
.03	Public debt to GDP  Bank deposits to GDP			Austria Hong Kong SAR			
.04 '.05	Stock market capitalization to GDP			Hong Kong SAR			
.06	Relative value-added of financial institutions to			Panama			
7.07	Private credit to GDP			United States			
.08	Stock market value traded to GDP			Saudi Arabia	356.2		
	Access						
.09	Financial market sophistication	51■	3.2	Switzerland	6.7		
.10	Venture capital availability			United States	5.3		
.11	Ease of access to credit	51	3.7	Slovak Republic	5.9		
.12	Ease of access to local equity market			Sweden			
.13	Bank branches			Spain			
.14	Ease of access to loans	50■	2.6	Norway	5.5		

## Colombia

## **Key indicators**

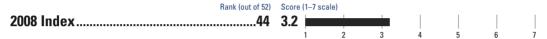
Population (millions), 2007	47.5
GDP (US\$ billions), 2007	171.6
GDP (current prices, US\$) per capita, 2007	.3,611.5
GDP (PPP) as share (%) of world total, 2007	0.49
Average annual rate of real GDP growth (%), 2003-07	5.45

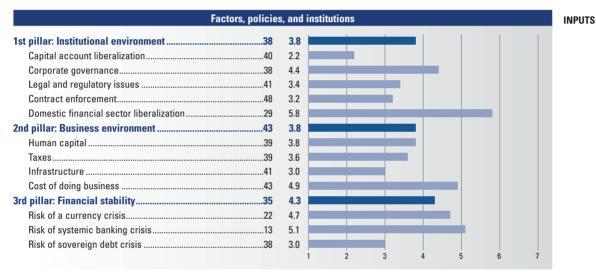
## Financial assets by major type, 2006

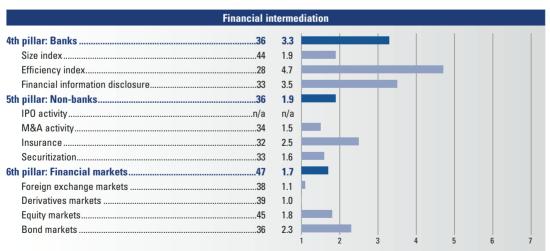


Total/GDP: 124.6%

## **Financial Development Index 2008**











# Colombia

## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment				
	Capital account liberalization				
1.01	Capital account liberalization	40	 0.1	Multiple (15)	2.6
	Corporate governance				
1.02	Extent of incentive-based compensation	48	 3.9	France	5.
1.03	Efficacy of corporate boards	31	 4.8	Sweden	6.
1.04	Reliance on professional management			Sweden	6.4
1.05	Willingness to delegate			Sweden	
1.06	Strength of auditing and accounting standards			Germany	
1.07	Shareholder rights index			Multiple (8)	
1.08	Ethical behavior of firms			Finland	
1.09	Protection of minority shareholders' interests	35	 4.5	Sweden	6.4
	Legal and regulatory issues				
1.10	Burden of government regulation			Singapore	
1.11	Centralization of economic policymaking			Switzerland	
1.12	Regulation of security exchanges			Sweden	
1.13	Property rights			Germany	
1.14	Intellectual property protection			Germany	
1.15 1.16	Diversion of public funds  Public trust of politicians			Finland	
1.10	'	40	 	Singapore	0.4
	Contract enforcement				
1.17	Effectiveness of law-making bodies			Singapore	
1.18	Judicial independence			Germany	
1.19	Irregular payments in judicial decisions			Finland	
1.20	Number of procedures to enforce a contract			Ireland	
1.21 1.22	Time to enforce a contract  Cost of enforcing contracts			Singapore China	
1.23	Strength of investor protection			Singapore	
1.24	Time to close a business			Ireland	
1.25	Domestic financial sector liberalization  Domestic financial sector liberalization	20	1.0	Multiple (34)	1 (
	2nd pillar: Business environment				
	Human capital				
2.01	Quality of management schools			France	
2.02	Quality of math and science education			Singapore	
2.03	Extent of staff training			Switzerland	
2.04	Local availability of research and training services			Switzerland	
2.05	Brain drain and ease of hiring foreign labor			Kuwait	
2.06	Tertiary enrollment	38	 30.8	Finland	93.2
	Taxes				
2.07	Irregular payments in tax collection			Sweden	
2.08	Distortive effect on competition of taxes and subsidie			Singapore	
2.09	Corporate tax rate	44	 34.0	Multiple (4)	0.0
	Infrastructure				
	Quality of overall infrastructure	45	 2.8	Switzerland	
2.10	Quality of telephone/fax infrastructure	31	 6.0	Switzerland	
2.10 2.11			 14.5	Netherlands	
2.11 2.12	Internet users				
2.11 2.12 2.13	Broadband Internet subscribers	38		Netherlands	
2.11 2.12		38	 17.0	Netherlands	66.9

(Cont'd.)

# Colombia

nanc	ial Development Index in detail (cont'o	d.)	■ Developmen	t <b>Advantage</b> Developm	ent <b>Disadva</b>
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of starting a business	38■.	19.3	Ireland	0.3
2.17	Cost of dealing with licenses	45	602.8	United Arab Emirate	s1.5
2.18	Cost of registering property	18■.	2.5	Saudi Arabia	0.0
2.19	Cost to export	47■.	1,440.0	China	390.0
2.20	Cost to import	45■.	1,440.0	Singapore	367.0
2.21	Cost of enforcing contracts	50	52.6	China	8.8
2.22	Cost of closing a business	1■.	1.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	23■.	0.7	Argentina	8.5
3.02	External vulnerability indicator	40	90.2	Russian Federation.	15.4
3.03	Current account balance to GDP	37 🔳 .	2.1	Kuwait	46.1
3.04	Dollarization vulnerability indicator	1■.	0.0	Multiple (2)	0.0
3.05A	External debt to GDP (developing economies)	12■.	29.4	Saudi Arabia	9.6
3.05B	Net int'l investment position to GDP (adv. economie	es)n/a	n/a	Switzerland	121.3
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks	n/a	n/a	Indonesia	16.0
3.07	Entry restrictions for banks	n/a	n/a	Multiple (24)	8.0
3.08	Capital restrictions for banks	n/a	n/a	Multiple (3)	9.0
3.09	Official supervisory power	n/a	n/a	Multiple (3)	14.0
3.10	Private monitoring of the banking industry	n/a	n/a	South Africa	9.0
3.11	Frequency of banking crises			Multiple (11)	0.0
3.12	Stability Index			India	7.2
3.13	Cumulative real estate appreciation	9■.	5.5	Russian Federation.	68.4
	Risk of sovereign debt crisis				
3.14	Local currency sovereign rating			Multiple (15)	
3.15	Foreign currency sovereign rating	40■.	9.3	Multiple (15)	20.0
	4th pillar: Banks				
	Size index				
4.01	Size index	44■.	4.7	Hong Kong SAR	10.8
	Efficiency index				
4.02	Efficiency index			United Arab Emirate	s6.8
4.03	Public ownership of banks	n/a	n/a	Multiple (11)	0.0
	Financial information disclosure				
4.04	Public credit registry coverage	21■.	0.0	Belgium	57.2
4.05	Private credit bureau coverage	25■.	39.9	Multiple (7)	100.0
4.06	Credit Information Index	15■.	5.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	n/a	n/a	France	31.0
5.02	IPO proceeds amount			Kazakhstan	
5.03	Share of world IPOs			Japan	
	M&A activity	•	•		
5.04	M&A market share	35	0.1	United States	44 /
5.05	M&A transaction value to GDP			United States	
	Share of total number of M&A deals			United States	

## Colombia

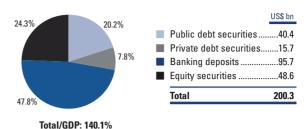
## Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

07	INDICATOR	RANK/52	SCORE	BEST PERFORMER SC
\ <del>-</del>	5th pillar: Non-banks (cont'd.)			
· -	Insurance			
)7	Insurance premiums, direct		3,199.7	United States1,170,10
8(	Insurance density	39■	69.1	United Kingdom6,46
9	Real growth of direct insurance premiums	12■	12.9	India
0	Insurance penetration	37■	2.4	United Kingdom
1	Relative value-added of insurance	16	1.5	Switzerland
	Securitization			
2	Securitization to GDP	33	1.5	United States
3	Share of total number of securitization deals	30■	0.1	United States6
	6th pillar: Financial markets			
	Foreign exchange markets			
1	Spot foreign exchange turnover	36 ■	0.1	United Kingdom
12	Outright forward foreign exchange turnover			United Kingdom
13	Foreign exchange swap turnover			United Kingdom
J		53		Officed Kingdoff
	Derivatives markets			
14	Interest rate derivatives turnover:			
	Forward rate agreements			United Kingdom
5	Interest rate derivatives turnover: Swaps			United Kingdom
6	Interest rate derivatives turnover: Options			United States
17	Foreign exchange derivatives turnover: Currency swa			United Kingdom
8	Foreign exchange derivatives turnover: Options	37■	0.0	United Kingdom
	Equity market development			
9	Equity market turnover	41■	17.8	Pakistan3
5	Stock market capitalization to GDP	39■	32.1	Hong Kong SAR7
	Bond market development			
0	Private-sector bonds to GDP	33	0.5	United States1
1	Public-sector bonds to GDP	26■	4.0	France
2	International bonds to GDP	29■	11.9	Netherlands12
	7th pillar: Size, depth, and access			
	Size and depth			
)1	M2 to GDP	33	29.8	Hong Kong SAR29
)2	Private debt to GDP	48■	1.4	Netherlands2
)3	Public debt to GDP	11	6.5	Austria
)4	Bank deposits to GDP	50	19.4	Hong Kong SAR25
)5	Stock market capitalization to GDP	39■	32.1	Hong Kong SAR7
6	Relative value-added of financial institutions to GDP.	33	3.1	Panama
7	Private credit to GDP	42	24.5	United States19
8	Stock market value traded to GDP	42	8.3	Saudi Arabia3!
	Access			
	Financial market sophistication	38 ■	4.2	Switzerland
19	Venture capital availability			United States
				Slovak Republic
0	Ease of access to credit	·····		·
0 1	Ease of access to local equity market	43	4.6	Sweden
09  0  1  2	Ease of access to local equity market			Sweden
0 1 2		30■	8.7	Sweden

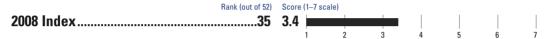
### **Key indicators**

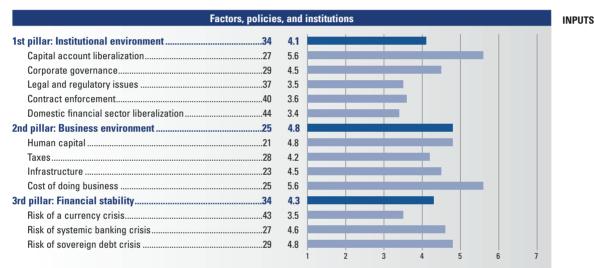
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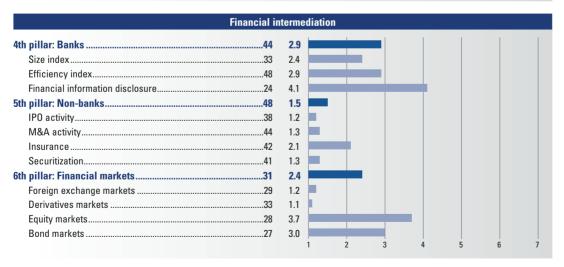
### Financial assets by major type, 2006



## **Financial Development Index 2008**











## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment				
	Capital account liberalization				
01	Capital account liberalization	27	2.3	Multiple (15)	2.6
	Corporate governance				
02	Extent of incentive-based compensation			France	
03	Efficacy of corporate boards			Sweden	
)4	Reliance on professional management			Sweden	
)5	Willingness to delegate			Sweden	
06	Strength of auditing and accounting standards			Germany	
07	Shareholder rights index			Multiple (8)	
38	Ethical behavior of firms			Finland	
)9	Protection of minority shareholders' interests	44	4.1	Sweden	6.4
	Legal and regulatory issues				
10	Burden of government regulation			Singapore	5.3
11	Centralization of economic policymaking			Switzerland	
12	Regulation of security exchanges			Sweden	
13	Property rights			Germany	
14	Intellectual property protection			Germany	
15	Diversion of public funds			Finland	6.5
16	Public trust of politicians	45■	1.9	Singapore	6.4
	Contract enforcement				
17	Effectiveness of law-making bodies	41	3.0	Singapore	6.1
18	Judicial independence	31■	4.1	Germany	6.5
19	Irregular payments in judicial decisions	33■	4.7	Finland	6.8
20	Number of procedures to enforce a contract	6■	27.0	Ireland	20.0
21	Time to enforce a contract	43■	820.0	Singapore	120.0
22	Cost of enforcing contracts	43■	33.0	China	8.8
23	Strength of investor protection	34■	5.0	Singapore	9.3
24	Time to close a business	50	6.5	Ireland	0.4
	Domestic financial sector liberalization				
25	Domestic financial sector liberalization	44	2.0	Multiple (34)	1.0
	2nd pillar: Business environment				
	Human capital				
01	Quality of management schools	28■	4.7	France	6.0
)2	Quality of math and science education	7■	5.5	Singapore	6.3
03	Extent of staff training	25■	4.5	Switzerland	5.9
)4	Local availability of research and training services	21■	4.8	Switzerland	6.0
)5	Brain drain and ease of hiring foreign labor			Kuwait	
06	Tertiary enrollment	26■	49.8	Finland	93.2
	Taxes				
07	Irregular payments in tax collection	27■	5.5	Sweden	6.8
38	Distortive effect on competition of taxes and subsidie	es44■	3.7	Singapore	5.7
09	Corporate tax rate	15■	24.0	Multiple (4)	0.0
	Infrastructure				
10	Quality of overall infrastructure	27	4.4	Switzerland	6.7
11	Quality of telephone/fax infrastructure			Switzerland	
12	Internet users			Netherlands	
-	Broadband Internet subscribers			Netherlands	
13				Switzerland	
13 14	Telephone lines	26	Z8.3	OVVILZEITATTU	

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of starting a business	30■.	10.6	Ireland	0.3
2.17	Cost of dealing with licenses			United Arab Emirates	31.5
2.18	Cost of registering property	22■.	3.0	Saudi Arabia	0.0
2.19	Cost to export	20■.	775.0	China	390.0
2.20	Cost to import			Singapore	
2.21	Cost of enforcing contracts			China	
2.22	Cost of closing a business	26■.	15.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	41	4.6	Argentina	-8.5
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP			Kuwait	
3.04	Dollarization vulnerability indicator			Multiple (2)	
05A	External debt to GDP (developing economies)			Saudi Arabia	
05B	Net int'l investment position to GDP (adv. econon	nies)n/a	n/a	Switzerland	121.3
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks	4	12 0	Indonesia	16.0
3.07	Entry restrictions for banks			Multiple (24)	
3.08	Capital restrictions for banks			Multiple (3)	
3.09	Official supervisory power			Multiple (3)	
3.10	Private monitoring of the banking industry			South Africa	
3.11	Frequency of banking crises			Multiple (11)	0.0
3.12	Stability Index	36	4.4	India	7.2
3.13	Cumulative real estate appreciation	14■.	9.5	Russian Federation	68.4
	Risk of sovereign debt crisis				
3.14	Local currency sovereign rating	28	15.3	Multiple (15)	20.0
3.15	Foreign currency sovereign rating			Multiple (15)	
	4th pillar: Banks Size index				
4.01	Size index	33	5.3	Hong Kong SAR	10.8
7.01				riong Rong OAR	
	Efficiency index	40 =	0.0		0.0
1.02	Efficiency index			United Arab Emirates	
4.03	Public ownership of banks	15■.	Z.5	Multiple (11)	0.0
	Financial information disclosure				
4.04	Public credit registry coverage			Belgium	
4.05	Private credit bureau coverage			Multiple (7)	
4.06	Credit Information Index	15■.	5.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	37■.	0.1	France	31.0
5.02	IPO proceeds amount			Kazakhstan	
5.03	Share of world IPOs			Japan	
5.04	M&A activity M&A market share	42 =	0.1	United States	44.4
5.04 5.05	M&A transaction value to GDP			United States United Kingdom	
5.06	Share of total number of M&A deals			United States	
	onare or total number of Max deals	U	U.4	United States	33.2

Financial Development Index in detail (cont'd.)	■ Development <b>Advantage</b> ■ Development <b>Disadvantage</b>
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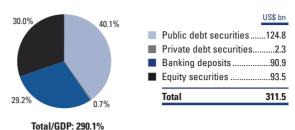
	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCOR
	5th pillar: Non-banks (cont'd.)			
	Insurance			
.07	Insurance premiums, direct	33	I5.304.5	United States1,170,100.
08	Insurance density			United Kingdom6,466.
.09	Real growth of direct insurance premiums			India52.
.10	Insurance penetration	25	<b>.</b> 3.8	United Kingdom16.
.11	Relative value-added of insurance	46	I0.2	Switzerland4.
	Securitization			
.12	Securitization to GDP	38	I 0.9	United States22.
.12	Share of total number of securitization deals			United States
. 10				
	6th pillar: Financial markets			
	Foreign exchange markets			
.01	Spot foreign exchange turnover	34	I0.1	United Kingdom26.
.02	Outright forward foreign exchange turnover	23	0.2	United Kingdom29.
.03	Foreign exchange swap turnover	30	I0.1	United Kingdom42.
	Derivatives markets			
.04	Interest rate derivatives turnover:			
	Forward rate agreements	21	0.1	United Kingdom45.
.05	Interest rate derivatives turnover: Swaps			United Kingdom46.
.06	Interest rate derivatives turnover: Options			United States42.
.07	Foreign exchange derivatives turnover: Currency swap			United Kingdom47.
.08	Foreign exchange derivatives turnover: Options			United Kingdom42.
	Equity market development			
.09	Equity market development  Equity market turnover	12	1177	Pakistan374.
.05	Stock market capitalization to GDP			Hong Kong SAR713.
.00			20.0	Tiong Rong DAT
	Bond market development	07 =		
.10	Private-sector bonds to GDP			United States114.
.11 .12	Public-sector bonds to GDP			France7. Netherlands121.
. 12	Titeriational bonds to GDF	41	4.0	Netricialius121.
	7th pillar: Size, depth, and access			
	Size and depth			
.01	M2 to GDP	17	67.7	Hong Kong SAR252.
.02			I11.1	Netherlands216.
.03	Public debt to GDP			Austria7.
.04	Bank deposits to GDP			Hong Kong SAR250.
.05	Stock market capitalization to GDP			Hong Kong SAR713.
.06	Relative value-added of financial institutions to GDP			Panama9.
.07	Private credit to GDP			United States193.
.08	Stock market value traded to GDP	35	I23.2	Saudi Arabia356
	Access			
.09	Financial market sophistication	35	I4.4	Switzerland6.
.00	Venture capital availability	39	I3.0	United States5.
	Ease of access to credit	22	<b>1</b> 5.1	Slovak Republic5.
.10		4.4	1.5	Sweden6.:
.10	Ease of access to local equity market	44	4.5	
.10 .11	Ease of access to local equity market	23	11.2	Spain95.

## Egypt

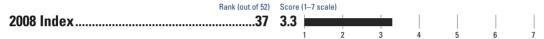
## **Key indicators**

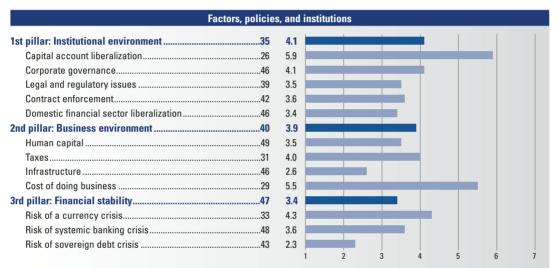
Population (millions), 2007	73.6
GDP (US\$ billions), 2007	127.9
GDP (current prices, US\$) per capita, 2007	1,738.8
GDP (PPP) as share (%) of world total, 2007	0.63
Average annual rate of real GDP growth (%), 2003-07.	5.14

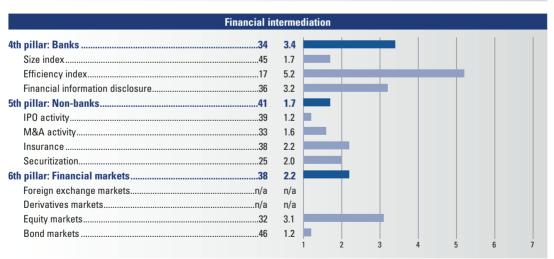
### Financial assets by major type, 2006

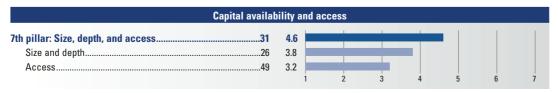


## **Financial Development Index 2008**











**INPUTS** 

## **Financial Development Index in detail**

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment				
	Capital account liberalization				
1.01	Capital account liberalization	26	2.6	Multiple (15)	2.6
	Corporate governance				
1.02	Extent of incentive-based compensation	49	3.8	France	5.7
1.03	Efficacy of corporate boards	45	4.4	Sweden	6.1
1.04	Reliance on professional management			Sweden	6.4
1.05	Willingness to delegate	47	3.5	Sweden	6.3
1.06	Strength of auditing and accounting standards			Germany	
1.07	Shareholder rights index			Multiple (8)	
1.08	Ethical behavior of firms			Finland	
1.09	Protection of minority shareholders' interests	34	4.5	Sweden	6.4
	Legal and regulatory issues				
1.10	Burden of government regulation			Singapore	
1.11	Centralization of economic policymaking			Switzerland	
1.12	Regulation of security exchanges			Sweden	
1.13	Property rights			Germany	
1.14 1.15	Intellectual property protection			Germany Finland	
1.15	Public trust of politicians			Singapore	
1.10	·		2.0	Singapore	
	Contract enforcement	0.4		0.	0.4
1.17	Effectiveness of law-making bodies			Singapore	
1.18 1.19	Judicial independence  Irregular payments in judicial decisions			Germany	
1.19	Number of procedures to enforce a contract			Ireland	
1.21	Time to enforce a contract			Singapore	
1.22	Cost of enforcing contracts			China	
1.23	Strength of investor protection			Singapore	
1.24	Time to close a business			Ireland	0.4
	Domestic financial sector liberalization				
1.25	Domestic financial sector liberalization	46■	2.0	Multiple (34)	1.0
	2nd pillar: Business environment				
	Human capital				
2.01	Quality of management schools	51	3.5	France	6.0
2.02	Quality of math and science education			Singapore	
2.03	Extent of staff training			Switzerland	
2.04	Local availability of research and training services			Switzerland	
2.05	Brain drain and ease of hiring foreign labor			Kuwait Finland	
2.06	Tertiary enrollment	34■	34.7	Fillidilu	93.2
	Taxes				
2.07	Irregular payments in tax collection			Sweden	
2.08	Distortive effect on competition of taxes and subsi			Singapore	
2.09	Corporate tax rate		∠U.U	Multiple (4)	0.0
	Infrastructure		_	0 11 1	
2.10	Quality of overall infrastructure			Switzerland	
2.11	Quality of telephone/fax infrastructure			Switzerland	
2.12	Internet users			Netherlands Netherlands	
2.13 2.14	Broadband Internet subscribers  Telephone lines			Switzerland	
2.14	Mobile telephone subscribers			Italy	
2.10	Wissing telephone addachidera	45	20.3	icary	

## Financial Development Index in detail (cont'd.)

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of starting a business	44■	28.6	Ireland	0.3
2.17	Cost of dealing with licenses			United Arab Emirates	
2.18	Cost of registering property	10	1.0	Saudi Arabia	0.0
2.19	Cost to export	17	714.0	China	390.0
2.20	Cost to import	13	729.0	Singapore	367.0
2.21	Cost of enforcing contracts			China	
2.22	Cost of closing a business	40	22.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	■	3.4	Argentina	8.5
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP	27■	1.6	Kuwait	46.1
3.04	Dollarization vulnerability indicator			Multiple (2)	
3.05A	External debt to GDP (developing economies)	9	27.5	Saudi Arabia	9.6
3.05B	Net int'l investment position to GDP (adv. economies			Switzerland	121.3
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks	n/a	n/a	Indonesia	16.0
3.07	Entry restrictions for banks			Multiple (24)	8.0
3.08	Capital restrictions for banks	n/a	n/a	Multiple (3)	9.0
3.09	Official supervisory power	n/a	n/a	Multiple (3)	14.0
3.10	Private monitoring of the banking industry	n/a	n/a	South Africa	9.0
3.11	Frequency of banking crises		2.0	Multiple (11)	0.0
3.12	Stability Index	39	4.3	India	7.2
3.13	Cumulative real estate appreciation	n/a	n/a	Russian Federation	68.4
	Risk of sovereign debt crisis				
3.14	Local currency sovereign rating	40	11.0	Multiple (15)	20.0
3.15	Foreign currency sovereign rating	51■	7.0	Multiple (15)	20.0
	4th pillar: Banks				
	Size index				
4.01	Size index	45	4.5	Hong Kong SAR	10.8
				riong nong or ar mini	
4.00	Efficiency index	10	E 4	United Andr Forinces	6.0
4.02 4.03	Efficiency index			United Arab Emirates Multiple (11)	
4.03	·	11/a	II/d	iviuitiple (11)	0.0
	Financial information disclosure				
4.04	Public credit registry coverage			Belgium	
4.05	Private credit bureau coverage			Multiple (7)	
4.06	Credit Information Index	31	4.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	40	0.1	France	31.0
5.02	IPO proceeds amount	36	0.2	Kazakhstan	4.4
5.03	Share of world IPOs	39	0.1	Japan	14.2
	M&A activity				
5.04	M&A market share			United States	44.4
5.05	M&A transaction value to GDP	24	3.6	United Kingdom	14.6
5.06	Share of total number of M&A deals	40	0.1	United States	33.2

## Financial Development Index in detail (cont'd.)

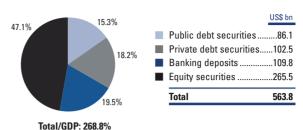
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	5th pillar: Non-banks (cont'd.)				
	Insurance				
07	Insurance premiums, direct	47	843.1	United States	1,170,100.
80	Insurance density	47	11.2	United Kingdom	6,466.
09	Real growth of direct insurance premiums	40	1.4	India	52.
10	Insurance penetration	46	8	United Kingdom	16.
11	Relative value-added of insurance	4■.	2.9	Switzerland	4.
	Securitization				
12	Securitization to GDP	16	3.4	United States	22
13	Share of total number of securitization deals			United States	
				Ormou otatoo	
	6th pillar: Financial markets				
	Foreign exchange markets				
01	Spot foreign exchange turnover	n/a	n/a	United Kingdom	26.
)2	Outright forward foreign exchange turnover	n/a	n/a	United Kingdom	29.
03	Foreign exchange swap turnover	n/a	n/a	United Kingdom	42.
	Derivatives markets				
04	Interest rate derivatives turnover:				
	Forward rate agreements	n/a	n/a	United Kingdom	45
05	Interest rate derivatives turnover: Swaps			United Kingdom	
06	Interest rate derivatives turnover: Options			United States	
07	Foreign exchange derivatives turnover: Currency swa			United Kingdom	
)8	Foreign exchange derivatives turnover: Options			United Kingdom	
00				Officea Kingaoff	42.
	Equity market development				
)9	Equity market turnover			Pakistan	
)5	Stock market capitalization to GDP	23■.	74.6	Hong Kong SAR	713.
	Bond market development				
10	Private-sector bonds to GDP	n/a	n/a	United States	114.
11	Public-sector bonds to GDP	n/a	n/a	France	7.
12	International bonds to GDP	43■.	3.3	Netherlands	121.
	7th pillar: Size, depth, and access				
	Size and depth				
01	M2 to GDP	11	92.4	Hong Kong SAR	252
)2	Private debt to GDP			Netherlands	
03	Public debt to GDP.		4.4	Austria	
)4	Bank deposits to GDP			Hong Kong SAR	
)5	Stock market capitalization to GDP			Hong Kong SAR	
06	Relative value-added of financial institutions to GDP			Panama	
)7	Private credit to GDP			United States	
)8	Stock market value traded to GDP			Saudi Arabia	
00			44.2	Saudi Alabia	
	Access				
)9	Financial market sophistication			Switzerland	
10	Venture capital availability			United States	
11	Ease of access to credit			Slovak Republic	
12	Ease of access to local equity market			Sweden	
13	Bank branches			Spain	
14	Ease of access to loans	49	2.7	Norway	5.

## **Finland**

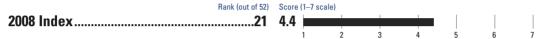
### **Key indicators**

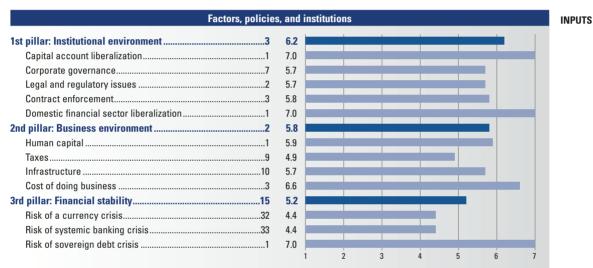
Population (millions), 2007	5.3
GDP (US\$ billions), 2007	245.0
GDP (current prices, US\$) per capita, 2007	.46,601.9
GDP (PPP) as share (%) of world total, 2007	0.29
Average annual rate of real GDP growth (%), 2003-07	73.52

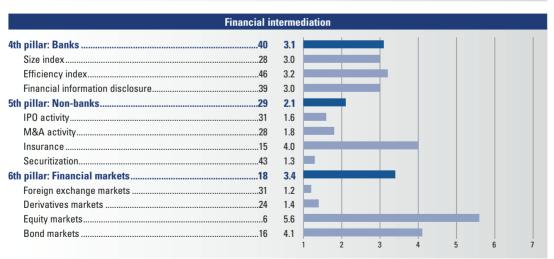
## Financial assets by major type, 2006



## **Financial Development Index 2008**











# Finland

## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment				
	Capital account liberalization				
.01	Capital account liberalization	1■	2.3	Multiple (15)	2.6
	Corporate governance				
.02	Extent of incentive-based compensation	16■	5.0	France	5.7
.03	Efficacy of corporate boards	6■	5.7	Sweden	6.1
.04	Reliance on professional management	7■	6.1	Sweden	6.4
.05	Willingness to delegate	6■	5.4	Sweden	6.3
.06	Strength of auditing and accounting standards	7■	6.2	Germany	6.3
.07	Shareholder rights index	17■	3.0	Multiple (8)	5.0
.08	Ethical behavior of firms	1	6.6	Finland	6.6
.09	Protection of minority shareholders' interests	4	5.9	Sweden	6.4
	Legal and regulatory issues				
.10	Burden of government regulation		4.6	Singapore	5.3
.11	Centralization of economic policymaking	10■	4.3	Switzerland	5.9
.12	Regulation of security exchanges			Sweden	6.3
.13	Property rights	6	6.4	Germany	6.7
.14	Intellectual property protection	2■	6.3	Germany	6.5
.15	Diversion of public funds	1■	6.5	Finland	6.5
.16	Public trust of politicians	2■	5.7	Singapore	6.4
	Contract enforcement				
.17	Effectiveness of law-making bodies	5	5.3	Singapore	6.1
.18	Judicial independence			Germany	
.19	Irregular payments in judicial decisions			Finland	
.20	Number of procedures to enforce a contract			Ireland	
.21	Time to enforce a contract			Singapore	
.22	Cost of enforcing contracts			China	
.23	Strength of investor protection			Singapore	
.24	Time to close a business			Ireland	
	Domestic financial sector liberalization				
.25	Domestic financial sector liberalization	1	1.0	Multiple (34)	1.0
	2nd pillar: Business environment				
	Human capital			_	
	Human capital  Quality of management schools			France	
.02	Human capital  Quality of management schools  Quality of math and science education	3■	6.2	Singapore	6.3
.02	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training	3■ 12■	6.2 5.3	Singapore Switzerland	
.02 .03 .04	Human capital  Quality of math and science education  Extent of staff training  Local availability of research and training services	3 <b>=</b> 12 <b>=</b> 9 <b>=</b>	6.2 5.3 5.7	Singapore Switzerland Switzerland	6.3 5.9 6.0
.02 .03 .04 .05	Human capital  Quality of math and science education	3 <b>1</b> 2 <b>9</b> 6 <b>9</b>	6.2 5.3 5.7 5.4	Singapore Switzerland Switzerland Kuwait	6.3 .5.9 6.0
.02 .03 .04 .05	Human capital  Quality of math and science education  Extent of staff training  Local availability of research and training services	3 <b>1</b> 2 <b>9</b> 6 <b>9</b>	6.2 5.3 5.7 5.4	Singapore Switzerland Switzerland	6.3 .5.9 6.0
.02 .03 .04	Human capital  Quality of math and science education	3 <b>1</b> 2 <b>9</b> 6 <b>9</b>	6.2 5.3 5.7 5.4	Singapore	6.3 5.9 5.8 93.2
.02 .03 .04 .05	Human capital  Quality of management schools	12		Singapore Switzerland Switzerland Kuwait	6.3 5.9 5.8 93.2
.02 .03 .04 .05 .06	Human capital  Quality of management schools	3		Singapore	
.02 .03 .04 .05 .06	Human capital  Quality of management schools	3		Singapore	
2.02 2.03 2.04 2.05 2.06	Human capital  Quality of management schools	3		Singapore	
2.01 2.02 2.03 2.04 2.05 2.06 2.06 2.08 2.09	Human capital  Quality of management schools	3		Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools	3		Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools	3		Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools	3		Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools	3		Singapore	

## Finland

Idill	ial Development Index in detail (cont	'd.)	Development	t <b>Advantage</b> ■ Developm	ent <b>Disadvanta</b>
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of starting a business	8	1.0	Ireland	0.3
2.17	Cost of dealing with licenses	29	122.3	United Arab Emirate	s1.5
2.18	Cost of registering property	28	4.0	Saudi Arabia	0.0
2.19	Cost to export	3	420.0	China	390.0
2.20	Cost to import	3	420.0	Singapore	367.0
2.21	Cost of enforcing contracts	6■	10.4	China	8.8
2.22	Cost of closing a business	5■	4.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	26	1.5	Argentina	8.5
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP			Kuwait	46.1
3.04	Dollarization vulnerability indicator	1	n/a	Multiple (2)	0.0
05A	External debt to GDP (developing economies)	n/a	n/a	Saudi Arabia	9.6
05B	Net int'l investment position to GDP (adv. econom	ies)	12.2	Switzerland	121.3
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks			Indonesia	
3.07	Entry restrictions for banks			Multiple (24)	
3.08	Capital restrictions for banks			Multiple (3)	
3.09	Official supervisory power			Multiple (3)	
3.10	Private monitoring of the banking industry	23	6.0	South Africa	9.0
3.11	Frequency of banking crises	12■	1.0	Multiple (11)	0.0
3.12	Stability Index			India	
3.13	Cumulative real estate appreciation	21	32.9	Russian Federation	68.4
	Risk of sovereign debt crisis				
3.14 3.15	Local currency sovereign rating  Foreign currency sovereign rating			Multiple (15) Multiple (15)	
	4th pillar: Banks				
	Size index				
4.01	Size index	28	6.0	Hong Kong SAR	10.8
	Efficiency index				
1.02	Efficiency index	47	4.1	United Arab Emirate	s6.8
4.03	Public ownership of banks	1	0.0	Multiple (11)	0.0
	Financial information disclosure				
1.04	Public credit registry coverage	21	0.0	Belgium	57.2
4.05	Private credit bureau coverage			Multiple (7)	
1.06	Credit Information Index			Multiple (14)	
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	30	0.3	France	31.0
5.02	IPO proceeds amount	23	0.4	Kazakhstan	4.4
5.03	Share of world IPOs			Japan	14.2
	M&A activity				
5.04	M&A market share			United States	44.4
5.05	M&A transaction value to GDP	23	3.8	United Kingdom	14.6
	Share of total number of M&A deals			United States	22.0

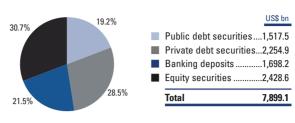
Financial Development Index in detail	(cont'd.)	Development Advantage	■ Development <b>Disadvantage</b>
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nc	eial Development Index in detail (c	ont'd.)	■ Development	Advantage Developme	ent <b>Disadvantage</b>
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	5th pillar: Non-banks (cont'd.)				
	Insurance				
.07	Insurance premiums, direct	23■	19,308.2	United States1	1,170,100.6
80	Insurance density			United Kingdom	6,466.7
.09	Real growth of direct insurance premiums			India	
.10 .11	Insurance penetration Relative value-added of insurance			United Kingdom Switzerland	
. 1 1		40	0.4	SWILZEITATIU	4.0
.12	Securitization Securitization to GDP	41	0.7	United States	22.0
.12	Share of total number of securitization deals			United States	
. 10	onare of total number of securitization acade			Officed States	
	6th pillar: Financial markets				
	Foreign exchange markets				
.01	Spot foreign exchange turnover			United Kingdom	
.02	Outright forward foreign exchange turnover			United Kingdom	
.03	Foreign exchange swap turnover	∠3■	0.3	United Kingdom	42.0
	Derivatives markets				
.04	Interest rate derivatives turnover: Forward rate agreements	24	0.0	United Vinadom	4E G
.05	Interest rate derivatives turnover: Swaps			United Kingdom United Kingdom	
.06	Interest rate derivatives turnover: Options			United States	
.07	Foreign exchange derivatives turnover: Currence			United Kingdom	
.08	Foreign exchange derivatives turnover: Options			United Kingdom	
	Equity market development				
.09	Equity market turnover	8	138.0	Pakistan	374.3
.05	Stock market capitalization to GDP	14	111.1	Hong Kong SAR	713.3
	Bond market development				
.10	Private-sector bonds to GDP	15	24.9	United States	114.0
.11	Public-sector bonds to GDP			France	
.12	International bonds to GDP	10■	46.6	Netherlands	121.7
	7th pillar: Size, depth, and access				
	Size and depth				
.01	M2 to GDP			Hong Kong SAR	
.02	Private debt to GDP			Netherlands	
.03	Public debt to GDP  Bank deposits to GDP			Austria Hong Kong SAR	
.04 .05	Stock market capitalization to GDP			Hong Kong SAR Hong Kong SAR	
.05	Relative value-added of financial institutions to			Panama	
.00	Private credit to GDP			United States	
.08	Stock market value traded to GDP			Saudi Arabia	
	Access				
09	Financial market sophistication	12	6.0	Switzerland	6.7
10	Venture capital availability			United States	
.11	Ease of access to credit			Slovak Republic	
.12	Ease of access to local equity market			Sweden	
.13	Bank branches			Spain	
.14	Ease of access to loans	2■	5.4	Norway	5.5

### **Key indicators**

Population (millions), 2007	61.7
GDP (US\$ billions), 2007	2,560.3
GDP (current prices, US\$) per capita, 2007	.41,511.2
GDP (PPP) as share (%) of world total, 2007	3.17
Average annual rate of real GDP growth (%), 2003-0	71.83

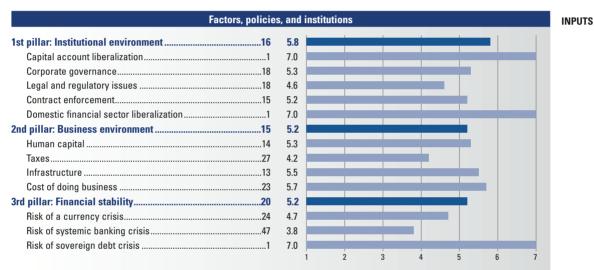
### Financial assets by major type, 2006

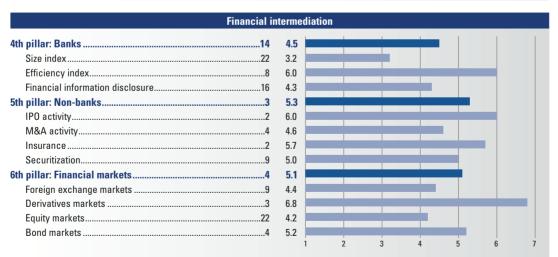


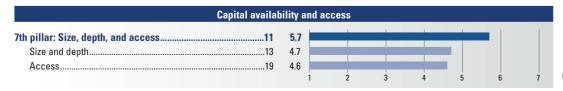
Total/GDP: 350.7%

## **Financial Development Index 2008**











## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52		SCORE	BEST PERFORMER	SCOR	
	1st pillar: Institutional environment						
	Capital account liberalization						
.01	Capital account liberalization	1		2.6	Multiple (15)	2.6	
	Corporate governance						
1.02	Extent of incentive-based compensation	1		5.7	France	5.7	
1.03	Efficacy of corporate boards	18		5.4	Sweden	6.	
1.04	Reliance on professional management	16		5.6	Sweden	6.4	
1.05	Willingness to delegate	21		4.6	Sweden	6.3	
1.06	Strength of auditing and accounting standards	11		6.1	Germany	6.3	
1.07	Shareholder rights index	17		3.0	Multiple (8)		
1.08	Ethical behavior of firms				Finland		
1.09	Protection of minority shareholders' interests	24		5.1	Sweden	6.4	
	Legal and regulatory issues						
1.10	Burden of government regulation				Singapore		
1.11	Centralization of economic policymaking				Switzerland	5.9	
1.12	Regulation of security exchanges	9		5.9	Sweden		
1.13	Property rights				Germany		
1.14	Intellectual property protection				Germany		
1.15	Diversion of public funds				Finland		
1.16	Public trust of politicians	19		3.4	Singapore	6.4	
	Contract enforcement						
1.17	Effectiveness of law-making bodies	17		4.4	Singapore	6.	
1.18	Judicial independence	19		5.3	Germany	6.!	
1.19	Irregular payments in judicial decisions	15		6.1	Finland	6.8	
1.20	Number of procedures to enforce a contract	10		30.0	Ireland	20.0	
1.21	Time to enforce a contract	12		331.0	Singapore	120.0	
1.22	Cost of enforcing contracts	19		17.4	China	8.8	
1.23	Strength of investor protection	30		5.3	Singapore		
1.24	Time to close a business	20		1.9	Ireland	0.4	
	Domestic financial sector liberalization						
1.25	Domestic financial sector liberalization	1		1.0	Multiple (34)	1.0	
	2nd pillar: Business environment						
	2nd pillar: Business environment						
	•						
2.01	2nd pillar: Business environment  Human capital  Quality of management schools	1		6.0	France	6.0	
	Human capital				France		
2.02	Human capital Quality of management schools	6		5.7		6.3	
2.02 2.03	Human capital Quality of management schools Quality of math and science education	6		5.7 5.0	Singapore	6.3	
2.02 2.03 2.04	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training.	6 19 11		5.7 5.0 5.6	Singapore	6.3 5.9	
2.02 2.03 2.04 2.05	Human capital  Quality of management schools	6 19 11 35		5.7 5.0 5.6 4.2	Singapore Switzerland Switzerland		
2.02 2.03 2.04 2.05	Human capital  Quality of math and science education	6 19 11 35		5.7 5.0 5.6 4.2	Singapore		
2.01 2.02 2.03 2.04 2.05 2.06	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor  Tertiary enrollment	6 19 11 35 22		5.7 5.0 5.6 4.2 56.2	Singapore	6.3 6.1 5.8 93.2	
2.02 2.03 2.04 2.05 2.06	Human capital  Quality of management schools	6		5.7 5.0 5.6 4.2 56.2	Singapore		
2.02 2.03 2.04 2.05 2.06 2.07 2.08	Human capital  Quality of management schools	6		5.7 5.0 5.6 4.2 56.2	Singapore		
2.02 2.03 2.04 2.05 2.06 2.07 2.08	Human capital  Quality of math and science education	6		5.7 5.0 5.6 4.2 56.2	Singapore		
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools	6		5.7 5.0 5.6 4.2 56.2 6.2 4.5 33.8	Singapore		
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools			5.7 5.0 5.6 4.2 56.2 4.5 33.8	Singapore	6.5 	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools			5.7 5.0 5.6 4.2 56.2 4.5 33.8	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland	6.5 6.0 5.8 93.2 6.8 6.8 6.8 6.6	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools			5.7 5.0 5.6 4.2 56.2 4.5 33.8 6.5 6.8 49.6	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland Netherlands	6.5 5.9 6.0 93.2 6.6 6.6 6.6 85.7	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09 2.10 2.11 2.12	Human capital  Quality of management schools				Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland	6.5 5.9 6.0 93.2 6.6 6.6 6.6 85.7 31.8	

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
.16	Cost of starting a business	9	1 1	Ireland	0.3
2.17	Cost of dealing with licenses			United Arab Emirates	
2.18	Cost of registering property			Saudi Arabia	
2.19	Cost to export			China	
2.20	Cost to import			Singapore	
2.21	Cost of enforcing contracts			China	
2.22	Cost of closing a business	18■	9.0	Multiple (4)	
	3rd pillar: Financial stability				
2 01	Risk of a currency crisis	25 =	0.0	Argentine	0.5
3.01	Change in real effective exchange rate External vulnerability indicator			Argentina Russian Federation	
3.02	Current account balance to GDP			Kuwait	
3.03	Dollarization vulnerability indicator			Multiple (2)	
.05A	External debt to GDP (developing economies)			Saudi Arabia	
.05B	Net int'l investment position to GDP (adv. economies)			Switzerland	
				OVVIIZONANA	
0.00	Risk of systemic banking crisis	00 =	0.0	te de	10.
3.06	Activity restrictions for banks			Indonesia	
3.07	Entry restrictions for banks			Multiple (24)	
3.08	Capital restrictions for banks			Multiple (3)	
3.09	Official supervisory power			Multiple (3)	
3.10	Private monitoring of the banking industry Frequency of banking crises			South Africa Multiple (11)	
3.11	Stability Index			India	
3.13	Cumulative real estate appreciation			Russian Federation	
	Risk of sovereign debt crisis				
3.14	Local currency sovereign rating	<b>1■</b>	20.0	Multiple (15)	20.0
3.15	Foreign currency sovereign rating			Multiple (15)	
	4th pillar: Banks				
	Size index				
4.01	Size index	22■	6.3	Hong Kong SAR	10.8
	Efficiency index				
4.02	Efficiency index	Q <b>=</b>	5.7	United Arab Emirates	. 69
4.02	Public ownership of banks			Multiple (11)	
٠.٥٥				ινιαιαριο (11/	
	Financial information disclosure	_			
4.04	Public credit registry coverage			Belgium	
4.05	Private credit bureau coverage			Multiple (7)	
4.06	Credit Information Index	31	4.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	1■	31.0	France	31.0
5.02	IPO proceeds amount	2	3.7	Kazakhstan	4.4
5.03	Share of world IPOs	7 <b>=</b>	5.0	Japan	14.2
	M&A activity				
5.04	M&A market share	4■	4.4	United States	44.4
5.05	M&A transaction value to GDP			United Kingdom	
				J	

## Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

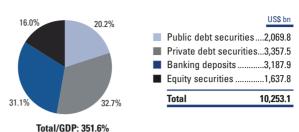
	INDICATOR	RANK/52		SCORE	BEST PERFORMER SCOP
	5th pillar: Non-banks (cont'd.)				
	Insurance				
)7	Insurance premiums, direct	4		.251,163.8	United States1,170,100
8(	Insurance density	4		4,075.4	United Kingdom6,466
9	Real growth of direct insurance premiums	16		10.6	India52
0	Insurance penetration	5		11.0	United Kingdom16
1	Relative value-added of insurance	23		1.0	Switzerland4
	Securitization				
2	Securitization to GDP	15		2 =	United States22
3	Share of total number of securitization deals				United States64.
J	Share of total number of secunization deals			1.0	Officed States04.
	6th pillar: Financial markets				
	Foreign exchange markets				
11	Spot foreign exchange turnover	9		2.0	United Kingdom26
12	Outright forward foreign exchange turnover				United Kingdom29
)3	Foreign exchange swap turnover				United Kingdom42.
Ŭ					5ga6
	Derivatives markets				
14	Interest rate derivatives turnover:		_	- 0	
_	Forward rate agreements				United Kingdom45
15	Interest rate derivatives turnover: Swaps				United Kingdom46
16	Interest rate derivatives turnover: Options				United States42
7	Foreign exchange derivatives turnover: Currency swa				United Kingdom47
8	Foreign exchange derivatives turnover: Options	7		2.2	United Kingdom42
	Equity market development				
9	Equity market turnover	20		81.9	Pakistan374
)5	Stock market capitalization to GDP	19		91.8	Hong Kong SAR713
	Bond market development				
0	Private-sector bonds to GDP	8		41 5	United States114
1	Public-sector bonds to GDP				France7
2	International bonds to GDP				Netherlands121
	7th pillar: Size, depth, and access				
1	Size and depth M2 to GDP	n/o		2/0	Hong Kong SAR252
)2	Private debt to GDP	, .		, -	Netherlands216
	Public debt to GDP				Austria7
13					
14	Bank deposits to GDP				Hong Kong SAR250
15	Stock market capitalization to GDP				Hong Kong SAR713
6	Relative value-added of financial institutions to GDP				Panama9
17	Private credit to GDP				United States193
8	Stock market value traded to GDP	20		69.4	Saudi Arabia356
	Access				
9	Financial market sophistication	14		6.0	Switzerland6
0	Venture capital availability	22		4.1	United States5
1	Ease of access to credit	43		4.6	Slovak Republic5
2	Ease of access to local equity market	21		5.5	Sweden6
3	Bank branches	7		43.2	Spain95.
	Ease of access to loans	31		3.8	Norway5
4					
4					
4					
4					

## Germany

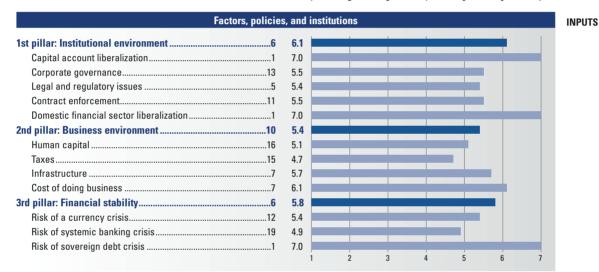
### **Key indicators**

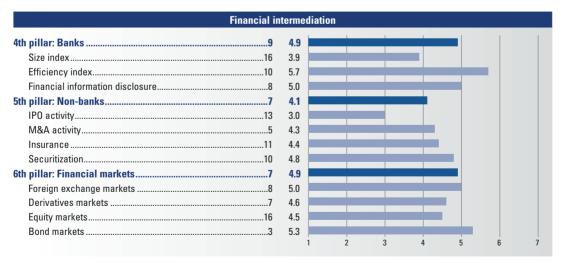
Population (millions), 2007	82.2
GDP (US\$ billions), 2007	3,322.1
GDP (current prices, US\$) per capita, 2007	40,415.4
GDP (PPP) as share (%) of world total, 2007	4.34
Average annual rate of real GDP growth (%), 2003-07	1.39

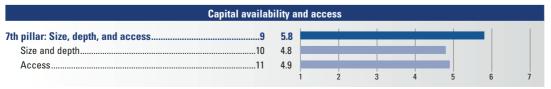
## Financial assets by major type, 2006



## **Financial Development Index 2008**









# Germany

## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment				
	Capital account liberalization				
1.01	Capital account liberalization	1	<b>I</b> 2.3	Multiple (15)	2.6
	Corporate governance				
1.02	Extent of incentive-based compensation	4	<b>I</b> 5.6	France	5.7
1.03	Efficacy of corporate boards			Sweden	6.
1.04	Reliance on professional management	2	<b>I</b> 6.2	Sweden	6.4
1.05	Willingness to delegate	7	5.4	Sweden	6.3
1.06	Strength of auditing and accounting standards	1	<b>I</b> 6.3	Germany	6.3
1.07	Shareholder rights index	33	I1.0	Multiple (8)	5.0
1.08	Ethical behavior of firms			Finland	
1.09	Protection of minority shareholders' interests	2	<b>I</b> 6.1	Sweden	6.4
	Legal and regulatory issues				
1.10	Burden of government regulation	29	I3.1	Singapore	5.3
1.11	Centralization of economic policymaking	2	<b>.</b> 5.3	Switzerland	5.9
1.12	Regulation of security exchanges	7	<b>I</b> 6.0	Sweden	6.3
1.13	Property rights	1	<b>I</b> 6.7	Germany	6.
1.14	Intellectual property protection	1	6.5	Germany	
1.15	Diversion of public funds	10	<b>.</b> 5.9	Finland	6.!
1.16	Public trust of politicians	12	l4.5	Singapore	6.4
	Contract enforcement				
1.17	Effectiveness of law-making bodies	10	4.9	Singapore	6.
1.18	Judicial independence	1	<b>I</b> 6.5	Germany	6.!
1.19	Irregular payments in judicial decisions	3	<b>I</b> 6.7	Finland	6.8
1.20	Number of procedures to enforce a contract	21	l33.0	Ireland	20.0
1.21	Time to enforce a contract	15	l394.0	Singapore	120.0
1.22	Cost of enforcing contracts	7	<b>I</b> 11.8	China	8.8
1.23	Strength of investor protection	34	l5.0	Singapore	
1.24	Time to close a business	14	l1.2	Ireland	0.4
	Domestic financial sector liberalization				
	Domestic financial sector liberalization	1	<b>I</b> 1.0	Multiple (34)	1.0
1.25					
1.25	2nd nillow Duningge anniversement				
1.25	2nd pillar: Business environment				
	Human capital			_	
2.01	Human capital Quality of management schools			France	
2.01 2.02	Human capital  Quality of management schools  Quality of math and science education	22	l4.8	Singapore	6.3
2.01 2.02 2.03	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training	22 8	l5.5	Singapore	6.3
2.01 2.02 2.03 2.04	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services	22 8	L4.8 L5.5 L6.0	Singapore Switzerland Switzerland	6.3 5.9
2.01 2.02 2.03 2.04 2.05	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor	22 8 3 16	4.8  5.5  6.0	Singapore	
2.01 2.02 2.03 2.04 2.05	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor  Tertiary enrollment	22 8 3 16	4.8  5.5  6.0	Singapore Switzerland Switzerland	6.3 5.9 6.0
2.01 2.02 2.03 2.04 2.05 2.06	Human capital  Quality of management schools	22		Singapore	6.3 6.1 5.8 93.2
2.01 2.02 2.03 2.04 2.05 2.06	Human capital  Quality of management schools	22		Singapore	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08	Human capital  Quality of management schools	22		Singapore	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08	Human capital  Quality of management schools	22		Singapore	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools	22		Singapore	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools			Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland	6.5 
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools			Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland	6.3 5.9 6.6 93.1 6.6 6.6 6.6
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09 2.10 2.11 2.12	Human capital  Quality of management schools			Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland Netherlands	6.3 5.4 6.6 6.6 6.6 85.1 66.1 66.1 85.1 66.1 66.1 85.1 85.1 85.1 66.1 66.1 66.1 85.1 85.1 85.1 85.1 85.1 85.1 85.1 85
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools			Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland	6.3 6.4 6.5 93.1 6.6 6.6 6.6 85.1 31.6

# Germany

Financial Development Index in detail (cont'd.)	■ Development <b>Advantage</b>	■ Development <b>Disadvantage</b>

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of starting a business	20■	5.7	Ireland	0.3
2.17	Cost of dealing with licenses	18	63.1	United Arab Emirates	1.5
2.18	Cost of registering property	36	5.2	Saudi Arabia	0.0
2.19	Cost to export	18	740.0	China	390.0
2.20	Cost to import	16■	765.0	Singapore	367.0
2.21	Cost of enforcing contracts	7■	11.8	China	8.8
2.22	Cost of closing a business	16■	8.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate			Argentina	
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP			Kuwait	
3.04	Dollarization vulnerability indicator			Multiple (2)	
3.05A	External debt to GDP (developing economies)			Saudi Arabia	
3.05B	Net int'l investment position to GDP (adv. economies	s)5 <b>=</b>	25.5	Switzerland	121.3
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks	29	7.0	Indonesia	16.0
3.07	Entry restrictions for banks	33	6.0	Multiple (24)	8.0
3.08	Capital restrictions for banks	8■	7.0	Multiple (3)	9.0
3.09	Official supervisory power	27	9.0	Multiple (3)	14.0
3.10	Private monitoring of the banking industry	10■	7.0	South Africa	9.0
3.11	Frequency of banking crises	12■	1.0	Multiple (11)	0.0
3.12	Stability Index	22	5.1	India	7.2
3.13	Cumulative real estate appreciation	5	16	Russian Federation	68.4
3.13			4.0	Hussiall Lederation	
3.13	Risk of sovereign debt crisis		4.0	Hussiali i ederation	
	Risk of sovereign debt crisis				20.0
3.14 3.15	Risk of sovereign debt crisis  Local currency sovereign rating  Foreign currency sovereign rating	1■	20.0	Multiple (15)	
3.14	Local currency sovereign rating	1■	20.0	Multiple (15)	
3.14	Local currency sovereign rating  Foreign currency sovereign rating	1■	20.0	Multiple (15)	
3.14 3.15	Local currency sovereign rating Foreign currency sovereign rating	1 <b>=</b> 1 <b>=</b>	20.0 20.0	Multiple (15) Multiple (15)	20.0
3.14	Local currency sovereign rating  Foreign currency sovereign rating	1 <b>=</b> 1 <b>=</b>	20.0 20.0	Multiple (15)	20.0
3.14 3.15	Local currency sovereign rating Foreign currency sovereign rating	1 <b>=</b> 1 <b>=</b>	20.0 20.0	Multiple (15) Multiple (15)	20.0
3.14 3.15	Local currency sovereign rating  Foreign currency sovereign rating	1	20.0 20.0	Multiple (15) Multiple (15)	10.8
3.14 3.15 4.01	Local currency sovereign rating	1	20.0 20.0	Multiple (15) Multiple (15) Hong Kong SAR	10.8
3.14 3.15 4.01 4.02	Local currency sovereign rating	1	20.0 20.0	Multiple (15) Multiple (15) Hong Kong SAR	10.8
3.14 3.15 4.01 4.02 4.03	Local currency sovereign rating	1		Multiple (15)  Multiple (15)  Hong Kong SAR  United Arab Emirates Multiple (11)	10.8
3.14 3.15 4.01 4.02 4.03 4.04	Local currency sovereign rating	1		Multiple (15)	
3.14 3.15 4.01 4.02 4.03 4.04 4.05	Local currency sovereign rating	1	20.07.15.840.00.798.1	Multiple (15)	
3.14 3.15 4.01 4.02 4.03 4.04	Local currency sovereign rating	1	20.07.15.840.00.798.1	Multiple (15)	
3.14 3.15 4.01 4.02 4.03 4.04 4.05	Local currency sovereign rating	1	20.07.15.840.00.798.1	Multiple (15)	
3.14 3.15 4.01 4.02 4.03 4.04 4.05	Local currency sovereign rating	1	20.07.15.840.00.798.1	Multiple (15)	
3.14 3.15 4.01 4.02 4.03 4.04 4.05 4.06	Local currency sovereign rating	1	20.0	Multiple (15)	
3.14 3.15 4.01 4.02 4.03 4.04 4.05 4.06	Local currency sovereign rating	1	20.0	Multiple (15)	
3.14 3.15 4.01 4.02 4.03 4.04 4.05 4.06	Local currency sovereign rating	1	20.0	Multiple (15)	
3.14 3.15 4.01 4.02 4.03 4.04 4.05 4.06 5.01 5.02 5.03	Local currency sovereign rating	1	20.0	Multiple (15)	
3.14 3.15 4.01 4.02 4.03 4.04 4.05 4.06	Local currency sovereign rating			Multiple (15)	
3.14 3.15 4.01 4.02 4.03 4.04 4.05 4.06	Local currency sovereign rating			Multiple (15)	

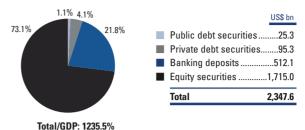
and	cial Development Index in detail (con	nt'd.)	■ Development	t Advantage Development Disadvantag
	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCORE
	5th pillar: Non-banks (cont'd.)			
	Insurance			
07	Insurance premiums, direct	5	204,543.9	United States1,170,100.6
80	Insurance density			United Kingdom6,466.7
09	Real growth of direct insurance premiums			India52.6
10	Insurance penetration			United Kingdom16.5
11	Relative value-added of insurance	29■.	0.9	Switzerland4.8
	Securitization			
12	Securitization to GDP			United States22.9
3	Share of total number of securitization deals	8■.	1.7	United States64.9
	6th pillar: Financial markets			
	Foreign exchange markets			
01	Spot foreign exchange turnover			United Kingdom26.6
02	Outright forward foreign exchange turnover			United Kingdom29.9
)3	Foreign exchange swap turnover	9■.	2.4	United Kingdom42.0
	Derivatives markets			
)4	Interest rate derivatives turnover:			
	Forward rate agreements			United Kingdom45.6
)5	Interest rate derivatives turnover: Swaps			United Kingdom46.0
16 17	Interest rate derivatives turnover: Options Foreign exchange derivatives turnover: Currency			United States42.6 United Kingdom47.6
8	Foreign exchange derivatives turnover: Options			United Kingdom47.6
, ,				Office Kingdom42.0
)9	Equity market development  Equity market turnover	E -	1447	Delictor 274.2
)5	Stock market capitalization to GDP			Pakistan374.3 Hong Kong SAR713.3
,,	•			Tiong Kong DAIT710.0
10	Bond market development  Private-sector bonds to GDP	12	24.5	United States114.0
11	Public-sector bonds to GDP			France
12	International bonds to GDP			Netherlands121.7
	7th pillar: Size, depth, and access Size and depth			
01	M2 to GDP	, ,	* *	Hong Kong SAR252.3
)2	Private debt to GDP			Netherlands216.2
)3	Public debt to GDP			Austria
)4 >=	Bank deposits to GDP			Hong Kong SAR250.4
)5 )6	Stock market capitalization to GDPRelative value-added of financial institutions to GI			Hong Kong SAR713.3 Panama9.2
)6 )7	Private credit to GDP			United States193.7
)/	Stock market value traded to GDP			Saudi Arabia356.2
_				
9	Access Financial market sophistication	10 =	6.2	Switzerland6.7
9	Venture capital availability			United States5.3
1	Ease of access to credit			Slovak Republic5.9
2	Ease of access to local equity market			Sweden6.2
3	Bank branches			Spain95.9
14	Ease of access to loans	16■.	4.4	Norway5.5

## Hong Kong SAR

### **Key indicators**

## 

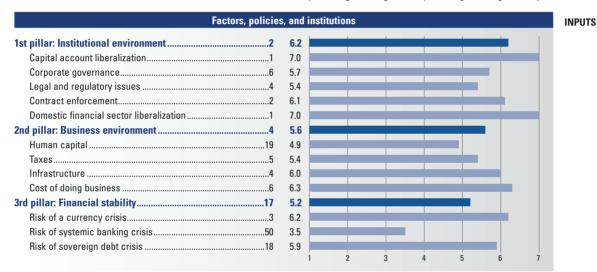
### Financial assets by major type, 2006

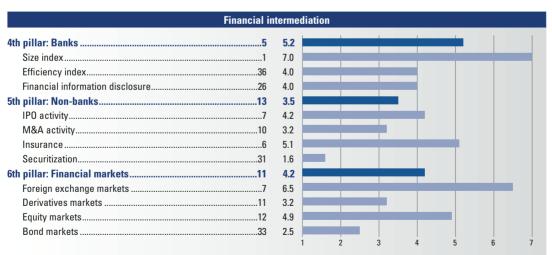


## **Financial Development Index 2008**

2008 Index Score (1–7 scale)

5.2 5.2









(Cont'd.)

# Hong Kong SAR

## **Financial Development Index in detail**

		RANK/52		SCORE	BEST PERFORMER	SCORI
	1st pillar: Institutional environment					
	Capital account liberalization					
01	Capital account liberalization	1		2.6	Multiple (15)	2.6
	Corporate governance					
02	Extent of incentive-based compensation	11		5.2	France	5.7
03	Efficacy of corporate boards	20		5.3	Sweden	6.
04	Reliance on professional management	23		5.4	Sweden	6.4
05	Willingness to delegate	13		5.1	Sweden	6.3
06	Strength of auditing and accounting standards	9		6.2	Germany	6.3
07	Shareholder rights index				Multiple (8)	
80	Ethical behavior of firms				Finland	
09	Protection of minority shareholders' interests	12		5.6	Sweden	6.4
	Legal and regulatory issues					
10	Burden of government regulation				Singapore	5.3
11	Centralization of economic policymaking	14		4.1	Switzerland	5.9
12	Regulation of security exchanges	3		6.2	Sweden	6.3
13	Property rights	11		6.3	Germany	6.
14	Intellectual property protection	16		5.5	Germany	6.!
15	Diversion of public funds	9		5.9	Finland	
16	Public trust of politicians	7		5.2	Singapore	6.4
	Contract enforcement					
17	Effectiveness of law-making bodies	22		4.2	Singapore	6.
18	Judicial independence	13		5.9	Germany	6.!
19	Irregular payments in judicial decisions	11		6.3	Finland	6.8
20	Number of procedures to enforce a contract	3		24.0	Ireland	20.0
21	Time to enforce a contract	2		211.0	Singapore	120.0
22	Cost of enforcing contracts	13		14.5	China	8.8
23	Strength of investor protection	2		9.0	Singapore	9.
24	Time to close a business	11		1.1	Ireland	0.4
	Domestic financial sector liberalization					
25	Domestic financial sector liberalization	1		1.0	Multiple (34)	1.0
	2nd pillar: Business environment					
	Human capital					
01	Quality of management schools	16		5.4	France	6.0
02	Quality of math and science education				Singapore	
03	Extent of staff training				Switzerland	
04	Local availability of research and training services			5.1	Switzerland	
05	Brain drain and ease of hiring foreign labor				Kuwait	
06	Tertiary enrollment				Finland	
	Taxes					
07	Irregular payments in tax collection	12		6.4	Sweden	6
U/	Distortive effect on competition of taxes and subsidies				Singapore	
no	Corporate tax rate				Multiple (4)	
	Corporate tax rate				ividitipio ( i/	
			_	0.0	Considerate and	0.
09	Infrastructure	_		'nЭ	Switzerland	
09	Quality of overall infrastructure				Considerated and a second	
09 10 11	Quality of overall infrastructure  Quality of telephone/fax infrastructure	7		6.8	Switzerland	
09 10 11 12	Quality of overall infrastructure	7 13		6.8 53.0	Netherlands	85.
09 10 11 12 13	Quality of overall infrastructure	7 13 7		6.8 53.0 24.5	Netherlands	85.
08 09 10 11 12 13 14 15	Quality of overall infrastructure	7 13 7 8		6.8 53.0 24.5 53.9	Netherlands	

# Hong Kong SAR

Financ	cial Development Index in detail (cont	t'd.)	Development	Advantage Developm	ent <b>Disadvanta</b>
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of starting a business	13	l3.1	Ireland	0.3
2.17	Cost of dealing with licenses	11	l21.3	United Arab Emirate	s1.5
2.18	Cost of registering property	34	l5.0	Saudi Arabia	0.0
2.19	Cost to export	8	l525.0	China	390.0
2.20	Cost to import	7	l525.0	Singapore	367.0
2.21	Cost of enforcing contracts	13	l14.5	China	8.8
2.22	Cost of closing a business	18	l9.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	5	I4.1	Argentina	8.5
3.02	External vulnerability indicator			Russian Federation.	
3.03	Current account balance to GDP	12	l9.3	Kuwait	46.1
3.04	Dollarization vulnerability indicator	1	ln/a	Multiple (2)	0.0
3.05A	External debt to GDP (developing economies)	n/a	n/a	Saudi Arabia	9.6
8.05B	Net int'l investment position to GDP (adv. econom	nies)n/a	n/a	Switzerland	121.3
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks	n/a	n/a	Indonesia	
3.07	Entry restrictions for banks	n/a	n/a	Multiple (24)	8.0
3.08	Capital restrictions for banks	n/a	n/a	Multiple (3)	9.0
3.09	Official supervisory power	n/a	n/a	Multiple (3)	14.0
3.10	Private monitoring of the banking industry	n/a	n/a	South Africa	9.0
3.11	Frequency of banking crises	50	l3.0	Multiple (11)	0.0
3.12	Stability Index	11	l5.4	India	7.2
3.13	Cumulative real estate appreciation	25	138.0	Russian Federation.	68.4
	Risk of sovereign debt crisis				
3.14	Local currency sovereign rating			Multiple (15)	
3.15	Foreign currency sovereign rating	18	I17.5	Multiple (15)	20.0
	4th pillar: Banks				
	Size index				
4.01	Size index	1	I10.8	Hong Kong SAR	10.8
	Efficiency index				
4.02	Efficiency index	35	l4.7	United Arab Emirate	s6.8
4.03	Public ownership of banks			Multiple (11)	0.0
	•				
4.04	Financial information disclosure	04	0.0	D 1 :	F7.0
4.04	Public credit registry coverage			Belgium	
4.05	Private credit bureau coverage  Credit Information Index			Multiple (7)	
4.06	Creat Information Index	15	5.0	Multiple (14)	0.0
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	10	I2.3	France	31.0
5.02	IPO proceeds amount	3	I3.3	Kazakhstan	4.4
5.03	Share of world IPOs			Japan	14.2
	M&A activity				
5.04	M&A market share	17	l0.7	United States	44.4
5.05	M&A transaction value to GDP			United Kingdom	
5.06	Share of total number of M&A deals			United States	
5.00	Share of total number of Mod deals	14	1	Officed States	

# Hong Kong SAR

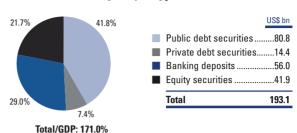
### Financial Development Index in detail (cont'd.)

	INDICATOR	RANK/52		SCORE	BEST PERFORMER SC	ORI
	5th pillar: Non-banks (cont'd.)					
	•					
07	Insurance	01	_	10.042.2	1 170 10	20.7
07	Insurance premiums, direct			•	United States1,170,10	
80	Insurance density				United Kingdom6,46	
09	Real growth of direct insurance premiums				India5	
10	Insurance penetration				United Kingdom1	
11	Relative value-added of insurance			4.0	Switzerland	.4.8
	Securitization					
12	Securitization to GDP				United States2	22.9
13	Share of total number of securitization deals	25		0.2	United States6	34.9
	6th pillar: Financial markets					
	Foreign exchange markets					
01	Spot foreign exchange turnover	7		3.0	United Kingdom2	
02	Outright forward foreign exchange turnover	7		3.5	United Kingdom2	29.9
03	Foreign exchange swap turnover	3		5.7	United Kingdom4	12.0
	Derivatives markets					
04	Interest rate derivatives turnover:					
•	Forward rate agreements	17		0.2	United Kingdom4	15.6
05	Interest rate derivatives turnover: Swaps				United Kingdom4	
06	Interest rate derivatives turnover: Options				United States4	
07	Foreign exchange derivatives turnover: Currency swa				United Kingdom4	
08	Foreign exchange derivatives turnover: Options				United Kingdom4	
	Equity market development					
09	Equity market turnover	29		48.9	Pakistan37	74.3
05	Stock market capitalization to GDP	1		713.3	Hong Kong SAR71	13.3
	Bond market development					
10	Private-sector bonds to GDP	21		17.9	United States11	14.0
11	Public-sector bonds to GDP	38		1.8	France	.7.0
12	International bonds to GDP	17		32.2	Netherlands12	21.7
	7th pillar: Size, depth, and access					
	Size and depth					
01	M2 to GDP				Hong Kong SAR25	52.3
02	Private debt to GDP	19		50.2	Netherlands21	16.2
03	Public debt to GDP	48		1.9	Austria	.7.0
04	Bank deposits to GDP	1		250.4	Hong Kong SAR25	50.4
05	Stock market capitalization to GDP	1		713.3	Hong Kong SAR71	13.3
06	Relative value-added of financial institutions to GDP.	3		8.6	Panama	.9.
07	Private credit to GDP	8		138.7	United States19	)3.
80	Stock market value traded to GDP	2		258.8	Saudi Arabia35	56.2
	Access					
09	Financial market sophistication	3		6.5	Switzerland	.6.
10	Venture capital availability	9		4.9	United States	.5.3
11	Ease of access to credit	8		5.4	Slovak Republic	.5.9
12	Ease of access to local equity market	3		6.0	Sweden	.6.2
13	Bank branches	n/a		n/a	Spain9	€.5
14	Ease of access to loans	10		4.9	Norway	.5.

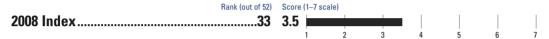
## **Key indicators**

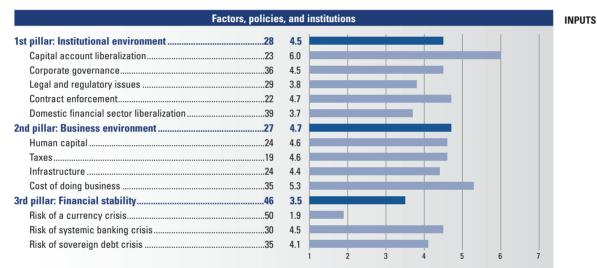
Population (millions), 2007	10.1
GDP (US\$ billions), 2007	138.4
GDP (current prices, US\$) per capita, 2007	.13,762.2
GDP (PPP) as share (%) of world total, 2007	0.30
Average annual rate of real GDP growth (%), 2003-07	73.66

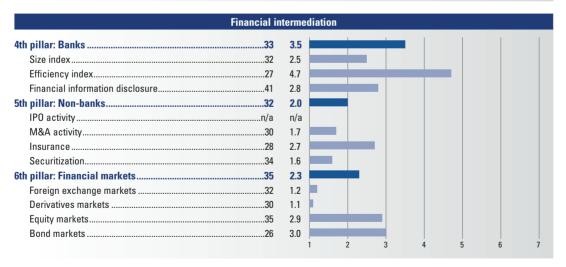
### Financial assets by major type, 2006



## **Financial Development Index 2008**











## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52		SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment					
	Capital account liberalization					
1.01	Capital account liberalization	23		2.3	Multiple (15)	2.6
	Corporate governance					
1.02	Extent of incentive-based compensation	31		4.6	France	5.7
1.03	Efficacy of corporate boards	36		4.7	Sweden	6.
1.04	Reliance on professional management	36		4.7	Sweden	6.4
1.05	Willingness to delegate	48		3.5	Sweden	6.3
1.06	Strength of auditing and accounting standards	29		5.1	Germany	6.3
1.07	Shareholder rights index	n/a		n/a	Multiple (8)	5.0
1.08	Ethical behavior of firms				Finland	
1.09	Protection of minority shareholders' interests	29		4.7	Sweden	6.4
	Legal and regulatory issues					
1.10	Burden of government regulation	41		2.6	Singapore	5.3
1.11	Centralization of economic policymaking	34		3.0	Switzerland	5.9
1.12	Regulation of security exchanges	33		5.0	Sweden	6.3
1.13	Property rights	24		5.4	Germany	
1.14	Intellectual property protection				Germany	
1.15	Diversion of public funds				Finland	
1.16	Public trust of politicians	35		2.3	Singapore	6.4
	Contract enforcement					
1.17	Effectiveness of law-making bodies	38		3.1	Singapore	6.
1.18	Judicial independence	27		4.4	Germany	6.5
1.19	Irregular payments in judicial decisions	26		5.0	Finland	6.8
1.20	Number of procedures to enforce a contract	21		33.0	Ireland	20.0
1.21	Time to enforce a contract	13		335.0	Singapore	120.0
1.22	Cost of enforcing contracts	9		13.0	China	8.8
1.23	Strength of investor protection	44		4.3	Singapore	9.3
1.24	Time to close a business	21		2.0	Ireland	0.4
	Domestic financial sector liberalization					
1.25	Domestic financial sector liberalization	39		2.0	Multiple (34)	1.0
	2nd pillar: Business environment					
	Human capital					
2.01	Quality of management schools	35		4.3	France	6.0
2.02	Quality of math and science education	14		5.1	Singapore	6.3
2.03	Extent of staff training				Switzerland	
2.04	Local availability of research and training services				Switzerland	
2.05	Brain drain and ease of hiring foreign labor				Kuwait	
2.06	Tertiary enrollment	9		68.6	Finland	93.2
	Taxes					
2.07	Irregular payments in tax collection	25		5.5	Sweden	6.8
2.08	Distortive effect on competition of taxes and subsidie	s46		3.6	Singapore	5.7
2.09	Corporate tax rate	6	■	16.0	Multiple (4)	0.0
	Infrastructure					
2.10	Quality of overall infrastructure	30		4.2	Switzerland	6.7
2.11	Quality of telephone/fax infrastructure				Switzerland	6.9
2.12	Internet users				Netherlands	
	Broadband Internet subscribers				Netherlands	
2.13						
2.13 2.14	Telephone lines	22		33.4	Switzerland	

## Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of starting a business	35■	17.7	Ireland	0.3
2.17	Cost of dealing with licenses			United Arab Emirates	
2.18	Cost of registering property	49	11.0	Saudi Arabia	0.0
2.19	Cost to export	31	975.0	China	390.0
2.20	Cost to import	26■	975.0	Singapore	367.0
2.21	Cost of enforcing contracts	9	13.0	China	8.8
2.22	Cost of closing a business	26■	15.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	27	1.6	Argentina	8.5
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP			Kuwait	
3.04	Dollarization vulnerability indicator			Multiple (2)	
3.05A	External debt to GDP (developing economies)			Saudi Arabia	
3.05B	Net int'l investment position to GDP (adv. economie			Switzerland	
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks	8	11.0	Indonesia	16.0
3.07	Entry restrictions for banks			Multiple (24)	
3.08	Capital restrictions for banks			Multiple (3)	
3.09	Official supervisory power			Multiple (3)	
3.10	Private monitoring of the banking industry			South Africa	
3.11	Frequency of banking crises	12	1.0	Multiple (11)	0.0
3.12	Stability Index	30	4.6	India	7.2
3.13	Cumulative real estate appreciation	22■	35.9	Russian Federation	68.4
	Risk of sovereign debt crisis				
3.14	Local currency sovereign rating	36■	13.2	Multiple (15)	20.0
3.15	Foreign currency sovereign rating	31	13.2	Multiple (15)	20.0
	4th pillar: Banks				
	Size index				
4.01	Size index	32	5.4	Hong Kong SAR	10.8
	F			The state of the s	
4.00	Efficiency index	00 =	F 0		0.0
4.02	Efficiency index			United Arab Emirates	
4.03	Public ownership of banks	·····	0.0	Multiple (11)	0.0
	Financial information disclosure				
4.04	Public credit registry coverage			Belgium	
4.05	Private credit bureau coverage			Multiple (7)	
4.06	Credit Information Index	15■	5.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	n/a	n/a	France	31.0
5.02	IPO proceeds amount	n/a	n/a	Kazakhstan	4.4
5.03	Share of world IPOs	n/a	n/a	Japan	14.2
	M&A activity				
5.04	M&A market share			United States	
5.05	M&A transaction value to GDP			United Kingdom	
5.06	Share of total number of M&A deals	34■	0.3	United States	33.2

## Financial Development Index in detail (cont'd.)

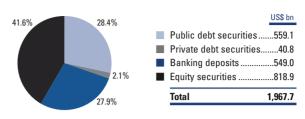
		RANK/52	SCORE	BEST PERFORMER SCOR
	5th pillar: Non-banks (cont'd.)			
	Insurance			
07	Insurance premiums, direct	37	 3,789.0	United States1,170,100.0
38	Insurance density	25	 376.2	United Kingdom6,466.
9	Real growth of direct insurance premiums	8	 14.7	India52.6
10	Insurance penetration	29	 3.4	United Kingdom16.
11	Relative value-added of insurance	28	 0.9	Switzerland4.
	Securitization			
12	Securitization to GDP	27	 1.9	United States22.9
13	Share of total number of securitization deals	39	 0.1	United States64.9
	6th pillar: Financial markets			
	Foreign exchange markets			
01	Spot foreign exchange turnover	29	0.2	United Kingdom26.
02	Outright forward foreign exchange turnover			United Kingdom29.9
03	Foreign exchange swap turnover			United Kingdom42.0
,,			 	12
0.4	Derivatives markets			
)4	Interest rate derivatives turnover:	10	0.2	United Kingdom
)E	Forward rate agreements			United Kingdom45.
)5 )6	Interest rate derivatives turnover: Swaps			United Kingdom46. United States42.
)6	Interest rate derivatives turnover: Options			
)7 )8	Foreign exchange derivatives turnover: Currency swap Foreign exchange derivatives turnover: Options			United Kingdom47.
50		24	 	United Kingdom42.
	Equity market development			
09	Equity market turnover			Pakistan374.
)5	Stock market capitalization to GDP	40	 31.7	Hong Kong SAR713.
	Bond market development			
10	Private-sector bonds to GDP	28	 5.0	United States114.
11	Public-sector bonds to GDP	9	 5.6	France7.
12	International bonds to GDP	25	 15.8	Netherlands121.
	7th pillar: Size, depth, and access			
	Size and depth			
01	M2 to GDP	26	 48.0	Hong Kong SAR252.
02	Private debt to GDP	31	 12.7	Netherlands216.
03	Public debt to GDP	6	 6.8	Austria7.
04	Bank deposits to GDP	37	 42.3	Hong Kong SAR250.
)5	Stock market capitalization to GDP	40	 31.7	Hong Kong SAR713.
	Relative value-added of financial institutions to GDP			Panama9.
06	Private credit to GDP	30	 51.4	United States193.
		33	 27.6	Saudi Arabia356.
07	Stock market value traded to GDP			
07				
07 08	Access	32	4.6	Switzerland 6
07 08 09	Access Financial market sophistication			
07 08 09 10	Access Financial market sophistication Venture capital availability	34	 3.4	United States5.
07 08 09 10	Access Financial market sophistication Venture capital availability Ease of access to credit	34 41	 3.4 4.7	Switzerland
06 07 08 09 10 11 12	Access Financial market sophistication Venture capital availability Ease of access to credit. Ease of access to local equity market	34 41 45	 3.4 4.7 4.3	United States
07 08 09 10	Access Financial market sophistication Venture capital availability Ease of access to credit	34 41 45 12	 3.4 4.7 4.3 28.3	United States5. Slovak Republic5.

## India

### **Key indicators**

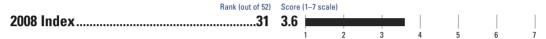
Population (millions), 20071,	,124.0
GDP (US\$ billions), 20071,	,098.9
GDP (current prices, US\$) per capita, 2007	977.7
GDP (PPP) as share (%) of world total, 2007	4.58
Average annual rate of real GDP growth (%), 2003–07	8.57

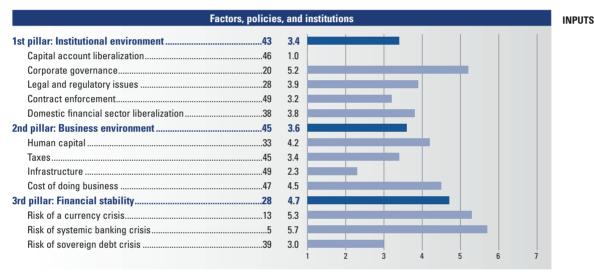
### Financial assets by major type, 2006

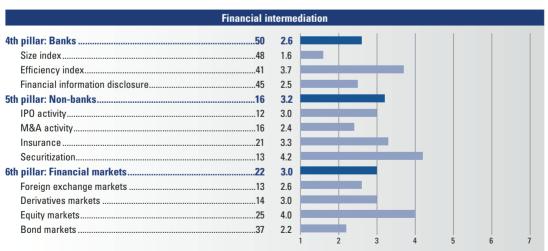


## Total/GDP: 224.3%

## **Financial Development Index 2008**











## **Financial Development Index in detail**

■ Development **Advantage** ■ Development **Disadvantage** 

		RANK/52		SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment					
	Capital account liberalization					
.01	Capital account liberalization	46		1.1	Multiple (15)	2.6
	Corporate governance					
.02	Extent of incentive-based compensation	32		4.5	France	5.7
.03	Efficacy of corporate boards	25		5.0	Sweden	6.1
.04	Reliance on professional management	21		5.4	Sweden	6.4
.05	Willingness to delegate	23		4.5	Sweden	6.3
.06	Strength of auditing and accounting standards	21		5.7	Germany	6.3
.07	Shareholder rights index	1		5.0	Multiple (8)	5.0
.08	Ethical behavior of firms	34		4.2	Finland	6.6
.09	Protection of minority shareholders' interests	21		5.3	Sweden	6.4
	Legal and regulatory issues					
.10	Burden of government regulation	32		2.9	Singapore	5.3
.11	Centralization of economic policymaking				Switzerland	
.12	Regulation of security exchanges				Sweden	
.13	Property rights				Germany	
.14	Intellectual property protection				Germany	
.15	Diversion of public funds				Finland	
.16	Public trust of politicians				Singapore	
					3-1	
17	Contract enforcement	15	_	4.5	C:	0.1
17	Effectiveness of law-making bodies				Singapore	
18	Judicial independence				Germany	
19	Irregular payments in judicial decisions				Finland	
.20	Number of procedures to enforce a contract				Ireland	
.21	Time to enforce a contract				Singapore	
.22	Cost of enforcing contracts				China	
.23	Strength of investor protection				Singapore	
.24	Time to close a business	51		10.0	Ireland	0.4
	Domestic financial sector liberalization					
.25	Domestic financial sector liberalization	38		2.0	Multiple (34)	1.0
	2nd pillar: Business environment					
	Human capital					
.01	Quality of management schools	Я		5.7	France	6.0
.02	Quality of math and science education				Singapore	
03	Extent of staff training				Switzerland	
.03	Local availability of research and training services				Switzerland	
.05	Brain drain and ease of hiring foreign labor				Kuwait	
.06	Tertiary enrollment				Finland	
	•					
07	Taxes	45	_	4.0	Sweden	6.0
.07	Irregular payments in tax collection					
.08	Distortive effect on competition of taxes and subsidie Corporate tax rate				Singapore	
09	Corporate tax rate	39		33.0	Multiple (4)	
	Infrastructure					
.10	Quality of overall infrastructure				Switzerland	
	Quality of telephone/fax infrastructure	23		6.3	Switzerland	6.9
.11	Internet users				Netherlands	
			_	0.2	Netherlands	31.8
.12	Broadband Internet subscribers	47				
.11 .12 .13 .14	Broadband Internet subscribers				Switzerland	

## India

	-		•	
	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCORE
	2nd pillar: Business environment (cont'd.)			
	Cost of doing business			
16	Cost of starting a business	50	74.6	Ireland0.3
17	Cost of dealing with licenses	44■.	519.4	United Arab Emirates1.5
18	Cost of registering property	45■.	7.7	Saudi Arabia0.0
19	Cost to export	22■.	820.0	China390.0
20	Cost to import	24■.	910.0	Singapore367.0
21	Cost of enforcing contracts	46	39.6	China8.8
22	Cost of closing a business	18■.	9.0	Multiple (4)1.0
	3rd pillar: Financial stability			
	Risk of a currency crisis			
01	Change in real effective exchange rate	15	0.6	Argentina8.5
02	External vulnerability indicator			Russian Federation15.4
03	Current account balance to GDP	40	2.9	Kuwait46.1
04	Dollarization vulnerability indicator	24■.	7.1	Multiple (2)0.0
5A	External debt to GDP (developing economies)			Saudi Arabia9.6
ōΒ	Net int'l investment position to GDP (adv. economie			Switzerland121.3
	Risk of systemic banking crisis			
06	Activity restrictions for banks	8■.	11.0	Indonesia16.0
07	Entry restrictions for banks	33■.	6.0	Multiple (24)8.0
80	Capital restrictions for banks	4■.	0.8	Multiple (3)9.0
9	Official supervisory power	24	10.0	Multiple (3)14.0
10	Private monitoring of the banking industry	n/a	n/a	South Africa9.0
11	Frequency of banking crises	12■.	1.0	Multiple (11)0.0
12	Stability Index	1■.	7.2	India7.2
13	Cumulative real estate appreciation	n/a	n/a	Russian Federation68.4
	Risk of sovereign debt crisis			
14	Local currency sovereign rating	41	10.7	Multiple (15)20.0
15	Foreign currency sovereign rating	38■.	10.7	Multiple (15)20.0
	4th pillar: Banks			
	Size index			
01	Size index	48	4.3	Hong Kong SAR10.8
	Efficiency index			
02	Efficiency index	36■.	4.7	United Arab Emirates6.8
03	Public ownership of banks	33■.	74.0	Multiple (11)0.0
	Financial information disclosure			
04	Public credit registry coverage	21■.	0.0	Belgium57.2
05	Private credit bureau coverage			Multiple (7)100.0
06	Credit Information Index			Multiple (14)6.0
	5th pillar: Non-banks			
	IPO activity			
01	IPO market share	13■.	1.8	France31.0
02	IPO proceeds amount			Kazakhstan4.4
03	Share of world IPOs			Japan14.2
	M&A activity			
04	M&A market share	13■.	1.1	United States44.4
05	M&A transaction value to GDP	25■.	3.6	United Kingdom14.6
06	Share of total number of M&A deals			United States33.2

Financial Development Index in detail (cont'd.)	■ Development <b>Advantage</b> ■ Development <b>Disadvantage</b>
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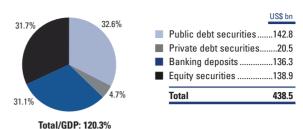
nc	cial Development Index in detail (co	nt'd.)	Development	Advantage Development Disadvantage
	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCORE
	5th pillar: Non-banks (cont'd.)			
	Insurance			
07	Insurance premiums, direct	14■	43,032.0	United States1,170,100.6
80	Insurance density	43■	38.4	United Kingdom6,466.7
09	Real growth of direct insurance premiums			India52.6
10	Insurance penetration			United Kingdom16.5
.11	Relative value-added of insurance	25■	1.0	Switzerland4.8
	Securitization	_		
.12	Securitization to GDP			United States22.9
.13	Share of total number of securitization deals	9	1./	United States64.9
	6th pillar: Financial markets			
	Foreign exchange markets			
.01	Spot foreign exchange turnover	13■	1.1	United Kingdom26.6
.02	Outright forward foreign exchange turnover			United Kingdom29.9
03	Foreign exchange swap turnover	17■	0.6	United Kingdom42.0
	Derivatives markets			
.04	Interest rate derivatives turnover:			
	Forward rate agreements			United Kingdom45.6
.05	Interest rate derivatives turnover: Swaps Interest rate derivatives turnover: Options			United Kingdom46.0
.06 .07	Foreign exchange derivatives turnover: Currency			United States42.6 United Kingdom47.6
.08	Foreign exchange derivatives turnover: Options			United Kingdom42.6
	Equity market development			
.09	Equity market turnover			Pakistan374.3
.05	Stock market capitalization to GDP	25■	/0.6	Hong Kong SAR713.3
	Bond market development			
.10	Private-sector bonds to GDP			United States114.0
.11 .12	Public-sector bonds to GDP International bonds to GDP			France
12	mendoral sonds to der			121.7
	7th pillar: Size, depth, and access Size and depth			
.01	M2 to GDP	19	62.9	Hong Kong SAR252.3
.02	Private debt to GDP			Netherlands216.2
.03	Public debt to GDP			Austria7.0
04	Bank deposits to GDP			Hong Kong SAR250.4
.05	Stock market capitalization to GDP			Hong Kong SAR713.3
.06	Relative value-added of financial institutions to G			Panama9.2
.07	Private credit to GDP			United States193.7
80	Stock market value traded to GDP	19	/U.5	Saudi Arabia356.2
	Access			
09	Financial market sophistication			Switzerland
10	Venture capital availability			United States
.11 .12	Ease of access to credit  Ease of access to local equity market			Slovak Republic5.9 Sweden6.2
.12	Bank branches			Spain
.13	Ease of access to loans			Norway5.5

## Indonesia

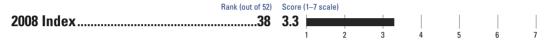
### **Key indicators**

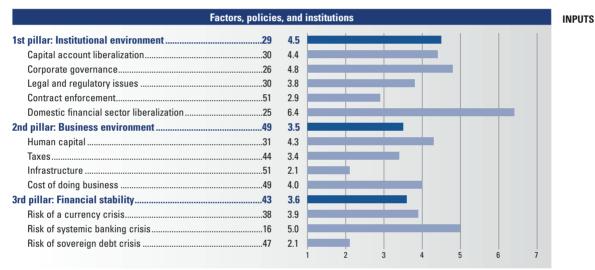
Population (millions), 2007	224.9
GDP (US\$ billions), 2007	432.9
GDP (current prices, US\$) per capita, 2007	1,924.7
GDP (PPP) as share (%) of world total, 2007	1.30
Average annual rate of real GDP growth (%), 2003–07	5.47

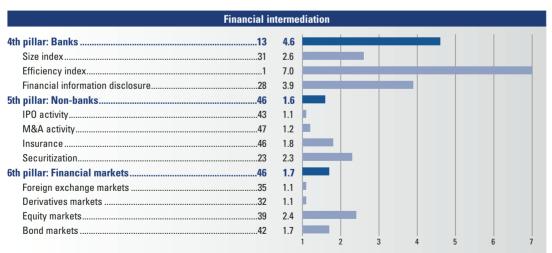
### Financial assets by major type, 2006

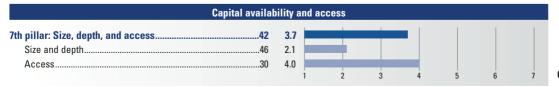


## **Financial Development Index 2008**











## Indonesia

## **Financial Development Index in detail**

■ Development **Advantage** ■ Development **Disadvantage** 

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment				
	Capital account liberalization				
1.01	Capital account liberalization	30	 1.2	Multiple (15)	2.6
	Corporate governance				
1.02	Extent of incentive-based compensation	10	 5.2	France	5.7
1.03	Efficacy of corporate boards			Sweden	6.
1.04	Reliance on professional management	22	 5.4	Sweden	6.4
1.05	Willingness to delegate	19	 4.9	Sweden	6.3
1.06	Strength of auditing and accounting standards	41	 4.5	Germany	6.3
1.07	Shareholder rights index	25	 2.0	Multiple (8)	5.0
1.08	Ethical behavior of firms	44	 3.8	Finland	6.6
1.09	Protection of minority shareholders' interests	9	 5.7	Sweden	6.4
	Legal and regulatory issues				
1.10	Burden of government regulation	11	 3.9	Singapore	5.3
1.11	Centralization of economic policymaking	5	 4.7	Switzerland	5.9
1.12	Regulation of security exchanges	21	 5.6	Sweden	6.3
1.13	Property rights	48	 3.4	Germany	6.7
1.14	Intellectual property protection	44	 3.1	Germany	6.!
1.15	Diversion of public funds	39	 3.4	Finland	6.!
1.16	Public trust of politicians	33	 2.6	Singapore	6.4
	Contract enforcement				
1.17	Effectiveness of law-making bodies	37	 3.2	Singapore	6.
1.18	Judicial independence			Germany	
1.19	Irregular payments in judicial decisions			Finland	
1.20	Number of procedures to enforce a contract			Ireland	
1.21	Time to enforce a contract			Singapore	
1.22	Cost of enforcing contracts			China	
1.23	Strength of investor protection			Singapore	
1.24	Time to close a business			Ireland	0.4
	Domestic financial sector liberalization				
1.25	Domestic financial sector liberalization	25	 1.0	Multiple (34)	1.(
	2nd pillar: Business environment				
	Human capital				
2.01	Quality of management schools			France	
2.02	Quality of math and science education			Singapore	
2.03	Extent of staff training			Switzerland	
2.04	Local availability of research and training services			Switzerland	
2.05	Brain drain and ease of hiring foreign labor			Kuwait	
2.06	Tertiary enrollment	47	 17.0	Finland	93.2
	Taxes				
2.07	Irregular payments in tax collection	49	 3.3	Sweden	6.8
2.08	Distortive effect on competition of taxes and subsidie	s22	 4.4	Singapore	5.7
2.09	Corporate tax rate	30	 30.0	Multiple (4)	0.0
	Infrastructure				
2.10	Quality of overall infrastructure	49	 2.6	Switzerland	6.7
2.11	Quality of telephone/fax infrastructure			Switzerland	6.9
	Internet users			Netherlands	
2.12				Netherlands	
2.12 2.13	Broadband Internet subscribers				
	Telephone lines		 6.6	Switzerland	66.9

## Indonesia

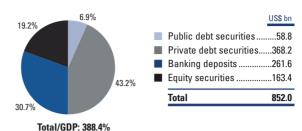
	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCORE
	2nd pillar: Business environment (cont'd.)			
	Cost of doing business			
.16	Cost of starting a business	51	80.0	Ireland0.3
2.17	Cost of dealing with licenses	39	286.8	United Arab Emirates1.5
.18	Cost of registering property	48	10.5	Saudi Arabia0.0
2.19	Cost to export	15■	667.0	China390.0
2.20	Cost to import			Singapore367.0
2.21	Cost of enforcing contracts			China8.8
2.22	Cost of closing a business	33	18.0	Multiple (4)1.0
	3rd pillar: Financial stability			
	Risk of a currency crisis			
3.01	Change in real effective exchange rate	46	7.8	Argentina8.5
3.02	External vulnerability indicator	28■	45.2	Russian Federation15.4
3.03	Current account balance to GDP	23	2.9	Kuwait46.1
3.04	Dollarization vulnerability indicator	30	34.1	Multiple (2)0.0
05A	External debt to GDP (developing economies)	19	37.9	Saudi Arabia9.6
05B	Net int'l investment position to GDP (adv. economies)	)n/a	n/a	Switzerland121.3
	Risk of systemic banking crisis			
3.06	Activity restrictions for banks	1	16.0	Indonesia16.0
3.07	Entry restrictions for banks	1	8.0	Multiple (24)8.0
3.08	Capital restrictions for banks	<b>8■</b>	7.0	Multiple (3)9.0
3.09	Official supervisory power	n/a	n/a	Multiple (3)14.0
3.10	Private monitoring of the banking industry	10	7.0	South Africa9.0
3.11	Frequency of banking crises	38	2.0	Multiple (11)0.0
3.12	Stability Index	40	4.3	India7.2
3.13	Cumulative real estate appreciation	4	10.9	Russian Federation68.4
	Risk of sovereign debt crisis			
3.14	Local currency sovereign rating	44	9.6	Multiple (15)20.0
3.15	Foreign currency sovereign rating	49	7.6	Multiple (15)20.0
	4th pillar: Banks			
	Size index			
4.01	Size index	31	5.5	Hong Kong SAR10.8
	Efficiency index			, ,
1.02	Efficiency index	3 ■	6.4	United Arab Emirates6.8
4.03	Public ownership of banks			Multiple (11)0.0
4.00	•			Widitiple (11)
	Financial information disclosure		22.5	5.1.
4.04	Public credit registry coverage			Belgium
4.05	Private credit bureau coverage			Multiple (7)100.0
4.06	Credit Information Index	45	3.0	Multiple (14)6.0
	5th pillar: Non-banks			
	IPO activity			
5.01	IPO market share	38■	0.1	France31.0
5.02	IPO proceeds amount			Kazakhstan4.4
5.03	Share of world IPOs			Japan14.2
	M&A activity			
5.04	M&A market share	/11 <b>=</b>	Λ 1	United States44.4
5.05	M&A transaction value to GDP			United Kingdom14.6
J.UU	Share of total number of M&A deals			United States

IIIC	ial Development Index in detail (cont'd	(.)	Development	Advantage Development Disadvantag
	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCORE
	5th pillar: Non-banks (cont'd.)			
	Insurance			
5.07	Insurance premiums, direct	35	14,848.6	United States1,170,100.6
80.	Insurance density			United Kingdom6,466.7
.09	Real growth of direct insurance premiums			India52.6
.10	Insurance penetration			United Kingdom16.5
5.11	Relative value-added of insurance	3/	IU.7	Switzerland4.8
	Securitization	05		11 % 10 %
5.12 5.13	Securitization to GDP			United States22.9 United States64.9
.13	Shale of total number of Securitization deals	20		United States04.9
	6th pillar: Financial markets			
	Foreign exchange markets			
6.01	Spot foreign exchange turnover			United Kingdom26.6
5.02	Outright forward foreign exchange turnover			United Kingdom29.9
3.03	Foreign exchange swap turnover  Derivatives markets	3/	0.0	United Kingdom42.0
6.04	Interest rate derivatives turnover:			
	Forward rate agreements			United Kingdom45.6
3.05	Interest rate derivatives turnover: Swaps			United Kingdom46.0
6.06 6.07	Interest rate derivatives turnover: Options Foreign exchange derivatives turnover: Currency swa			United States42.6 United Kingdom47.6
6.08	Foreign exchange derivatives turnover: Currency swa	•		United Kingdom42.6
	Equity market development			
5.09	Equity market turnover	28	I53.7	Pakistan374.3
7.05	Stock market capitalization to GDP	45	l26.5	Hong Kong SAR713.3
	Bond market development			
3.10	Private-sector bonds to GDP			United States114.0
5.11	Public-sector bonds to GDP			France
5.12	International bonds to GDP	42	I4.2	Netherlands121.7
	7th pillar: Size, depth, and access			
	Size and depth			
7.01	M2 to GDP			Hong Kong SAR252.3
7.02	Private debt to GDP			Netherlands216.2
7.03	Public debt to GDP			Austria7.0
.04	Bank deposits to GDP			Hong Kong SAR250.4
7.05 7.06	Stock market capitalization to GDP			Hong Kong SAR713.3  Panama9.2
7.06 7.07	Private credit to GDP			United States193.7
7.07 7.08	Stock market value traded to GDP			Saudi Arabia
.00				200.7
.09	Access Financial market sophistication	<b>4</b> 7 ■	3.6	Switzerland6.7
7.10	Venture capital availability			United States5.3
· 10 7.11	Ease of access to credit			Slovak Republic
7.12	Ease of access to local equity market			Sweden6.2
7.13	Bank branches			Spain95.9
7.14	Ease of access to loans	28	I4.0	Norway5.5

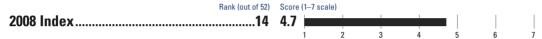
### **Key indicators**

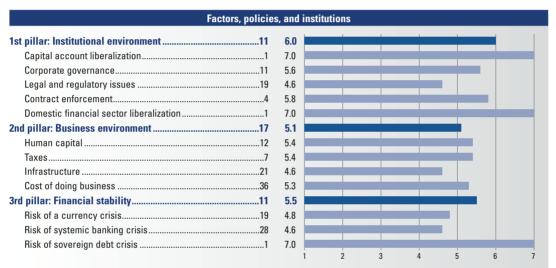
Population (millions), 2007	4.3
GDP (US\$ billions), 2007	258.6
GDP (current prices, US\$) per capita, 2007	59,924.4
GDP (PPP) as share (%) of world total, 2007	0.29
Average annual rate of real GDP growth (%), 2003-0	75.11

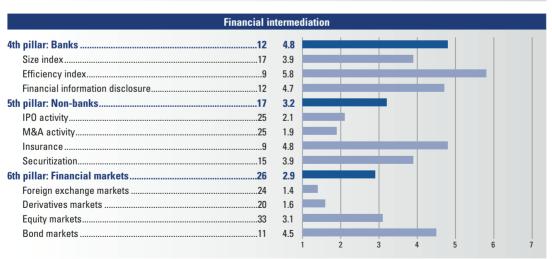
### Financial assets by major type, 2006



### **Financial Development Index 2008**











**INPUTS** 

### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment				
	Capital account liberalization				
01	Capital account liberalization	1■	2.6	Multiple (15)	2.0
	Corporate governance				
02	Extent of incentive-based compensation	22	4.9	France	5.
03	Efficacy of corporate boards	13■	5.5	Sweden	6.
04	Reliance on professional management	5	6.1	Sweden	6.
05	Willingness to delegate	16	5.0	Sweden	6.
06	Strength of auditing and accounting standards	8■	6.2	Germany	
07	Shareholder rights index			Multiple (8)	
80	Ethical behavior of firms			Finland	
09	Protection of minority shareholders' interests	7■	5.8	Sweden	6.
	Legal and regulatory issues				
10	Burden of government regulation			Singapore	
11	Centralization of economic policymaking	47	2.2	Switzerland	
12	Regulation of security exchanges			Sweden	6.
13	Property rights			Germany	6.
14	Intellectual property protection			Germany	
15	Diversion of public funds			Finland	
16	Public trust of politicians	23■	3.3	Singapore	6.
	Contract enforcement				
17	Effectiveness of law-making bodies	14	4.5	Singapore	6.
18	Judicial independence	12	6.0	Germany	6.
19	Irregular payments in judicial decisions	13■	6.3	Finland	6.
20	Number of procedures to enforce a contract	1■	20.0	Ireland	20.
21	Time to enforce a contract	30	515.0	Singapore	120.
22	Cost of enforcing contracts	34	26.9	China	8.
23	Strength of investor protection	4	8.3	Singapore	9.
24	Time to close a business	1■	0.4	Ireland	0.
	Domestic financial sector liberalization				
25	Domestic financial sector liberalization	1■	1.0	Multiple (34)	1.
	2nd pillar: Business environment				
	Human capital				
01	Quality of management schools			France	
02	Quality of math and science education			Singapore	
03	Extent of staff training			Switzerland	
04	Local availability of research and training services			Switzerland	
05	Brain drain and ease of hiring foreign labor			Kuwait	
	Tertiary enrollment	18■	58.8	Finland	93.
06	<u> </u>				
06	Taxes			Sweden	6
	Taxes Irregular payments in tax collection	14■	6.3	Sweden	
07				Singapore	5.
07 08	Irregular payments in tax collection	dies16■	4.7		5.
07 08	Irregular payments in tax collection	dies16■	4.7	Singapore	5.
07 08 09	Irregular payments in tax collection	dies16■ 5■	4.7 12.5	Singapore	5. 0.
07 08 09	Irregular payments in tax collection  Distortive effect on competition of taxes and subsic Corporate tax rate  Infrastructure	dies16■ 5■	4.712.53.9	SingaporeMultiple (4)	5. 0.
07 08 09 10	Irregular payments in tax collection  Distortive effect on competition of taxes and subsice Corporate tax rate  Infrastructure  Quality of overall infrastructure	dies16		Singapore	5. 0.
07 08 09 10 11	Irregular payments in tax collection		4.7 12.5 3.9 5.5 34.2	Singapore	5. 6. 6.
06 07 08 09 10 11 12 13	Irregular payments in tax collection		4.7 12.5 3.9 5.5 34.2 14.3	Singapore	

(Cont'd.)

#### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage INDICATOR BEST PERFORMER 2nd pillar: Business environment (cont'd.) Cost of doing business 2.16 Ireland......0.3 United Arab Emirates ......1.5 2.17 Saudi Arabia ......0.0 2.18 China ......390.0 Singapore ......367.0 2.20 2.21 Multiple (4) ......1.0 2.22 3rd pillar: Financial stability Risk of a currency crisis 3.01 Argentina .....-8.5 3.02 Russian Federation......15.4 3.03 Current account balance to GDP......39 ....■ .....2.6 Kuwait ......46.1 Multiple (2) ......0.0 External debt to GDP (developing economies) ......n/a .....n/a Saudi Arabia ......9.6 3.05A 3.05B Net int'l investment position to GDP (adv. economies) ......n/a ......n/a Switzerland......121.3 Risk of systemic banking crisis 3.06 Indonesia......16.0 3.07 Multiple (24) ......8.0 3.08 Multiple (3) ......9.0 Multiple (3) .....14.0 South Africa.....9.0 3.10 3.11 Multiple (11) ......0.0 3.12 Russian Federation.....-68.4 3 13 Risk of sovereign debt crisis 3.14 Multiple (15) .....20.0 Multiple (15) ......20.0 3.15 4th pillar: Banks Size index 4.01 Hong Kong SAR .....10.8 Size index Efficiency index United Arab Emirates ......6.8 4.02 Public ownership of banks ......n/a Multiple (11) ......0.0 4.03 Financial information disclosure 4.04 Belgium ......57.2 Multiple (7) ......100.0 4.05 4.06 Multiple (14) ......6.0 5th pillar: Non-banks IPO activity 5.01 France 31.0 Kazakhstan ......4.4 Japan .....14.2 M&A activity 5.04 United States ......44.4 5.05 United Kingdom .....14.6 5.06 United States ......33.2

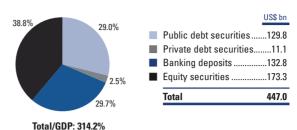
#### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage BEST PERFORMER 5th pillar: Non-banks (cont'd.) Insurance 5.07 United States ......1,170,100.6 United Kingdom ......6,466.7 5.09 India.....52.6 United Kingdom ......16.5 Switzerland......4.8 Securitization 5.12 United States ......22.9 5.13 United States ......64.9 6th pillar: Financial markets Foreign exchange markets 6.01 United Kingdom ......26.6 United Kingdom ......29.9 6.02 Foreign exchange swap turnover......25..........25...... United Kingdom ......42.0 6.03 **Derivatives markets** 6.04 Interest rate derivatives turnover: United Kingdom ......45.6 6.05 United Kingdom ......46.0 United States ......42.6 6.06 United Kingdom ......47.6 Foreign exchange derivatives turnover: Currency swaps .....13 .......................1.0 6.07 6.08 United Kingdom ......42.6 **Equity market development** 6.09 Pakistan......374.3 Hong Kong SAR .....713.3 7.05 Bond market development 6 10 United States ......114.0 6 1 1 France......7.0 Netherlands ......121.7 6.12 7th pillar: Size, depth, and access Size and depth 7.01 M2 to GDP ......n/a .....n/a Hong Kong SAR .....252.3 7.02 Netherlands ......216.2 Austria ......7.0 7.04 Bank deposits to GDP......104.2 Hong Kong SAR .....250.4 7.05 Hong Kong SAR .....713.3 7.06 Panama......9.2 7.07 United States ......193.7 Saudi Arabia ......356.2 7.08 Access Switzerland......6.7 7.09 United States ......5.3 7.10 7.11 Slovak Republic ......5.9 Sweden ......6.2 7.12 Spain......95.9 7 13 Norway......5.5

### Israel

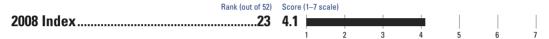
### **Key indicators**

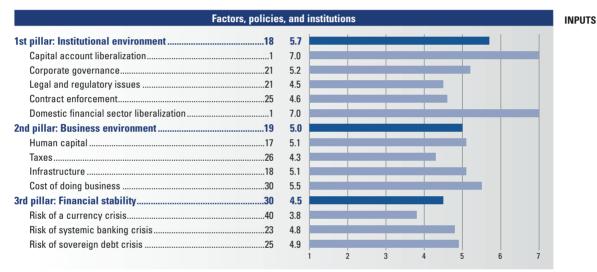
Population (millions), 2007	7.2
GDP (US\$ billions), 2007	161.9
GDP (current prices, US\$) per capita, 2007	.22,475.1
GDP (PPP) as share (%) of world total, 2007	0.29
Average annual rate of real GDP growth (%), 2003–0	7 4 65

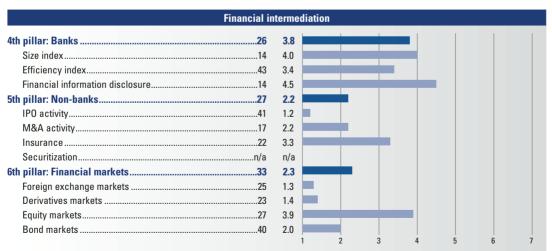
### Financial assets by major type, 2006



### **Financial Development Index 2008**











### Israel

### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

		RANK/52	SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment				
	Capital account liberalization		_		
.01	Capital account liberalization	1	2.3	Multiple (15)	2.6
	Corporate governance				
.02	Extent of incentive-based compensation			France	
.03	Efficacy of corporate boards			Sweden	
.04	Reliance on professional management			Sweden	
.05	Willingness to delegate	18	4.9	Sweden	
.06	Strength of auditing and accounting standards	18	5.9	Germany	6.3
.07	Shareholder rights index	17	3.0	Multiple (8)	
.08	Ethical behavior of firms	22	4.9	Finland	6.6
.09	Protection of minority shareholders' interests	19	5.4	Sweden	6.4
	Legal and regulatory issues				
.10	Burden of government regulation	16	3.6	Singapore	5.3
.11	Centralization of economic policymaking			Switzerland	
.12	Regulation of security exchanges			Sweden	
.13	Property rights			Germany	
.14	Intellectual property protection			Germany	
.15	Diversion of public funds			Finland	
.16	Public trust of politicians			Singapore	
	•			3.1.	
47	Contract enforcement	0.5		0:	0.4
.17	Effectiveness of law-making bodies			Singapore	
.18	Judicial independence			Germany	
.19	Irregular payments in judicial decisions			Finland	
.20	Number of procedures to enforce a contract			Ireland	
.21	Time to enforce a contract			Singapore	
.22	Cost of enforcing contracts			China	
.23	Strength of investor protection			Singapore	
.24	Time to close a business	39	4.0	Ireland	0.4
	Domestic financial sector liberalization				
0.5	Domestic financial sector liberalization	1	1.0	Multiple (34)	1.C
.25		1		·	
.25					
.25	2nd pillar: Business environment			·	
	2nd pillar: Business environment Human capital				
.01	2nd pillar: Business environment  Human capital  Quality of management schools	14	■5.5	France	
.01	2nd pillar: Business environment  Human capital  Quality of management schools	14	■5.5 ■4.9	Singapore	6.3
.01 .02 .03	2nd pillar: Business environment  Human capital  Quality of management schools	141918	■5.5 ■4.9 ■5.0	Singapore Switzerland	6.3
.01 .02 .03	2nd pillar: Business environment  Human capital  Quality of management schools	14 19 18 12	■5.5 ■4.9 ■5.0 ■5.5	Singapore Switzerland Switzerland	6.3 5.9 6.0
01 02 03 04 05	2nd pillar: Business environment  Human capital  Quality of management schools	14 19 18 12 38	■5.5 ■4.9 ■5.0 ■5.5 ■4.1	Singapore Switzerland Switzerland Kuwait	6.3 5.9 6.0
.01 .02 .03 .04	2nd pillar: Business environment  Human capital  Quality of management schools	14 19 18 12 38	■5.5 ■4.9 ■5.0 ■5.5 ■4.1	Singapore Switzerland Switzerland	6.3 5.9 6.0
.01 .02 .03 .04	2nd pillar: Business environment  Human capital  Quality of management schools	14 19 18 12 38	■5.5 ■4.9 ■5.0 ■5.5 ■4.1	Singapore Switzerland Switzerland Kuwait	6.3 5.9 6.0
.01 .02 .03 .04 .05	2nd pillar: Business environment  Human capital  Quality of management schools	14 19 18 12 38 20	5.5 4.9 5.0 5.5 4.1 57.6	Singapore Switzerland Switzerland Kuwait	6.3 6.0 5.8 93.2
.01 .02 .03 .04 .05 .06	2nd pillar: Business environment  Human capital  Quality of management schools	14	5.5 4.9 5.0 5.5 4.1 5.7.6	Singapore	
.01 .02 .03 .04 .05 .06	2nd pillar: Business environment  Human capital  Quality of management schools	14	5.5 4.9 5.0 5.5 4.1 57.6	Singapore	
.01 .02 .03 .04 .05 .06	2nd pillar: Business environment  Human capital  Quality of management schools	14	5.5 4.9 5.0 5.5 4.1 57.6	Singapore	
.01 .02 .03 .04 .05 .06	2nd pillar: Business environment  Human capital  Quality of management schools	141912	5.5 4.9 5.0 5.5 4.1 57.6 5.4 4.8 29.0	Singapore	
.01 .02 .03 .04 .05 .06	2nd pillar: Business environment  Human capital  Quality of management schools	141912	5.5 4.9 5.0 5.5 4.1 57.6 5.4 4.8 29.0	Singapore	6.3 5.8 6.0 5.8 93.2 6.8 5.7 6.6
.01 .02 .03 .04 .05 .06	2nd pillar: Business environment  Human capital  Quality of management schools	14	5.5 4.9 5.0 5.5 4.1 57.6 5.4 4.8 29.0 5.0 6.7	Singapore	6.3 5.8 6.0 5.8 93.2 6.8 5.7 0.0
.01 .02 .03 .04 .05 .06 .07 .08 .09	2nd pillar: Business environment  Human capital  Quality of management schools	141912	5.5 4.9 5.0 5.5 4.1 57.6 5.4 4.8 29.0 5.0 6.7	Singapore	
.01 .02 .03 .04 .05 .06	2nd pillar: Business environment  Human capital  Quality of management schools	14	5.5 4.9 5.0 5.5 4.1 57.6 5.4 4.8 29.0 5.0 6.7 27.7 20.8	Singapore	

(Cont'd.)

# Israel

2nd pillar: Business environment (cont'd.)		INDICATOR	RANK/52	SCORE	BEST PERFORMER SCO
Cost of doing business		2nd pillar: Business environment (cont'd.)			
1.17   Cost of dealing with licenses	2.16	_	16	4.4	Ireland 0
2.18 Cost for export	2.17	· ·			
2.19   Cost to export	2.18	•			
Singapore   367   Singapore	2.19				
2.21 Cost of enforcing contracts.	2.20	•			
3rd pillar: Financial stability  Risk of a currency crisis 3.01 Change in real affective exchange rate. 9		•			• ,
Risk of a currency crisis   3.01   Change in real effective exchange rate   9	2.22	Cost of closing a business	46■	23.0	
Risk of a currency crisis   3.01   Change in real effective exchange rate   9		3rd nillar: Financial stability			
3.01 Change in real effective exchange rate. 9					
20.2   External vulnerability indicator.	2 01		0 -	2.6	Argentine
Current account balance to GDP		9			
0.6A External debt to GDP (developing economies) 29 ■ 60.3 Saudi Arabia 9.  Net int'l investment position to GDP (developing economies) // 29 ■ 60.3 Saudi Arabia 9.  Net int'l investment position to GDP (adv. economies) // 29 ■ 60.3 Saudi Arabia 9.  Net int'l investment position to GDP (adv. economies) // 20 ■ // 30		•			
External debt to GDP (developing economies)   29					
Net int'l investment position to GDP (adv. economies)		•			
Risk of systemic banking crisis  3.06 Activity restrictions for banks		. •			
3.06 Activity restrictions for banks	מטט	•	ı,11/a	II/a	Switzerialiu121
3.07 Entry restrictions for banks					
3.08 Capital restrictions for banks		•			
3.09 Official supervisory power		•			
3.10 Private monitoring of the banking industry		•			· ·
3.11 Frequency of banking crises					· ·
3.12 Stability Index					
Risk of sovereign debt crisis   3.14   Local currency sovereign rating   22		-			
Risk of sovereign debt crisis         3.14       Local currency sovereign rating       22       16.0       Multiple (15)       20         3.15       Foreign currency sovereign rating       29       14.0       Multiple (15)       20         4th pillar: Banks         Size index         4.01       Size index       14       7.2       Hong Kong SAR       10         Efficiency index         4.02       Efficiency index       41       44       United Arab Emirates       6         4.03       Public ownership of banks       n/a       n/a       Multiple (11)       0         Financial information disclosure         4.04       Public credit registry coverage       21       0.0       Belgium       57         4.05       Private credit bureau coverage       9       91.6       Multiple (7)       100         4.06       Credit Information Index       15       5.0       Multiple (7)       10         5.01       IPO proceeds amount       42       0.1       France       31         5.02       IPO proceeds amount       42       0.1       Kazakhstan       .4         5.02       Private than a management		•			
3.14 Local currency sovereign rating	3.13	Cumulative real estate appreciation	7	2.4	Russian Federation68
4th pillar: Banks  Size index  4.01 Size index  4.02 Efficiency index  4.02 Efficiency index  4.03 Public ownership of banks		_			
4th pillar: Banks         Size index         4.01       Size index       14       7.2       Hong Kong SAR       10         Efficiency index       41       4.4       United Arab Emirates       6         4.03       Public ownership of banks       n/a       n/a       Multiple (11)       0         Financial information disclosure         4.04       Public credit registry coverage       21       0.0       Belgium       .57         4.05       Private credit bureau coverage       9       91.6       Multiple (7)       100         4.06       Credit Information Index       15       5.0       Multiple (14)       .6         Sth pillar: Non-banks         IPO activity       IPO market share       42       0.1       France       .31         5.02       IPO proceeds amount       42       0.1       Kazakhstan       .4         5.03       Share of world IPOs       26       0.4       Japan       .14         M&A activity              5.04       M&A market share              5.05					· ·
Size index         4.01       Size index       14       7.2       Hong Kong SAR       10         Efficiency index         4.02       Efficiency index       41       4.4       United Arab Emirates       .6         4.03       Public ownership of banks       n/a       Multiple (11)       .0         Financial information disclosure         4.04       Public credit registry coverage       21       0.0       Belgium       .57         4.05       Private credit bureau coverage       .9       91.6       Multiple (7)       .100         4.06       Credit Information Index       .15       5.0       Multiple (14)       .6         5th pillar: Non-banks         IPO activity         5.01       IPO proceeds amount       .42       0.1       Kazakhstan       .4         5.02       IPO proceeds amount       .26       0.4       Japan       .14         M&A activity       .9       .0.4       United States       .44         M&A market share       .23       .0.4       United Kingdom       .14         5.05       M&A transaction value to GDP       .9       .7.5       United Kingdom       .14	3.15	Foreign currency sovereign rating	29■	14.0	Multiple (15)20
4.01 Size index		4th pillar: Banks			
Efficiency index 4.02 Efficiency index		Size index			
4.02 Efficiency index	4.01	Size index	14	7.2	Hong Kong SAR10
4.03       Public ownership of banks       n/a       n/a       Multiple (11)       .0         Financial information disclosure         4.04       Public credit registry coverage       21       0.0       Belgium       .57         4.05       Private credit bureau coverage       9       91.6       Multiple (7)       100         4.06       Credit Information Index       15       5.0       Multiple (14)       .6         5th pillar: Non-banks         IPO activity         5.01       IPO market share       42       0.1       France       .31         5.02       IPO proceeds amount       42       0.1       Kazakhstan       .4         5.03       Share of world IPOs       26       0.4       Japan       .14         M&A activity       .0       <		Efficiency index			
4.03       Public ownership of banks       n/a       n/a       Multiple (11)       .0         Financial information disclosure         4.04       Public credit registry coverage       21       0.0       Belgium       .57         4.05       Private credit bureau coverage       9       91.6       Multiple (7)       100         4.06       Credit Information Index       15       5.0       Multiple (14)       .6         5th pillar: Non-banks         IPO activity         5.01       IPO market share       42       0.1       France       .31         5.02       IPO proceeds amount       42       0.1       Kazakhstan       .4         5.03       Share of world IPOs       26       0.4       Japan       .14         M&A activity       .0       <	4.02	Efficiency index	41	4.4	United Arab Emirates6
Financial information disclosure  4.04 Public credit registry coverage 21		•			
4.04       Public credit registry coverage       21       ■       0.0       Belgium       .57         4.05       Private credit bureau coverage       .9       ■       .91.6       Multiple (7)       .100         4.06       Credit Information Index       .15       ■       .5.0       Multiple (14)       .6         5th pillar: Non-banks         IPO activity       IPO market share       .9       .0.1       France       .31         5.02       IPO proceeds amount       .42       .0.1       Kazakhstan       .4         5.03       Share of world IPOs       .26       .0.4       Japan       .14         M&A activity       .9       .0.4       United States       .44         5.05       M&A transaction value to GDP       .9       .7.5       United Kingdom       .14		'			
4.05 Private credit bureau coverage. 9 ■ 91.6 Multiple (7) 100 4.06 Credit Information Index 15 ■ 5.0 Multiple (14) 6  5th pillar: Non-banks  IPO activity 5.01 IPO market share 42 ■ 0.1 France 31 5.02 IPO proceeds amount 42 ■ 0.1 Kazakhstan 4 5.03 Share of world IPOs 26 ■ 0.4 Japan 14  M&A activity  5.04 M&A market share 23 ■ 0.4 United States 44 5.05 M&A transaction value to GDP 9 ■ 7.5 United Kingdom 14	4 O4		21	0.0	Belgium 57
5th pillar: Non-banks         IPO activity         5.01       IPO market share       42       0.1       France       31         5.02       IPO proceeds amount       42       0.1       Kazakhstan       4         5.03       Share of world IPOs       26       0.4       Japan       14         M&A activity         5.04       M&A market share       23       0.4       United States       44         5.05       M&A transaction value to GDP       9       7.5       United Kingdom       14		· ,			
5th pillar: Non-banks         IPO activity         5.01       IPO market share		•			
IPO activity   5.01   IPO market share	4.00	Credit information mass	10	5.0	νιαπριε (14)
5.01       IPO market share       42       ■       0.1       France       31         5.02       IPO proceeds amount       42       ■       0.1       Kazakhstan       .4         5.03       Share of world IPOs       26       ■       0.4       Japan       .14         M&A activity         5.04       M&A market share       23       ■       0.4       United States       .44         5.05       M&A transaction value to GDP       9       ■       7.5       United Kingdom       .14		5th pillar: Non-banks			
5.02 IPO proceeds amount		IPO activity			
5.03 Share of world IPOs	5.01	IPO market share	42	0.1	France31
M&A activity         5.04         M&A market share         23         ■         0.4         United States         .44           5.05         M&A transaction value to GDP         9         ■         7.5         United Kingdom         .14	5.02	IPO proceeds amount	42	0.1	Kazakhstan4
5.04       M&A market share       23       0.4       United States       .44         5.05       M&A transaction value to GDP       .9       7.5       United Kingdom       .14	5.03	•			Japan14
5.04       M&A market share       23       0.4       United States       .44         5.05       M&A transaction value to GDP       9       7.5       United Kingdom       .14		M&A activity			
5.05 M&A transaction value to GDP99 United Kingdom14	5.04	•	22 =	0.4	United States
5.06 Share of total number of M&A deals31	5.06				United States33

Financial Development Index in detail (cont'd.)	■ Development <b>Advantage</b>	$\blacksquare \   {\sf Development}  {\color{red} \textbf{Disadvantage}}$

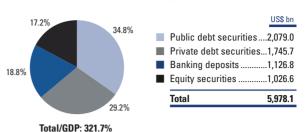
8 Real growth of direct insurance premiums	nc	ial Development Index in detail (cont'o	d.)	■ Developmen	t <b>Advantage</b> Development <b>Disadvantag</b>
Insurance   Ins		INDICATOR	RANK/52	SCORE	BEST PERFORMER SCORE
28		5th pillar: Non-banks (cont'd.)			
28		•			
State   Sta	.07		28■	7.754.2	United States1.170.100.6
10   Insurance penetration   20   5.5   Switzerland   4.8	.08	•			
Relative value-added of insurance   .5	.09	Real growth of direct insurance premiums	26■	2.9	India52.6
Securitization to GDP	.10				United Kingdom16.5
Securitization to GDP	.11	Relative value-added of insurance	5■	2.8	Switzerland4.8
Share of total number of securitization deals		Securitization			
Sith pillar: Financial markets   Foreign exchange markets   Spot foreign exchange turnover   23	.12				
Foreign exchange markets   10	.13	Share of total number of securitization deals	n/a	n/a	United States64.9
Spot foreign exchange turnover   23		6th pillar: Financial markets			
02         Outright forward foreign exchange turnover		Foreign exchange markets			
Poreign exchange swap turnover   26	.01	Spot foreign exchange turnover	23■	0.3	United Kingdom26.6
Derivatives markets    Interest rate derivatives turnover:   Forward rate agreements	.02				United Kingdom29.9
104 Interest rate derivatives turnover: Forward rate agreements	.03	Foreign exchange swap turnover	26■	0.2	United Kingdom42.0
Forward rate agreements		Derivatives markets			
10   10   10   10   10   10   10   10	.04				
Foreign exchange derivatives turnover: Currency swaps   n/a	.05				<u> </u>
Foreign exchange derivatives turnover: Options   20	.06				
27	07				-
Stock market capitalization to GDP					
Bond market development	.09				
Private-sector bonds to GDP	.05	Stock market capitalization to GDP		103.1	Hong Kong SAR/13.3
Public-sector bonds to GDP					
7th pillar: Size, depth, and access       35       12.3       1.4.7       1.4.3       1.4.3       1.4.3       1.4.3       1.4.3       1.4.3       1.4.7       1.4.3       1.4.3       1.4.7       1.4.3       1.4.7       1.4.3       1.4.3       1.4.7       1.4.7       1.4.3       1.4.7       1.4.7       1.4.7       1.4.7       1.4.3       1.4.7       1.4.3       1.4.7       1.4.3       1.4.7       1.4.3       1.4.3       1.4.7       1.4.7       1.4.3       1.4.7       1.4.3       1.4.7       1.4.3       1.4.7       1.4.3       1.4.7       1.4.3       1.4.7       1.4.3       1.4.7       1.4.4       1.4.7       1.4.4       1.4.7       1.4.4       1.4.7       1.4.4       1.4.7       1.4.4       1.4.7       1.4.4       1.4.7       1.4.4       1.4.7       1.4.7       1.4.4	.10				
7th pillar: Size, depth, and access         Size and depth         01       M2 to GDP       10       96.1       Hong Kong SAR       252.3         02       Private debt to GDP       35       7.5       Netherlands       216.2         03       Public debt to GDP       13       5.8       Austria       7.0         04       Bank deposits to GDP       16       87.3       Hong Kong SAR       250.4         05       Stock market capitalization to GDP       17       103.1       Hong Kong SAR       713.3         06       Relative value-added of financial institutions to GDP       .7       6.1       Panama       9.2         07       Private credit to GDP       21       87.5       United States       193.7         08       Stock market value traded to GDP       27       48.5       Saudi Arabia       356.2         Access         09       Financial market sophistication       15       5.9       Switzerland       6.7         10       Venture capital availability       .5       5.2       United States       5.3         11       Ease of access to credit       20       5.1       Slovak Republic       5.9         12	.11				
Size and depth         01       M2 to GDP       10       96.1       Hong Kong SAR       .252.3         02       Private debt to GDP       35       .7.5       Netherlands       .216.2         03       Public debt to GDP       13       .5.8       Austria       .7.0         04       Bank deposits to GDP       16       .87.3       Hong Kong SAR       .250.4         05       Stock market capitalization to GDP       .17       .103.1       Hong Kong SAR       .713.3         06       Relative value-added of financial institutions to GDP       .7       .6.1       Panama       .9.2         07       Private credit to GDP       .21       .87.5       United States       .193.7         08       Stock market value traded to GDP       .27       .48.5       Saudi Arabia       .356.2         Access         09       Financial market sophistication       .15       .5.9       Switzerland       .6.7         10       Venture capital availability       .5       .5.2       United States       .5.3         11       Ease of access to credit       .20       .5.1       Slovak Republic       .5.9         12       Ease of access to local equity market	12	international bonds to GDT	20	14.3	Netricialus121./
01       M2 to GDP       10       96.1       Hong Kong SAR       .252.3         02       Private debt to GDP       .35       .7.5       Netherlands       .216.2         03       Public debt to GDP       .13       .58       Austria       .7.0         04       Bank deposits to GDP       .16       .87.3       Hong Kong SAR       .250.4         05       Stock market capitalization to GDP       .17       .103.1       Hong Kong SAR       .250.4         06       Relative value-added of financial institutions to GDP       .7       .6.1       Panama       .9.2         07       Private credit to GDP       .21       .87.5       United States       .193.7         08       Stock market value traded to GDP       .27       .48.5       Saudi Arabia       .356.2         Access         09       Financial market sophistication       .15       .5.9       Switzerland       .6.7         10       Venture capital availability       .5       .5.2       United States       .5.3         11       Ease of access to credit       .20       .5.1       Slovak Republic       .5.9         12       Ease of access to local equity market       .15       .5.7       Sweden		•			
02       Private debt to GDP       .35       .7.5       Netherlands       .216.2         03       Public debt to GDP       .13       .5.8       Austria       .7.0         04       Bank deposits to GDP       .16       .87.3       Hong Kong SAR       .250.4         05       Stock market capitalization to GDP       .17       .103.1       Hong Kong SAR       .713.3         06       Relative value-added of financial institutions to GDP       .7       .6.1       Panama       .9.2         07       Private credit to GDP       .21       .87.5       United States       .193.7         08       Stock market value traded to GDP       .27       .48.5       Saudi Arabia       .356.2         Access         09       Financial market sophistication       .15       .5.9       Switzerland       .6.7         10       Venture capital availability       .5       .5.2       United States       .5.3         11       Ease of access to credit       .20       .5.1       Slovak Republic       .5.9         12       Ease of access to local equity market       .15       .5.7       Sweden       .6.2         13       Bank branches       .18       .14.7       Spain	.01	•	10	96.1	Hong Kong SAR 252.3
93       Public debt to GDP	.02				
05       Stock market capitalization to GDP       17       ■ 103.1       Hong Kong SAR       .713.3         06       Relative value-added of financial institutions to GDP       .7       ■ 6.1       Panama       .9.2         07       Private credit to GDP       .21       ■ 87.5       United States       .193.7         08       Stock market value traded to GDP       .27       ■ 48.5       Saudi Arabia       .356.2         Access         09       Financial market sophistication       .15       ■ 5.9       Switzerland       .6.7         10       Venture capital availability       .5       ■ 5.2       United States       .5.3         11       Ease of access to credit       .20       ■ 5.1       Slovak Republic       .5.9         12       Ease of access to local equity market       .15       ■ 5.7       Sweden       .6.2         13       Bank branches       .18       ■ 14.7       Spain       .95.9	03				
26       Relative value-added of financial institutions to GDP       .7       ■       .6.1       Panama       .9.2         27       Private credit to GDP       .21       ■       .87.5       United States       .193.7         28       Stock market value traded to GDP       .27       ■       .48.5       Saudi Arabia       .356.2         Access         29       Financial market sophistication       .15       ■       .5.9       Switzerland       .6.7         10       Venture capital availability       .5       ■       .5.2       United States       .5.3         11       Ease of access to credit       .20       ■       .5.1       Slovak Republic       .5.9         12       Ease of access to local equity market       .15       ■       .5.7       Sweden       .6.2         13       Bank branches       .18       ■       .14.7       Spain       .95.9	04	Bank deposits to GDP	16■	87.3	Hong Kong SAR250.4
07       Private credit to GDP	.05	•			
Access       Saudi Arabia       356.2         Pinancial market sophistication       15. ■ .5.9       Switzerland       .6.7         Venture capital availability       .5. ■ .5.2       United States       .5.3         11 Ease of access to credit       .20. ■ .5.1       Slovak Republic       .5.9         12 Ease of access to local equity market       .15. ■ .5.7       Sweden       .6.2         13 Bank branches       .18. ■ .14.7       Spain       .95.9	.06				
Access         09       Financial market sophistication       15       ■       5.9       Switzerland       .6.7         10       Venture capital availability       .5       ■       5.2       United States       .5.3         11       Ease of access to credit       .20       ■       .5.1       Slovak Republic       .5.9         12       Ease of access to local equity market       .15       ■       .5.7       Sweden       .6.2         13       Bank branches       .18       ■       .14.7       Spain       .95.9	.07				
09 Financial market sophistication       15. ■       5.9       Switzerland       6.7         10 Venture capital availability       .5. ■       5.2       United States       .5.3         11 Ease of access to credit       .20. ■       .5.1       Slovak Republic       .5.9         12 Ease of access to local equity market       .15. ■       .5.7       Sweden       .6.2         13 Bank branches       .18. ■       .14.7       Spain       .95.9	80	Stock market value traded to GDP	27	48.5	Saudi Arabia356.2
10       Venture capital availability       .5       .5.2       United States       .5.3         11       Ease of access to credit       .20       .5.1       Slovak Republic       .5.9         12       Ease of access to local equity market       .15       .5.7       Sweden       .6.2         13       Bank branches       .18       .14.7       Spain       .95.9					
11 Ease of access to credit	09	·			
12       Ease of access to local equity market       15       5.7       Sweden       6.2         13       Bank branches       18       14.7       Spain       95.9	10	, ,			
13 Bank branches	11				· ·
·	12				
	. 13 .14				Norway5.5

## Italy

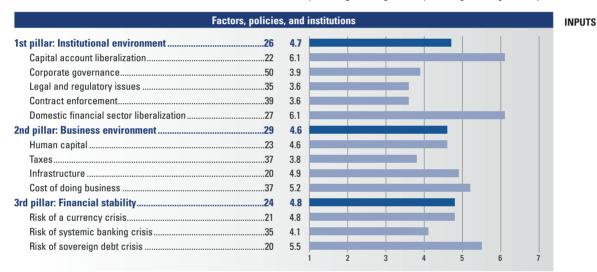
### **Key indicators**

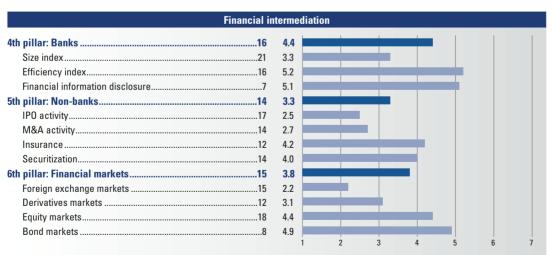
Population (millions), 2007	58.7
GDP (US\$ billions), 2007	2,104.7
GDP (current prices, US\$) per capita, 2007	35,872.4
GDP (PPP) as share (%) of world total, 2007	2.76
Average annual rate of real GDP growth (%), 2003-0	)71.07

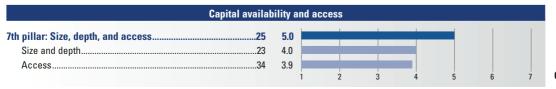
### Financial assets by major type, 2006



### **Financial Development Index 2008**









# Italy

### **Financial Development Index in detail**

■ Development **Advantage** ■ Development **Disadvantage** 

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment				
	Capital account liberalization				
01	Capital account liberalization	22	2.6	Multiple (15)	2.6
	Corporate governance				
02	Extent of incentive-based compensation	20■	5.0	France	5.7
03	Efficacy of corporate boards	47	4.3	Sweden	6.
04	Reliance on professional management	52	3.6	Sweden	6.4
05	Willingness to delegate	49	3.5	Sweden	6.3
06	Strength of auditing and accounting standards	43	4.5	Germany	
07	Shareholder rights index			Multiple (8)	
80	Ethical behavior of firms			Finland	
09	Protection of minority shareholders' interests	46	4.0	Sweden	6.4
	Legal and regulatory issues				
10	Burden of government regulation			Singapore	5.3
11	Centralization of economic policymaking	21■	3.6	Switzerland	5.9
12	Regulation of security exchanges	42	4.5	Sweden	6.3
13	Property rights			Germany	6.
14	Intellectual property protection			Germany	
15	Diversion of public funds			Finland	
16	Public trust of politicians	39■	2.2	Singapore	6.
	Contract enforcement				
17	Effectiveness of law-making bodies	43	2.9	Singapore	6.
18	Judicial independence	34	3.8	Germany	6.
19	Irregular payments in judicial decisions	28	4.9	Finland	6.8
20	Number of procedures to enforce a contract	43	41.0	Ireland	20.0
21	Time to enforce a contract	49	1,210.0	Singapore	120.0
22	Cost of enforcing contracts		29.9	China	8.
23	Strength of investor protection	22	5.7	Singapore	9.:
24	Time to close a business	18■	1.8	Ireland	0.
	Domestic financial sector liberalization				
25	Domestic financial sector liberalization	27■	1.0	Multiple (34)	1.0
	2nd pillar: Business environment				
01	Human capital  Quality of management schools	22	4.4	France	6.1
02	Quality of math and science education			Singapore	
02	Extent of staff training			Switzerland	
03 04	Local availability of research and training services			Switzerland	
05	Brain drain and ease of hiring foreign labor			Kuwait	
06	Tertiary enrollment			Finland	
	,				
07	Taxes	25	4.0	Sweden	6
07	Irregular payments in tax collection			Singapore	
08 09	Distortive effect on competition of taxes and subsic Corporate tax rate			Multiple (4)	
03	·			Multiple (4)	0.1
	Infrastructure				
10	Quality of overall infrastructure			Switzerland	
11	Quality of telephone/fax infrastructure			Switzerland	
	Internet users			Netherlands	
	titude a situación de l'actionica de la cida a cida	20	14.9	Netherlands	
12 13	Broadband Internet subscribers				
	Telephone lines	12■		Switzerland	

# Italy

### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52 SCORE	BEST PERFORMER	SCOR
	2nd pillar: Business environment (cont'd.)			
	Cost of doing business			
6	Cost of starting a business	18.7	Ireland	0.
	Cost of dealing with licenses	138.2	United Arab Emirates	31 .
	Cost of registering property	8■0.6	Saudi Arabia	0.
	Cost to export	1,291.0	China	390.
	Cost to import	1,291.0	Singapore	367.
	Cost of enforcing contracts	29.9	China	8.
	Cost of closing a business	40■22.0	Multiple (4)	1.
	3rd pillar: Financial stability			
	Risk of a currency crisis			
	Change in real effective exchange rate	39 45	Argentina	-8
	External vulnerability indicator		Russian Federation	
	Current account balance to GDP		Kuwait	
	Dollarization vulnerability indicator		Multiple (2)	
	•			
	External debt to GDP (developing economies)		Saudi Arabia	
	Net int'l investment position to GDP (adv. economi	es)n/an/a	Switzerland	121.
	Risk of systemic banking crisis			4.0
	Activity restrictions for banks		Indonesia	
	Entry restrictions for banks		Multiple (24)	
	Capital restrictions for banks		Multiple (3)	
	Official supervisory power		Multiple (3)	
	Private monitoring of the banking industry		South Africa	9.
	Frequency of banking crises	121.0	Multiple (11)	0.
	Stability Index	4.3	India	7.
	Cumulative real estate appreciation	26.8	Russian Federation	68.
	Risk of sovereign debt crisis			
	Local currency sovereign rating		Multiple (15)	
	Foreign currency sovereign rating	10.0	Multiple (15)	20.
	4th pillar: Banks			
	Size index			
	Size index	6.3	Hong Kong SAR	10.
	Efficiency index			
	Efficiency index	5.3	United Arab Emirates	s6.
	Public ownership of banks		Multiple (11)	
	Financial information disclosure	, ·-	, ,	
	Public credit registry coverage	11 ■ 11 ^	Belgium	57
	Private credit bureau coverage		Multiple (7)	
	Credit Information Index		Multiple (14)	
	Credit information index	5.0	iviulupie (14)	
	5th pillar: Non-banks			
	IPO activity			
	IPO market share	9 <b>1</b> 2.7	France	31.
	IPO proceeds amount	250.4	Kazakhstan	4.
	Share of world IPOs	141.8	Japan	14.
	M&A activity			
			United States	4.4
	M&A market share	8■2.∩	United States	44
	M&A market share		United Kingdom	



### Financial Development Index in detail (cont'd.)

■ Development **Advantage** ■ Development **Disadvantage** 

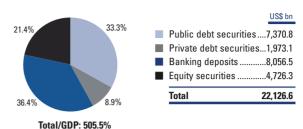
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	5th pillar: Non-banks (cont'd.)				
	Insurance				
.07	Insurance premiums, direct	6	l138,679.2	United States1	,170,100.6
.08	Insurance density	17	l2,302.2	United Kingdom	6,466.7
.09	Real growth of direct insurance premiums	43	4.9	India	52.6
.10	Insurance penetration	14	l7.2	United Kingdom	16.5
.11	Relative value-added of insurance	32	0.9	Switzerland	4.8
	Securitization				
.12	Securitization to GDP	14	l3.5	United States	22.9
.13	Share of total number of securitization deals			United States	
	6th pillar: Financial markets				
	Foreign exchange markets				
.01	Spot foreign exchange turnover	15	l0.9	United Kingdom	26 6
.02	Outright forward foreign exchange turnover			United Kingdom	
.03	Foreign exchange swap turnover			United Kingdom	
	Derivatives markets			· ·	
.04	Interest rate derivatives turnover:				
.04	Forward rate agreements	11	1 00	United Kingdom	15.6
.05	Interest rate derivatives turnover: Swaps			United Kingdom	
.06	Interest rate derivatives turnover: Swaps			United States	
.07	Foreign exchange derivatives turnover: Currency swar			United Kingdom	
.08	Foreign exchange derivatives turnover: Options			United Kingdom	
.00				Office Kingdom	
	Equity market development		100.0		
.09	Equity market turnover			Pakistan	
.05	Stock market capitalization to GDP	31	48.4	Hong Kong SAR	/13.3
	Bond market development				
.10	Private-sector bonds to GDP	4	l49.8	United States	114.0
.11	Public-sector bonds to GDP	11■	l5.4	France	7.C
.12	International bonds to GDP	13■	l42.2	Netherlands	121.7
	7th pillar: Size, depth, and access				
.01	Size and depth M2 to GDP	n/a	n/a	Hong Kong SAR	252.3
.02	Private debt to GDP		, -	Netherlands	
.02	Public debt to GDP			Austria	
.03	Bank deposits to GDP			Hong Kong SAR	
.04	Stock market capitalization to GDP			Hong Kong SAR	
.06	Relative value-added of financial institutions to GDP			Panama	
.07	Private credit to GDP			United States	
.08	Stock market value traded to GDP			Saudi Arabia	
00	Access	00	4.0	Constructional	0.7
.09	Financial market sophistication			Switzerland	
.10	Venture capital availability			United States	
.11	Ease of access to credit			Slovak Republic	
.12	Ease of access to local equity market			Sweden	
.13	Bank branches			Spain	
	Ease of access to loans	44	2.9	Norway	5.5
.14					
.14					
.14					

### Japan

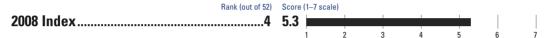
### **Key indicators**

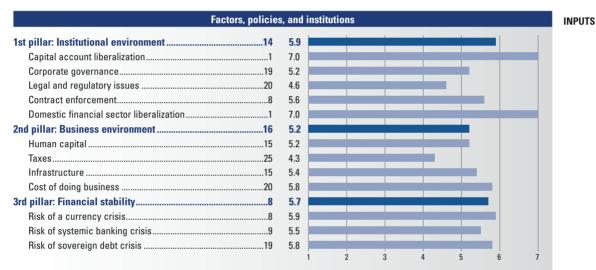
Population (millions), 2007	127.8
GDP (US\$ billions), 2007	4,383.8
GDP (current prices, US\$) per capita, 2007	34,312.1
GDP (PPP) as share (%) of world total, 2007	6.61
Average annual rate of real GDP growth (%), 2003-	072.12

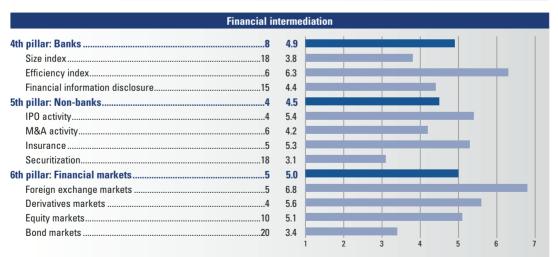
#### Financial assets by major type, 2006



### **Financial Development Index 2008**











### **Financial Development Index in detail**

■ Development **Advantage** ■ Development **Disadvantage** 

	INDICATOR	RANK/52		SCORE	BEST PERFORMER	SCOR		
	1st pillar: Institutional environment							
	Capital account liberalization							
.01	Capital account liberalization	1		2.6	Multiple (15)	2.6		
	Corporate governance							
1.02	Extent of incentive-based compensation	41		4.3	France	5.7		
1.03	Efficacy of corporate boards	24		5.2	Sweden	6.		
1.04	Reliance on professional management	14		5.8	Sweden	6.4		
1.05	Willingness to delegate	12		5.1	Sweden	6.3		
1.06	Strength of auditing and accounting standards	26		5.2	Germany	6.3		
1.07	Shareholder rights index	9		4.0	Multiple (8)	5.0		
1.08	Ethical behavior of firms				Finland			
1.09	Protection of minority shareholders' interests	25		5.0	Sweden	6.4		
	Legal and regulatory issues							
1.10	Burden of government regulation	8		4.1	Singapore	5.3		
1.11	Centralization of economic policymaking	41		2.7	Switzerland	5.9		
1.12	Regulation of security exchanges	28		5.2	Sweden	6.3		
1.13	Property rights	12		6.2	Germany	6.7		
1.14	Intellectual property protection	14		5.6	Germany	6.5		
1.15	Diversion of public funds	20		4.9	Finland	6.!		
1.16	Public trust of politicians	20		3.4	Singapore	6.4		
	Contract enforcement							
1.17	Effectiveness of law-making bodies	12		4.8	Singapore	6.		
1.18	Judicial independence	15		5.5	Germany	6.!		
1.19	Irregular payments in judicial decisions	10		6.3	Finland	6.8		
1.20	Number of procedures to enforce a contract	10		30.0	Ireland	20.0		
1.21	Time to enforce a contract	11		316.0	Singapore	120.0		
1.22	Cost of enforcing contracts	25		22.7	China	8.8		
1.23	Strength of investor protection	10		7.0	Singapore	9.3		
1.24	Time to close a business	2		0.6	Ireland	0.4		
	Domestic financial sector liberalization							
1.25	Domestic financial sector liberalization	1		1.0	Multiple (34)	1.0		
	2nd pillar: Business environment							
	Human capital							
2.01	Quality of management schools	40		4.1	France	6.0		
2.02	Quality of math and science education	18		5.0	Singapore			
2.03	Extent of staff training				Switzerland			
2.00	Local availability of research and training services				Switzerland			
				4.8	Kuwait			
2.04 2.05	Brain drain and ease of hiring foreign labor							
2.04 2.05	Brain drain and ease of hiring foreign labor  Tertiary enrollment			57.3	Finland	93.2		
2.04 2.05	~ ~ ~			57.3	Finland	93.2		
2.04 2.05 2.06 2.06	Tertiary enrollment	21			Finland			
2.04 2.05 2.06 2.07	Tertiary enrollment	21		6.2		6.8		
2.04 2.05 2.06 2.07 2.08	Taxes Irregular payments in tax collection	21 16 s25		6.2 4.3	Sweden	6.8 5.7		
2.04 2.05 2.06 2.07 2.08	Taxes Irregular payments in tax collection Distortive effect on competition of taxes and subsidie	21 16 s25		6.2 4.3	Sweden	6.8 5.7		
2.04 2.05 2.06 2.07 2.08 2.09	Taxes Irregular payments in tax collection	21 16 s25 30		6.2 4.3 30.0	Sweden			
2.04 2.05 2.06 2.07 2.08 2.09	Taxes Irregular payments in tax collection	21 16 s25 30		6.2 4.3 30.0	Sweden Singapore Multiple (4)	6.8 5.7 0.0		
2.04 2.05 2.06 2.07 2.08 2.09 2.10 2.11	Taxes Irregular payments in tax collection	21 16 s25 30 13		6.2 30.0 5.9	Sweden Singapore Multiple (4)	6.5 6.5		
2.04 2.05 2.06 2.07 2.08 2.09 2.10 2.11 2.12	Taxes Irregular payments in tax collection	21		6.2 30.0 5.9 6.8 68.3	Sweden Singapore Multiple (4) Switzerland Switzerland	6.856.856.856.856.8		
2.04 2.05 2.06	Taxes Irregular payments in tax collection	21		6.2 30.0 5.9 6.8 68.3 20.6	Sweden Singapore Multiple (4) Switzerland Switzerland Netherlands	6.8 6.7 6.5 6.5		

(Cont'd.)

# Japan

### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of starting a business	23	7.5	Ireland	0.3
2.17	Cost of dealing with licenses	■	17.8	United Arab Emirates	
2.18	Cost of registering property	34	5.0	Saudi Arabia	0.0
2.19	Cost to export	32	989.0	China	390.0
2.20	Cost to import	30	1,047.0	Singapore	367.0
2.21	Cost of enforcing contracts	25	22.7	China	8.8
2.22	Cost of closing a business	5■	4.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	7	-3.9	Argentina	-8.5
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP			Kuwait	
3.04	Dollarization vulnerability indicator			Multiple (2)	
3.05A	External debt to GDP (developing economies)			Saudi Arabia	
3.05B	Net int'l investment position to GDP (adv. economies			Switzerland	
	Risk of systemic banking crisis	-,		OVVILEO I GITTA I I I I I I I I I I I I I I I I I I	
3.06	Activity restrictions for banks	8 ■	11 0	Indonesia	16.0
3.07	Entry restrictions for banks			Multiple (24)	
3.08	Capital restrictions for banks			Multiple (3)	
3.09	Official supervisory power			Multiple (3)	
3.10	Private monitoring of the banking industry			South Africa	
3.11	Frequency of banking crises			Multiple (11)	
3.12	Stability Index			India	
3.13	Cumulative real estate appreciation			Russian Federation	
				ridocidir i odorationii.	
3.14	Risk of sovereign debt crisis	20	17.0	M. Itial - (4.5)	20.0
3.14	Local currency sovereign rating  Foreign currency sovereign rating			Multiple (15)	
0.10	Totolgi odnorov sovologi rading			Watapio (10)	20.0
	4th pillar: Banks				
	Size index				
4.01	Size index	18	7.0	Hong Kong SAR	10.8
	Efficiency index				
4.02	Efficiency index	6	6.0	United Arab Emirates	6.8
4.03	Public ownership of banks			Multiple (11)	
4.00	·		I/a	widitiple (11/	
4.04	Financial information disclosure	04	0.0	D 1 :	F7.0
4.04	Public credit registry coverage			Belgium	
4.05	Private credit bureau coverage			Multiple (7)	
4.06	Credit Information Index	I <mark>=</mark>	6.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	4	6.9	France	31.0
5.02	IPO proceeds amount			Kazakhstan	
5.03	Share of world IPOs			Japan	14.2
	M&A activity				
5.04	M&A market share			United States	
5.05	M&A transaction value to GDP			United Kingdom	
5.06	Share of total number of M&A deals	3■	6.3	United States	33.2

# Japan Development Disadvantage

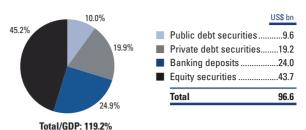
Financial Development Index in detail (c	cont'd.)	Development Advantage	■ Development <b>Disadvantage</b>
--	----------	-----------------------	-----------------------------------

	In   In   In   In   In   In   In   In	nsurance nsurance premiums, direct nsurance density leal growth of direct insurance premiums nsurance penetration. leal delative value-added of insurance. leacuritization lecuritization to GDP leacuritization to securitization deals leacuritization deals leacuritization to foreign exchange markets leacuritization deals		3,589.6 1.5 10.5 1.9 1.3 1.1	United States
Insurance premiums, direct	107	surance premiums, direct surance density seal growth of direct insurance premiums surance penetration selective value-added of insurance securitization securitization to GDP schare of total number of securitization deals th pillar: Financial markets spot foreign exchange markets surance premiums securitization securitization deals schare of total number of securitization deals surance securitization securitization deals schare of total number of securitization deals		3,589.6 1.5 10.5 1.9 1.3 1.1	United Kingdom       .6,466.         India       .52.6         United Kingdom       .16.8         Switzerland       .4.8         United States       .22.8         United States       .64.8
Reurance density	08   In:: 09   Rei 10   In:: 11   Rei 12   Se 13   Sh  6tt  Fc 502   Oi 203   Fc  104   In:: 105   In:: 106   In:: 108   In:: 109   In:: 109	nsurance density		3,589.6 1.5 10.5 1.9 1.3 1.1	United Kingdom       6,466.         India       52.6         United Kingdom       16.8         Switzerland       4.8         United States       22.8         United States       64.8
	Re	th pillar: Financial markets  pot foreign exchange turnover  butright forward foreign exchange turnover  butright forward foreign exchange turnover  coreign exchange swap turnover.			United Kingdom       6,466.         India       52.6         United Kingdom       16.8         Switzerland       4.8         United States       22.8         United States       64.8
10   Insurance penetration   1.1   1.2   1.2   1.3	10	nsurance penetration			United Kingdom
10   Insurance penetration	Re   Se	th pillar: Financial markets  pot foreign exchange markets  putright forward foreign exchange turnover  putright forward foreign exchange turnover  perivatives markets	14	I1.9  I1.3  I1.1	United Kingdom
Securitization   Securitization to GDP	Se   Se   Se   Se   Se   Se   Se   Se	th pillar: Financial markets  oreign exchange markets  pot foreign exchange turnover		I1.3 I1.1	United States
Securitization to GDP	Se   Se   Se   Se   Se   Se   Se   Se	th pillar: Financial markets coreign exchange markets coreign exchange turnover	4		United States64.
Securitization to GDP	Se   Se   Se   Se   Se   Se   Se   Se	th pillar: Financial markets coreign exchange markets coreign exchange turnover	4		United States64.
Sith pillar: Financial markets   Foreign exchange markets	6tl	th pillar: Financial markets foreign exchange markets spot foreign exchange turnover	4	I8.0	
Foreign exchange markets    Spot foreign exchange turnover	Fc 01 Sp 02 Oi 03 Fc Di 04 In: Fc 05 In:	poreign exchange markets spot foreign exchange turnover  Dutright forward foreign exchange turnover  oreign exchange swap turnover	3■		United Kinadom 26 0
Foreign exchange markets    Spot foreign exchange turnover	Fc 01 Sp 02 Oi 03 Fc Di 04 In: Fc 05 In:	poreign exchange markets spot foreign exchange turnover  Dutright forward foreign exchange turnover  oreign exchange swap turnover	3■		United Kingdom 26
Spot foreign exchange turnover	01 Sp 02 Or 03 Fc 04 In Fc 05 In	pot foreign exchange turnover	3■		United Kingdom 26
Outright forward foreign exchange turnover   3	02 Or 03 Fo 04 In Fo 05 In	Outright forward foreign exchange turnoveroreign exchange swap turnover	3■		
Poreign exchange swap turnover   6   5.2   United Kingdom   4.4	03 Fc 04 In: Fc 05 In: 06 In:	oreign exchange swap turnover			The second secon
Derivatives markets	)4 In: Fc )5 In: )6 In:	Perivatives markets			The second secon
Interest rate derivatives turnover: Forward rate agreements	)4 In: Fc )5 In: )6 In:			۷.۰	Officed Kingdofff42.
Forward rate agreements.	Fc 05 In: 06 In:	nterest rate derivatives turnover:			
10	)5 In: )6 In:				
10	06 In	8			· ·
Foreign exchange derivatives turnover: Currency swaps					•
Equity market development    Equity market turnover		·			
Equity market development  Equity market turnover					3
Equity market turnover	)8 Fc	oreign exchange derivatives turnover: Options	4	<b>I</b> 4.3	United Kingdom42.
Stock market capitalization to GDP		• •			
Bond market development   O   Private-sector bonds to GDP   C   A   A   A   A   A   A   A   A   A		• •			
Private-sector bonds to GDP	)5 St	tock market capitalization to GDP	15	l108.3	Hong Kong SAR713.
Public-sector bonds to GDP	В	ond market development			
7th pillar: Size, depth, and access         Size and depth         01       M2 to GDP         02       Private debt to GDP         03       Public debt to GDP         04       Bank deposits to GDP         05       Stock market capitalization to GDP         06       Stock market capitalization to GDP         07       Private credit to GDP         08       Stock market value added of financial institutions to GDP         09       Trivate credit to GDP         00       Private credit to GDP         01       Trivate credit to GDP         02       Trivate credit to GDP         03       Trivate credit to GDP         04       Trivate credit to GDP         05       Trivate credit to GDP         06       Trivate credit to GDP         07       Trivate credit to GDP         08       Trivate credit to GDP         09       Trivate credit to GDP         10       Trivate credit to GDP         14       Trivate credit to GDP         15       Trivate credit to GDP         16       Trivate credit to GDP         17       Trivate credit to GDP         18       Trivate credit to GDP         1	0 Pr	rivate-sector bonds to GDP	6	42.5	United States114.
7th pillar: Size, depth, and access         Size and depth         01       M2 to GDP       .5       .137.9       Hong Kong SAR       .25         02       Private debt to GDP       .21       .45.5       Netherlands       .21         03       Public debt to GDP       .33       .4.0       Austria	1 Pu	ublic-sector bonds to GDP	27	l4.0	France7.
Size and depth         01       M2 to GDP       .5       .137.9       Hong Kong SAR       .25         02       Private debt to GDP       .21       .45.5       Netherlands       .21         03       Public debt to GDP       .33       .4.0       Austria	2 In	nternational bonds to GDP	39	l6.4	Netherlands121.
M2 to GDP		th pillar: Size, depth, and access			
Private debt to GDP	Si	ize and depth			
93 Public debt to GDP	)1 M	/12 to GDP	5	<b>1</b> 137.9	Hong Kong SAR252.
D4       Bank deposits to GDP	)2 Pr	rivate debt to GDP	21	l45.5	Netherlands216.
05       Stock market capitalization to GDP       15       ■       108.3       Hong Kong SAR       71         06       Relative value-added of financial institutions to GDP       18       ■       4.4       Panama       .9         07       Private credit to GDP       17       ■       97.5       United States       .19         08       Stock market value traded to GDP       14       ■       .10.2       Saudi Arabia       .35         Access         09       Financial market sophistication       .27       ■       .5.2       Switzerland       .0         10       Venture capital availability       .27       ■       .3.9       United States       .0         11       Ease of access to credit       .27       ■       .5.0       Slovak Republic       .0         12       Ease of access to local equity market       .8       ■       .5.9       Sweden       .0         13       Bank branches       .26       ■       .10.0       Spain       .9	)3 Pu	ublic debt to GDP	33	l4.0	Austria7.0
06       Relative value-added of financial institutions to GDP       .18       .4.4       Panama       .9         07       Private credit to GDP       .17       .97.5       United States       .19         08       Stock market value traded to GDP       .14       .110.2       Saudi Arabia       .35         Access       .9       Financial market sophistication       .27       .5.2       Switzerland       .0         0       Venture capital availability       .27       .3.9       United States       .0         1       Ease of access to credit       .27       .5.0       Slovak Republic       .0         2       Ease of access to local equity market       .8       .5.9       Sweden       .0         3       Bank branches       .26       .10.0       Spain       .9	)4 Ba	ank deposits to GDP	2	189.4	Hong Kong SAR250.4
07       Private credit to GDP	)5 St	tock market capitalization to GDP	15	l108.3	Hong Kong SAR713.3
Access       Saudi Arabia       350         99 Financial market sophistication       27 ■ 5.2       Switzerland         10 Venture capital availability       27 ■ 3.9       United States         11 Ease of access to credit       27 ■ 5.0       Slovak Republic         12 Ease of access to local equity market       8 ■ 5.9       Sweden         13 Bank branches       26 ■ 10.0       Spain       99	06 Re	Relative value-added of financial institutions to GDP	18	l4.4	Panama9.
Access         09       Financial market sophistication       27       ■       .5.2       Switzerland       .0         10       Venture capital availability       27       ■       .3.9       United States       .0         1       Ease of access to credit       27       ■       .5.0       Slovak Republic       .0         2       Ease of access to local equity market       8       ■       .5.9       Sweden       .0         3       Bank branches       26       ■       10.0       Spain       .9	)7 Pr	rivate credit to GDP	17	l97.5	United States193.
9 Financial market sophistication	)8 St	tock market value traded to GDP	14	l110.2	Saudi Arabia356.:
Venture capital availability	A	Access			
1 Ease of access to credit	)9 Fi	inancial market sophistication	27	l5.2	Switzerland6.
2 Ease of access to local equity market	0 Ve	enture capital availability	27	l3.9	United States5.3
13 Bank branches	I1 Ea	ase of access to credit	27	l5.0	Slovak Republic5.5
	12 Ea	ase of access to local equity market	8	<b>1</b> 5.9	Sweden6.
4 Ease of access to loans	13 Ba	ank branches	26	l10.0	Spain95.9
	14 Ea	ase of access to loans	33	l3.7	Norway5.

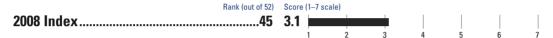
### **Key indicators**

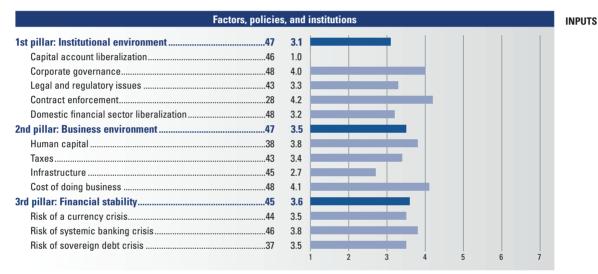
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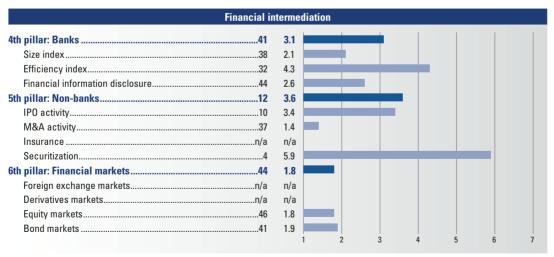
### Financial assets by major type, 2006



### **Financial Development Index 2008**











### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52		SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment					
	Capital account liberalization					
.01	Capital account liberalization	46		1.1	Multiple (15)	2.
	Corporate governance					
1.02	Extent of incentive-based compensation	45		4.0	France	5.
1.03	Efficacy of corporate boards				Sweden	6.
1.04	Reliance on professional management	46		4.3	Sweden	6.
1.05	Willingness to delegate	51		3.4	Sweden	6.
1.06	Strength of auditing and accounting standards	45		4.2	Germany	6.
1.07	Shareholder rights index	n/a		n/a	Multiple (8)	5.
1.08	Ethical behavior of firms	47		3.7	Finland	6.
1.09	Protection of minority shareholders' interests	48		3.7	Sweden	6.
	Legal and regulatory issues					
1.10	Burden of government regulation	27		3.2	Singapore	5.
1.11	Centralization of economic policymaking	29		3.3	Switzerland	5.
1.12	Regulation of security exchanges	51		3.4	Sweden	6.
1.13	Property rights	44		4.0	Germany	6.
1.14	Intellectual property protection	43		3.3	Germany	6.
1.15	Diversion of public funds	33		3.7	Finland	6.
1.16	Public trust of politicians	34		2.6	Singapore	6.
	Contract enforcement					
1.17	Effectiveness of law-making bodies	28		3.9	Singapore	6.
1.18	Judicial independence	46		2.8	Germany	6.
1.19	Irregular payments in judicial decisions	42		3.7	Finland	6.
1.20	Number of procedures to enforce a contract				Ireland	20.
1.21	Time to enforce a contract	3		.230.0	Singapore	120.
1.22	Cost of enforcing contracts	24		22.0	China	8.
1.23	Strength of investor protection	22		5.7	Singapore	9.
.24	Time to close a business	36		3.3	Ireland	0.
	Domestic financial sector liberalization					
.25	Domestic financial sector liberalization	48		2.0	Multiple (34)	1.
	2nd pillar: Business environment					
	Human capital					
2.01	Quality of management schools				France	
2.02	Quality of math and science education	36		3.9	Singapore	6.
2.02	Quality of math and science education	36	<b></b>	3.9 3.3	Singapore	6. 5.
2.02 2.03 2.04	Quality of math and science education	36 49 47	•	3.9 3.3 3.6	Singapore	6. 5.
2.02 2.03 2.04 2.05	Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor	36 49 47		3.9 3.3 3.6 3.7	Singapore Switzerland Switzerland Kuwait	6. 5. 6.
2.02	Quality of math and science education	36 49 47		3.9 3.3 3.6 3.7	Singapore	6. 5. 6.
2.02 2.03 2.04 2.05	Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor	36 49 47		3.9 3.3 3.6 3.7	Singapore Switzerland Switzerland Kuwait	6. 5. 6.
2.02 2.03 2.04 2.05	Ouality of math and science education	36 .49 47 47 24	• •	3.9 3.3 3.6 3.7 51.2	Singapore Switzerland Switzerland Kuwait	6. 6. 5. 93.
2.02 2.03 2.04 2.05 2.06	Quality of math and science education	3649474724	•	3.9 3.3 3.6 3.7 51.2	Singapore	
2.02 2.03 2.04 2.05 2.06	Quality of math and science education	364947472424	=	3.9 3.3 3.6 3.7 51.2 4.3	Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08	Quality of math and science education	364947472424	•	3.9 3.3 3.6 3.7 51.2 4.3	Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08	Quality of math and science education	3649472424	=	3.9 3.6 3.7 51.2 4.3 3.5 30.0	Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Quality of math and science education	36 49 47 24 24 47 30		3.9 3.6 3.7 51.2 4.3 3.5 30.0	Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Quality of math and science education	36 49 47 24 44 s47 30 39		3.9 3.6 3.7 51.2 4.3 3.5 30.0	Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Quality of math and science education	36 49 47 24 48 s47 30 39 48		3.9 3.6 3.7 51.2 4.3 3.5 30.0	Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09 2.10 2.11 2.12	Quality of math and science education	36 49 47 24 48 s47 30 39 48 46		3.9 3.6 3.7 51.2 4.3 3.5 30.0 3.4 5.0 8.7	Singapore	

(Cont'd.)

	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCOR
	2nd pillar: Business environment (cont'd.)	•		
16	Cost of doing business Cost of starting a business	24	7.6	Ireland0.
17	Cost of dealing with licenses			United Arab Emirates1.
18	Cost of dealing with licenses			Saudi Arabia0.
19	Cost to registering property			China390.
20	Cost to export			Singapore367.
20	Cost of enforcing contracts			China8.
22	Cost of closing a business			Multiple (4)1.
	3rd pillar: Financial stability			
	Risk of a currency crisis			
01	Change in real effective exchange rate			Argentina8.
02	External vulnerability indicator	43	98.0	Russian Federation15.
03	Current account balance to GDP			Kuwait46.
04	Dollarization vulnerability indicator	29	24.8	Multiple (2)0.
ōΑ	External debt to GDP (developing economies)	30	66.0	Saudi Arabia9.
БВ	Net int'l investment position to GDP (adv. economie	s)n/a	n/a	Switzerland121.
	Risk of systemic banking crisis			
06	Activity restrictions for banks			Indonesia16.
07	Entry restrictions for banks			Multiple (24)8.
80	Capital restrictions for banks			Multiple (3)9.
09	Official supervisory power	n/a	n/a	Multiple (3)14.
10	Private monitoring of the banking industry	n/a	n/a	South Africa9.
11	Frequency of banking crises	1■.	0.0	Multiple (11)0.
12	Stability Index	47	2.9	India7.
13	Cumulative real estate appreciation	n/a	n/a	Russian Federation68.
	Risk of sovereign debt crisis			
14	Local currency sovereign rating			Multiple (15)20.
15	Foreign currency sovereign rating	37■.	11.3	Multiple (15)20.
	4th pillar: Banks			
	Size index			
01	Size index	38■.	4.9	Hong Kong SAR10.
	Efficiency index			0
)2	Efficiency index	20	4 Ω	United Arab Emirates6.
)2 )3	Public ownership of banks			Multiple (11)
J	'	d	II/a	νιαιαριε (11/
14	Financial information disclosure	01 -	0.0	Polgium
)4 >=	Public credit registry coverage			Belgium
)5	Private credit bureau coverage			Multiple (7)100.
.06	Credit Information Index	31	4.0	Multiple (14)6.
	5th pillar: Non-banks			
	IPO activity			
)1	IPO market share	18■.	1.2	France31.
)2	IPO proceeds amount			Kazakhstan4.
)3	Share of world IPOs			Japan14.
	M&A activity			
04	M&A market share	42■.	0.1	United States44.
)5	M&A transaction value to GDP			United Kingdom14.
	Share of total number of M&A deals			United States33.

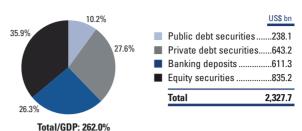
### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

.07 II08 III09 F .10 III11 F .12 S .13 S	Sth pillar: Non-banks (cont'd.) Insurance Insurance premiums, direct	n/a . n/a . n/a .		n/a	United States1,170,100. United Kingdom6,466. India52.		
07   III   08   III   09   F   10   III   11   F   12   S   13   S   6   6	nsurance premiums, direct	n/a . n/a . n/a .		n/a	United Kingdom6,466.		
07   III	nsurance premiums, direct	n/a . n/a . n/a .		n/a	United Kingdom6,466.		
08 III 09 F 10 III 11 F 12 S 13 S	nsurance density	n/a . n/a . n/a .		n/a	United Kingdom6,466.		
09 F 10 li 11 F 12 S 13 S	Real growth of direct insurance premiums	n/a . n/a .					
10 lil 11 F \$ 12 S 13 S	nsurance penetration	n/a .					
12 S 13 S	Securitization	n/a .		n/a	United Kingdom16		
12 S 13 S				n/a	Switzerland4.		
12 S 13 S							
13 S	300011020101110	2		17.6	United States22.		
	Share of total number of securitization deals				United States64.		
	6th pillar: Financial markets						
	Foreign exchange markets						
	Spot foreign exchange turnover	n/a		n/a	United Kingdom26.		
	Outright forward foreign exchange turnover				United Kingdom29.		
	Foreign exchange swap turnover				United Kingdom42.		
	Derivatives markets	.,		• •	<u> </u>		
	nterest rate derivatives turnover:						
	Forward rate agreements	n/a		n/a	United Kingdom45.		
	nterest rate derivatives turnover: Swaps				United Kingdom46.		
	nterest rate derivatives turnover: Options				United States42.		
	Foreign exchange derivatives turnover: Currency swap				United Kingdom47.		
	Foreign exchange derivatives turnover: Options				United Kingdom42.		
	Equity market development						
	Equity market turnover	42 .		14.9	Pakistan374.:		
	Stock market capitalization to GDP				Hong Kong SAR713.		
	Bond market development						
	Private-sector bonds to GDP	n/a		n/a	United States114.		
	Public-sector bonds to GDP	, .			France7.		
12 lı	nternational bonds to GDP	28		13.5	Netherlands121.		
7	7th pillar: Size, depth, and access						
S	Size and depth						
	V2 to GDP	39 .		25.0	Hong Kong SAR252.		
02 F	Private debt to GDP	23 .		27.3	Netherlands216.		
03 F	Public debt to GDP	49 .		1.7	Austria7.		
04 E	Bank deposits to GDP	45 .		22.7	Hong Kong SAR250.		
05 S	Stock market capitalization to GDP	42		30.3	Hong Kong SAR713.		
06 F	Relative value-added of financial institutions to GDP	n/a .		n/a	Panama9.		
	Private credit to GDP				United States193.		
08 S	Stock market value traded to GDP	47		1.9	Saudi Arabia356.		
P	Access						
09 F	inancial market sophistication	43		3.9	Switzerland6.		
10 V	Venture capital availability	33		3.4	United States5.		
	Ease of access to credit				Slovak Republic5.		
	Ease of access to local equity market				Sweden6.		
	Bank branches				Spain95.		
14 E	Ease of access to loans	34		3.6	Norway5.		

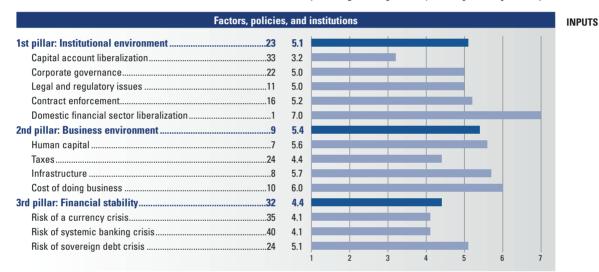
### **Key indicators**

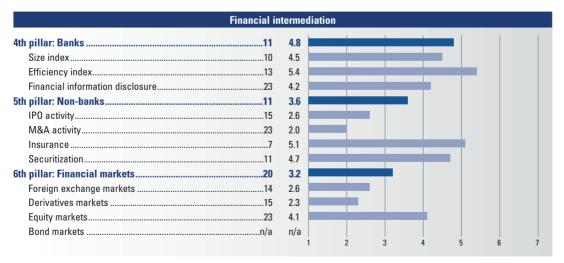
Population (millions), 2007	48.5
GDP (US\$ billions), 2007	957.1
GDP (current prices, US\$) per capita, 2007	.19,750.8
GDP (PPP) as share (%) of world total, 2007	1.85
Average annual rate of real GDP growth (%), 2003-0	74.43

#### Financial assets by major type, 2006



### **Financial Development Index 2008**









### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52		SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment					
	Capital account liberalization					
.01	Capital account liberalization	33		0.1	Multiple (15)	2.
	Corporate governance					
.02	Extent of incentive-based compensation	6		5.4	France	5.
.03	Efficacy of corporate boards				Sweden	6.
.04	Reliance on professional management				Sweden	6.
.05	Willingness to delegate	17		5.0	Sweden	6.
.06	Strength of auditing and accounting standards	23		5.4	Germany	6.
.07	Shareholder rights index	25		2.0	Multiple (8)	5.
.08	Ethical behavior of firms	20		5.2	Finland	6.
.09	Protection of minority shareholders' interests	23		5.1	Sweden	6.
	Legal and regulatory issues					
.10	Burden of government regulation	6		4.3	Singapore	5
.11	Centralization of economic policymaking				Switzerland	
.12	Regulation of security exchanges				Sweden	
.13	Property rights				Germany	
.14	Intellectual property protection				Germany	
.15	Diversion of public funds				Finland	
.16	Public trust of politicians				Singapore	
	·				J-p	
47	Contract enforcement	00	_	4.0	0:	0
.17	Effectiveness of law-making bodies				Singapore	
.18	Judicial independence				Germany	
1.19	Irregular payments in judicial decisions				Finland	
.20	Number of procedures to enforce a contract				Ireland	
.21	Time to enforce a contract				Singapore	
.22	Cost of enforcing contracts				China	
.23	Strength of investor protection				Singapore	
.24	Time to close a business	15		1.5	Ireland	0.
	Domestic financial sector liberalization					
				1.0	Multiple (34)	1
.25	Domestic financial sector liberalization	1				
.25		1				
.25	2nd pillar: Business environment	1				
	2nd pillar: Business environment Human capital				France	
2.01	2nd pillar: Business environment  Human capital  Quality of management schools	23		5.1	France	6.
2.01	2nd pillar: Business environment  Human capital  Quality of management schools	23		5.1 5.5	Singapore	6. 6.
2.01 2.02 2.03	2nd pillar: Business environment  Human capital  Quality of management schools	23 8 4		5.1 5.5 5.6	Singapore	6. 6.
2.01 2.02 2.03 2.04	2nd pillar: Business environment  Human capital  Quality of management schools	23 8 4 .13		5.1 5.5 5.6 5.3	Singapore	6. 6. 5.
2.01 2.02 2.03 2.04 2.05	2nd pillar: Business environment  Human capital  Quality of management schools	23 8 4 13 15		5.1 5.5 5.6 5.3 4.8	Singapore	6. 5. 6.
2.01 2.02 2.03 2.04 2.05	2nd pillar: Business environment  Human capital  Quality of management schools	23 8 4 13 15		5.1 5.5 5.6 5.3 4.8	Singapore Switzerland Switzerland Kuwait	6. 5. 6.
2.01 2.02 2.03 2.04 2.05 2.06	2nd pillar: Business environment  Human capital  Quality of management schools	23		5.1 5.5 5.6 5.3 4.8 92.6	Singapore Switzerland Switzerland Kuwait Finland	
2.01 2.02 2.03 2.04 2.05 2.06	2nd pillar: Business environment  Human capital  Quality of management schools	23		5.1 5.5 5.6 5.3 4.8 92.6	Singapore Switzerland Switzerland Kuwait Finland Sweden	
2.01 2.02 2.03 2.04 2.05 2.06	2nd pillar: Business environment  Human capital  Quality of management schools	23		5.1 5.5 5.6 5.3 4.8 92.6	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore	
2.01 2.02 2.03 2.04 2.05 2.06	2nd pillar: Business environment  Human capital  Quality of management schools	23		5.1 5.5 5.6 5.3 4.8 92.6	Singapore Switzerland Switzerland Kuwait Finland Sweden	
2.01 2.02 2.03 2.04 2.05 2.06	2nd pillar: Business environment  Human capital  Quality of management schools	23		5.1 5.5 5.6 5.3 4.8 92.6	Singapore Switzerland. Switzerland. Kuwait Finland.  Sweden Singapore Multiple (4)	
2.01 2.02 2.03 2.04 2.05 2.06	2nd pillar: Business environment  Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor  Tertiary enrollment  Taxes  Irregular payments in tax collection  Distortive effect on competition of taxes and subsidie Corporate tax rate	23		5.1 5.5 5.6 5.3 4.8 92.6 5.6 4.8	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	2nd pillar: Business environment  Human capital  Quality of management schools	23		5.1 5.5 5.6 5.3 4.8 92.6 5.6 4.8 27.5	Singapore Switzerland. Switzerland. Kuwait Finland.  Sweden Singapore Multiple (4)  Switzerland Switzerland	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.10 2.11 2.12	2nd pillar: Business environment  Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor  Tertiary enrollment  Taxes  Irregular payments in tax collection  Distortive effect on competition of taxes and subsidie Corporate tax rate  Infrastructure  Quality of overall infrastructure	23		5.1 5.5 5.6 5.3 4.8 92.6 5.6 4.8 27.5	Singapore Switzerland. Switzerland. Kuwait Finland.  Sweden Singapore Multiple (4)  Switzerland Switzerland Netherlands.	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09 2.10 2.11	2nd pillar: Business environment  Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor  Taxes  Irregular payments in tax collection  Distortive effect on competition of taxes and subsidie Corporate tax rate  Infrastructure  Quality of overall infrastructure  Quality of telephone/fax infrastructure	23		5.1 5.5 5.6 5.3 4.8 92.6 5.6 4.8 27.5	Singapore Switzerland. Switzerland. Kuwait Finland. Sweden Singapore Multiple (4) Switzerland Switzerland	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	2nd pillar: Business environment  Human capital  Quality of management schools	23		5.1 5.5 5.6 5.3 4.8 92.6 5.6 4.8 27.5	Singapore Switzerland. Switzerland. Kuwait Finland.  Sweden Singapore Multiple (4)  Switzerland Switzerland Netherlands.	

ши	ial Development Index in detail (con	. u.,	■ Developmen	t <b>Advantage</b> ■ Developm	ent <b>Disauvant</b>
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
.16	Cost of starting a business	34	16.9	Ireland	0.3
.17	Cost of dealing with licenses	36■	170.2	United Arab Emirate	s1.5
.18	Cost of registering property			Saudi Arabia	0.0
.19	Cost to export			China	390.0
.20	Cost to import	14■	745.0	Singapore	367.0
.21	Cost of enforcing contracts	5■	10.3	China	8.8
.22	Cost of closing a business	5	4.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
.01	Change in real effective exchange rate	40	4.5	Argentina	8.5
.02	External vulnerability indicator			Russian Federation	
.03	Current account balance to GDP			Kuwait	
.04	Dollarization vulnerability indicator			Multiple (2)	
5A	External debt to GDP (developing economies)			Saudi Arabia	
5B	Net int'l investment position to GDP (adv. econom			Switzerland	
	Risk of systemic banking crisis				
.06	Activity restrictions for banks			Indonesia	
.07	Entry restrictions for banks			Multiple (24)	
80	Capital restrictions for banks			Multiple (3)	
09	Official supervisory power			Multiple (3)	
10	Private monitoring of the banking industry			South Africa	
11	Frequency of banking crises			Multiple (11)	
12	Stability Index			India	
.13	Cumulative real estate appreciation	18■	25.9	Russian Federation	68.4
	Risk of sovereign debt crisis				
.14 .15	Local currency sovereign rating  Foreign currency sovereign rating			Multiple (15)	
	, , ,				
	4th pillar: Banks				
.01	Size index Size index	10	7.0	Hong Kong SAR	10.0
UI			7.0	Horig Korig SAN	10.0
02	Efficiency index Efficiency index	12	5.5	United Arab Emirate	60
02	Public ownership of banks			Multiple (11)	
03	·	20	10.0	iviuitipie (11)	0.0
	Financial information disclosure				
04	Public credit registry coverage			Belgium	57.2
05	Private credit bureau coverage			Multiple (7)	100.0
1.06	Credit Information Index	15■	5.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
01	IPO market share	11■	2.2	France	
.02	IPO proceeds amount	19	0.6	Kazakhstan	4.4
03	Share of world IPOs	14	1.8	Japan	14.2
	M&A activity				
04	M&A market share			United States	44.4
05	M&A transaction value to GDP			United Kingdom	14.6
.06	Share of total number of M&A deals	15	1 5	United States	22.2

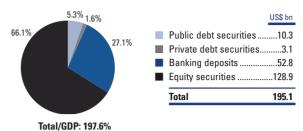
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	5th pillar: Non-banks (cont'd.)				
	Insurance				
.07	Insurance premiums, direct	7	■ 101 179 <i>4</i>	United States	170 100 6
.08	Insurance density			United States	
.09	Real growth of direct insurance premiums			India	
.10	Insurance penetration			United Kingdom	
.11	Relative value-added of insurance			Switzerland	
	Securitization				
10	Securitization Securitization to GDP	10	2.6	United States	22.0
.12 .13	Share of total number of securitization deals			United States United States	
. 10	Share of total number of Securitization deals			Officed States	04.3
	6th pillar: Financial markets				
	Foreign exchange markets				
.01	Spot foreign exchange turnover	11	■1.4	United Kingdom	26.6
.02	Outright forward foreign exchange turnover	13	■1.2	United Kingdom	29.9
.03	Foreign exchange swap turnover	18	■0.5	United Kingdom	42.0
	Derivatives markets				
.04	Interest rate derivatives turnover:				
	Forward rate agreements	22	<b>1</b> 0.1	United Kingdom	45.6
.05	Interest rate derivatives turnover: Swaps			United Kingdom	
.06	Interest rate derivatives turnover: Options			United States	
.07	Foreign exchange derivatives turnover: Currency swa			United Kingdom	
.08	Foreign exchange derivatives turnover: Options			United Kingdom	
.00				Officed Ringdom	
00	Equity market development	- /-	- /-	D 1: -	0746
.09	Equity market turnover			Pakistan	
.05	Stock market capitalization to GDP	21	86.1	Hong Kong SAR	/13.3
	Bond market development				
.10	Private-sector bonds to GDP			United States	114.0
.11	Public-sector bonds to GDP			France	
.12	International bonds to GDP	n/a	n/a	Netherlands	121.7
	7th pillar: Size, depth, and access				
	Size and depth				
.01	M2 to GDP	15	■69.8	Hong Kong SAR	252.3
.02	Private debt to GDP			Netherlands	
.03	Public debt to GDP			Austria	
.04	Bank deposits to GDP			Hong Kong SAR	
.05	Stock market capitalization to GDP			Hong Kong SAR	
.06	Relative value-added of financial institutions to GDP.			Panama	
.07	Private credit to GDP	9	■112.5	United States	
.08	Stock market value traded to GDP	6	■150.9	Saudi Arabia	356.2
	Access				
.09	Financial market sophistication	25	<b>5</b> 2	Switzerland	6.7
.09	Venture capital availability			United States	
.10	Ease of access to credit			Slovak Republic	
.11	Ease of access to local equity market			Sweden	
.12	Bank branches			Spain	
	Ease of access to loans			Norway	
.14					

### Kuwait

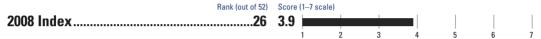
#### **Key indicators**

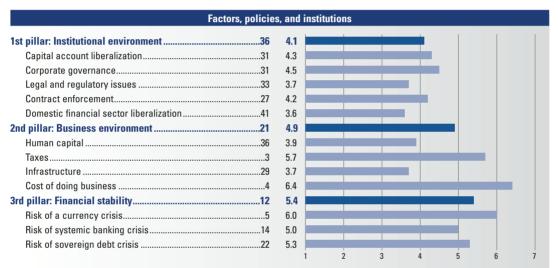
Population (millions), 2007	3.3
GDP (US\$ billions), 2007	111.3
GDP (current prices, US\$) per capita, 2007	.33,634.3
GDP (PPP) as share (%) of world total, 2007	0.20
Average annual rate of real GDP growth (%), 2003-0	710.05

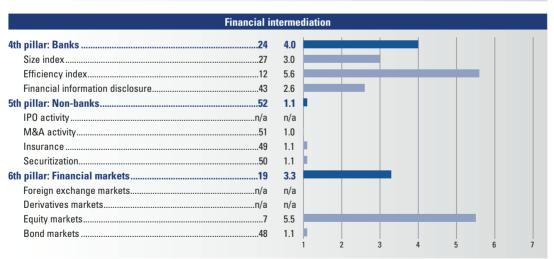
#### Financial assets by major type, 2006

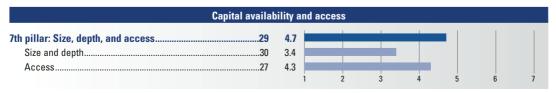


### **Financial Development Index 2008**











**INPUTS** 

## Kuwait

### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	S	CORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment					
	Capital account liberalization					
1.01	Capital account liberalization	31		1.2	Multiple (15)	2.6
	Corporate governance					
1.02	Extent of incentive-based compensation	28		4.7	France	5.7
1.03	Efficacy of corporate boards				Sweden	6.
1.04	Reliance on professional management	49		4.0	Sweden	6.4
1.05	Willingness to delegate	36		4.0	Sweden	6.3
1.06	Strength of auditing and accounting standards	24		5.3	Germany	6.3
1.07	Shareholder rights index	n/a		n/a	Multiple (8)	5.0
1.08	Ethical behavior of firms	24		4.7	Finland	6.6
1.09	Protection of minority shareholders' interests	38		4.4	Sweden	6.4
	Legal and regulatory issues					
1.10	Burden of government regulation	35		2.9	Singapore	5.3
1.11	Centralization of economic policymaking	49		2.1	Switzerland	5.9
1.12	Regulation of security exchanges	43		4.4	Sweden	6.3
1.13	Property rights	26		5.4	Germany	6.7
1.14	Intellectual property protection	34		3.6	Germany	6.!
1.15	Diversion of public funds	25		4.4	Finland	6.!
1.16	Public trust of politicians	22		3.3	Singapore	6.4
	Contract enforcement					
1.17	Effectiveness of law-making bodies	26		4.0	Singapore	6.
1.18	Judicial independence	21		5.2	Germany	6.!
1.19	Irregular payments in judicial decisions	27		5.0	Finland	6.8
1.20	Number of procedures to enforce a contract	50		.50.0	Ireland	20.0
1.21	Time to enforce a contract	33	5	566.0	Singapore	120.0
1.22	Cost of enforcing contracts	10		.13.3	China	8.8
1.23	Strength of investor protection	14		6.3	Singapore	9.3
1.24	Time to close a business	43		4.2	Ireland	0.4
	Domestic financial sector liberalization					
1.25	Domestic financial sector liberalization	41		2.0	Multiple (34)	1.0
	2nd pillar: Business environment					
	Human capital					
2.01	Quality of management schools	41		4.1	France	6.0
2.02	Quality of math and science education				Singapore	
2.03	Extent of staff training				Switzerland	
2.04	Local availability of research and training services				Switzerland	
2.05	Brain drain and ease of hiring foreign labor				Kuwait	
2.06	Tertiary enrollment	46		.17.6	Finland	93.2
	Taxes					
2.07	Irregular payments in tax collection	19		6.0	Sweden	6.8
2.08	Distortive effect on competition of taxes and subsidie	s32		4.1	Singapore	5.7
2.09	Corporate tax rate	1		0.0	Multiple (4)	0.0
	Infrastructure					
2.10	Quality of overall infrastructure	25		4.8	Switzerland	6.7
2.11	Quality of telephone/fax infrastructure				Switzerland	6.9
2.12	Internet users				Netherlands	
2.13	Broadband Internet subscribers				Netherlands	
2.10					Switzerland	
2.13	Telephone lines	3/		. 10.7		

(Cont'd.)

# Kuwait

1110	ial Development Index in detail (com	ťd.)	Development	t <b>Advantage</b> Developm	ent <b>Disadvan</b>
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
16	Cost of starting a business	10	1.6	Ireland	0.3
17	Cost of dealing with licenses			United Arab Emirates	
18	Cost of registering property			Saudi Arabia	
19	Cost to export			China	
20	Cost to import			Singapore	367.0
21	Cost of enforcing contracts			China	
22	Cost of closing a business	1■	1.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
01	Change in real effective exchange rate	n/a	n/a	Argentina	-8.5
02	External vulnerability indicator			Russian Federation	
03	Current account balance to GDP			Kuwait	
04	Dollarization vulnerability indicator			Multiple (2)	
5Α	External debt to GDP (developing economies)			Saudi Arabia	
5B	Net int'l investment position to GDP (adv. econom			Switzerland	
	Risk of systemic banking crisis				
06	Activity restrictions for banks	16■	10.0	Indonesia	16.0
07	Entry restrictions for banks	1	8.0	Multiple (24)	8.0
80	Capital restrictions for banks	1■	9.0	Multiple (3)	9.0
9	Official supervisory power	n/a	n/a	Multiple (3)	14.0
10	Private monitoring of the banking industry	n/a	n/a	South Africa	9.0
11	Frequency of banking crises	12	1.0	Multiple (11)	0.0
12	Stability Index	32	4.6	India	7.2
13	Cumulative real estate appreciation	n/a	n/a	Russian Federation	68.4
	Risk of sovereign debt crisis				
14	Local currency sovereign rating	22	16.0	Multiple (15)	20.0
15	Foreign currency sovereign rating	21■	16.0	Multiple (15)	20.0
	4th pillar: Banks				
	Size index				
01	Size index	27	6.0	Hong Kong SAR	10.8
	Efficiency index	_			
02	Efficiency index			United Arab Emirates	
03	Public ownership of banks	n/a	n/a	Multiple (11)	0.0
	Financial information disclosure				
)4	Public credit registry coverage	21	0.0	Belgium	57.2
)5	Private credit bureau coverage	32	14.5	Multiple (7)	100.0
06	Credit Information Index	31■	4.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
01	IPO market share	n/a	n/a	France	31.0
)2	IPO proceeds amount	n/a	n/a	Kazakhstan	4.4
03	Share of world IPOs			Japan	14.2
	M&A activity				
	M&A market share	51	0.0	United States	44.4
)4					
04 05	M&A transaction value to GDP		0.0	United Kingdom	14.6

Financial Development Index in detail (cont'd.)	■ Development <b>Advantage</b> ■ Development <b>Disadvantage</b>
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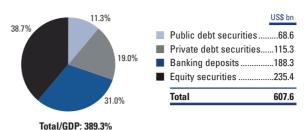
ınc	cial Development Index in detail (co	nt'd.)	Development	t Advantage Development Disadvantage
	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCORE
	5th pillar: Non-banks (cont'd.)			
	Insurance			
5.07	Insurance premiums, direct	49	628.2	United States1,170,100.6
80.	Insurance density	30■	227.2	United Kingdom6,466.7
5.09	Real growth of direct insurance premiums			India52.6
5.10	Insurance penetration			United Kingdom16.5
5.11	Relative value-added of insurance	44■	0.2	Switzerland4.8
	Securitization			
5.12	Securitization to GDP			United States22.9
5.13	Share of total number of securitization deals	49∎	0.0	United States64.9
	6th pillar: Financial markets			
	Foreign exchange markets			
.01	Spot foreign exchange turnover			United Kingdom26.6
5.02	Outright forward foreign exchange turnover			United Kingdom29.9
6.03	Foreign exchange swap turnover	n/a	n/a	United Kingdom42.0
	Derivatives markets			
5.04	Interest rate derivatives turnover:			
. 0.	Forward rate agreements			United Kingdom45.6
.05	Interest rate derivatives turnover: Swaps Interest rate derivatives turnover: Options			United Kingdom46.0 United States42.6
5.07	Foreign exchange derivatives turnover: Currency			United States47.6
3.08	Foreign exchange derivatives turnover: Options.			United Kingdom42.6
	Equity market development			
3.09	Equity market turnover			Pakistan
.05	·	5■	153.9	Hong Kong SAR713.3
	Bond market development	,	,	11 : 10: .
6.10 6.11	Private-sector bonds to GDP  Public-sector bonds to GDP			United States114.0 France7.0
.12	International bonds to GDP			Netherlands121.7
	7th pillar: Size, depth, and access			
	Size and depth			
.01	M2 to GDP			Hong Kong SAR252.3
.02	Private debt to GDP			Netherlands216.2
.03	Public debt to GDP  Bank deposits to GDP			Austria7.0 Hong Kong SAR250.4
.04	Stock market capitalization to GDP			Hong Kong SAR713.3
7.06	Relative value-added of financial institutions to G			Panama9.2
.07	Private credit to GDP			United States193.7
.08	Stock market value traded to GDP	12■	116.4	Saudi Arabia356.2
	Access			
.09	Financial market sophistication	33	4.6	Switzerland6.7
10	Venture capital availability	23■	4.0	United States5.3
.11	Ease of access to credit			Slovak Republic5.9
.12	Ease of access to local equity market			Sweden6.2
7.13	Bank branches			Spain
.14	Ease of access to loans	12■	4.6	Norway5.5

### Malaysia

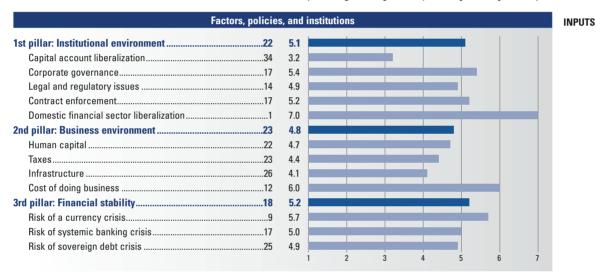
### **Key indicators**

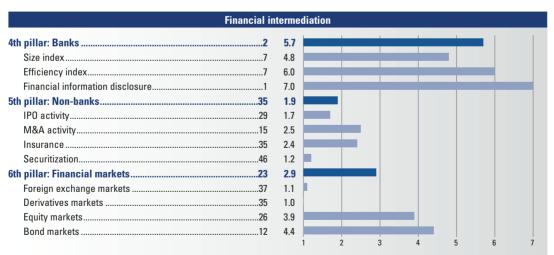
Population (millions), 2007	26.8
GDP (US\$ billions), 2007	186.5
GDP (current prices, US\$) per capita, 2007	6,947.6
GDP (PPP) as share (%) of world total, 2007	0.52
Average annual rate of real GDP growth (%), 2003–07	5.97

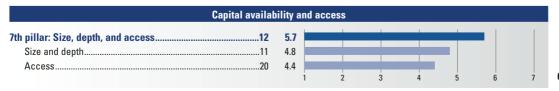
#### Financial assets by major type, 2006



### **Financial Development Index 2008**









(Cont'd.)

# Malaysia

### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment				
	Capital account liberalization				
.01	Capital account liberalization	34■	0.1	Multiple (15)	2.6
	Corporate governance				
.02	Extent of incentive-based compensation	14	5.1	France	5.7
.03	Efficacy of corporate boards			Sweden	6.1
.04	Reliance on professional management	17■	5.6	Sweden	6.4
.05	Willingness to delegate	15■	5.1	Sweden	6.3
.06	Strength of auditing and accounting standards			Germany	6.3
.07	Shareholder rights index	9■	4.0	Multiple (8)	5.0
.08	Ethical behavior of firms	19	5.3	Finland	6.6
.09	Protection of minority shareholders' interests	16■	5.5	Sweden	6.4
	Legal and regulatory issues				
.10	Burden of government regulation	4	4.6	Singapore	5.3
.11	Centralization of economic policymaking			Switzerland	
.12	Regulation of security exchanges			Sweden	6.3
.13	Property rights	18	5.7	Germany	6.7
.14	Intellectual property protection			Germany	6.5
.15	Diversion of public funds	19	4.9	Finland	6.5
.16	Public trust of politicians	11■	4.6	Singapore	6.4
	Contract enforcement				
.17	Effectiveness of law-making bodies	3	5.4	Singapore	6.1
.17	Judicial independence			Germany	
.19	Irregular payments in judicial decisions			Finland	
.20	Number of procedures to enforce a contract			Ireland	
.21	Time to enforce a contract			Singapore	
.22	Cost of enforcing contracts			China	
.23	Strength of investor protection			Singapore	
.24	Time to close a business			Ireland	
			*		
.25	Domestic financial sector liberalization  Domestic financial sector liberalization	1 -	1.0	Multiple (34)	1.0
.20	Domestic imancial sector liberalization	······	1.0	Widitiple (54)	
	2nd pillar: Business environment				
	Human capital				
.01	Quality of management schools	20	5.2	France	6.0
.02	Quality of math and science education	10■	5.4	Singapore	6.3
00	Extent of staff training			Switzerland	
.03	Local availability of research and training services	19	5.0	Switzerland	6.0
				Kuwait	5.8
.04	Brain drain and ease of hiring foreign labor	13■	4.9	Kuvvait	
.04 .05	Brain drain and ease of hiring foreign labor Tertiary enrollment			Finland	93.2
.04					93.2
.03 .04 .05 .06	Tertiary enrollment	40	28.6		
.04 .05 .06	Tertiary enrollment	26	28.6	Finland	6.8
.04 .05 .06	Taxes Irregular payments in tax collection	26 <b>1</b> 0 <b>1</b>	28.6 5.5 4.8	Finland	6.8
.04 .05 .06	Taxes Irregular payments in tax collection	26 <b>1</b> 0 <b>1</b>	28.6 5.5 4.8	Sweden	6.8
.04 .05 .06 .07 .08	Taxes Irregular payments in tax collection Distortive effect on competition of taxes and subsic Corporate tax rate	26 <b>l</b> dies10 <b>s</b>		Sweden Singapore Multiple (4)	6.8 5.7 0.0
.04 .05 .06 .07 .08 .09	Taxes Irregular payments in tax collection Distortive effect on competition of taxes and subsic Corporate tax rate Infrastructure Quality of overall infrastructure		28.6 5.5 4.8 27.0	Sweden	6.8 5.7 0.0
04 05 06 07 08 09	Taxes Irregular payments in tax collection		28.6 5.5 27.0 27.0	Sweden	6.8 
.04 .05 .06 .07 .08 .09	Taxes Irregular payments in tax collection		28.6 5.5 27.0 5.7 6.1 54.2	Sweden	
04 05 06 07 08 09	Taxes Irregular payments in tax collection			Sweden	6.8 0.0 6.7 6.9 85.7
.04 .05 .06 .07 .08 .09	Taxes Irregular payments in tax collection			Sweden	

# Malaysia

Financial Development Index in detail (cont'd.)	■ Development <b>Advantage</b> ■ Development <b>Disadvantage</b>
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	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of starting a business	36■	18.1	Ireland	0.3
2.17	Cost of dealing with licenses	2■	10.0	United Arab Emirates	1.5
2.18	Cost of registering property	16■	2.4	Saudi Arabia	0.0
2.19	Cost to export	4	432.0	China	390.0
2.20	Cost to import	2	385.0	Singapore	367.0
2.21	Cost of enforcing contracts	35	27.5	China	8.8
2.22	Cost of closing a business	26■	15.0	Multiple (4)	1.0
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	10	2.1	Argentina	8.5
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP			Kuwait	46.1
3.04	Dollarization vulnerability indicator			Multiple (2)	
3.05A	External debt to GDP (developing economies)			Saudi Arabia	
3.05B	Net int'l investment position to GDP (adv. economi			Switzerland	
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks		11 0	Indonesia	16.0
3.07	Entry restrictions for banks			Multiple (24)	
3.08	Capital restrictions for banks			Multiple (3)	
3.09	Official supervisory power			Multiple (3)	
3.10	Private monitoring of the banking industry			South Africa	
3.11	Frequency of banking crises			Multiple (11)	
3.12	Stability Index			India	
3.13	Cumulative real estate appreciation	6■	4.3	Russian Federation	68.4
	Risk of sovereign debt crisis				
3.14	Local currency sovereign rating	22	16.0	Multiple (15)	20.0
3.15	Foreign currency sovereign rating			Multiple (15)	
	4th pillar: Banks				
4.01	Size index Size index	7	0.2	Hana Kana CAD	10.0
4.01	Size index		8.2	Hong Kong SAR	10.8
	Efficiency index				
4.02	Efficiency index			United Arab Emirates	
4.03	Public ownership of banks	1■	0.0	Multiple (11)	0.0
	Financial information disclosure				
4.04	Public credit registry coverage	4	44.5	Belgium	57.2
4.05	Private credit bureau coverage	n/a	n/a	Multiple (7)	100.0
4.06	Credit Information Index	1■	6.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO activity IPO market share	39	O 1	France	31.0
5.01 5.02	IPO market share			France	
5.01 5.02 5.03	•	40	0.2	Kazakhstan	4.4
5.02	IPO market share IPO proceeds amount Share of world IPOs	40	0.2		4.4
5.02 5.03	IPO market share IPO proceeds amount Share of world IPOs  M&A activity	40 <b>=</b>	0.2	Kazakhstan Japan	14.2
<ul><li>5.02</li><li>5.03</li><li>5.04</li></ul>	IPO market share IPO proceeds amount Share of world IPOs  M&A activity M&A market share	40 <b>1</b> 0 <b>1</b> 0 <b>1</b> 25 <b>1</b>	0.2	KazakhstanJapan	4.4
5.02 5.03	IPO market share IPO proceeds amount Share of world IPOs  M&A activity	40	0.2 2.8 0.3 6.1	Kazakhstan Japan	4.4

# Malaysia

#### **Financial Development Index in detail** (cont'd.)

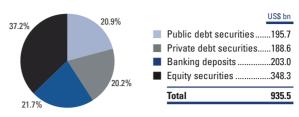
	INDICATOR	RANK/52		SCORE	BEST PERFORMER	SCORE
	5th pillar: Non-banks (cont'd.)					
	Insurance					
.07	Insurance Insurance premiums, direct	20	-	7 526 7	United Ctates	1 170 100 6
					United States	
.08	Insurance density				United Kingdom	
.09	Real growth of direct insurance premiums				India	
.10	Insurance penetration				United Kingdom	
.11	Relative value-added of insurance	21		1.1	Switzerland	4.8
	Securitization					
.12	Securitization to GDP	45		0.4	United States	22.9
.13	Share of total number of securitization deals	40		0.0	United States	64.9
	6th pillar: Financial markets					
	Foreign exchange markets					
.01	Spot foreign exchange turnover	32		0.1	United Kingdom	26.6
02	Outright forward foreign exchange turnover	33		0.1	United Kingdom	29.9
03	Foreign exchange swap turnover	32		0.1	United Kingdom	42.0
	Derivatives markets					
04	Interest rate derivatives turnover:					
0 1	Forward rate agreements	27		0.0	United Kingdom	45.6
05	Interest rate derivatives turnover: Swaps				United Kingdom	
06	Interest rate derivatives turnover: Options				United States	
07	Foreign exchange derivatives turnover: Currency swa				United States	
07					_	
00	Foreign exchange derivatives turnover: Options			0.0	United Kingdom	42.0
	Equity market development					
09	Equity market turnover	37		26.6	Pakistan	374.3
05	Stock market capitalization to GDP	9		133.9	Hong Kong SAR	713.3
	Bond market development					
10	Private-sector bonds to GDP	3		52.4	United States	114.0
.11	Public-sector bonds to GDP	15		5.2	France	7.0
.12	International bonds to GDP	23		22.4	Netherlands	121.7
	7th pillar: Size, depth, and access					
	Size and depth					
01	M2 to GDP	6		124.8	Hong Kong SAR	252.3
02	Private debt to GDP	14		77.4	Netherlands	216.2
03	Public debt to GDP	24		4.9	Austria	7.0
04	Bank deposits to GDP	10		110.2	Hong Kong SAR	250.4
05	Stock market capitalization to GDP	9		133.9	Hong Kong SAR	713.3
06	Relative value-added of financial institutions to GDP	38		2.5	Panama	9.2
07	Private credit to GDP	12		110.2	United States	193.7
80	Stock market value traded to GDP	29		44.9	Saudi Arabia	356.2
	Access					
09	Financial market sophistication	23		5.4	Switzerland	6.7
10	Venture capital availability				United States	5.3
11	Ease of access to credit				Slovak Republic	
12	Ease of access to local equity market				Sweden	
.13	Bank branches				Spain	
.14	Ease of access to loans				Norway	
					, , , , , , , , , , , , , , , , , , , ,	

### Mexico

#### **Key indicators**

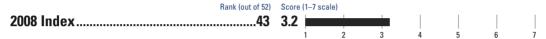
Population (millions), 2007	105.4
GDP (US\$ billions), 2007	893.4
GDP (current prices, US\$) per capita, 20078,	478.7
GDP (PPP) as share (%) of world total, 2007	2.07
Average annual rate of real GDP growth (%) 2003–07	3 31

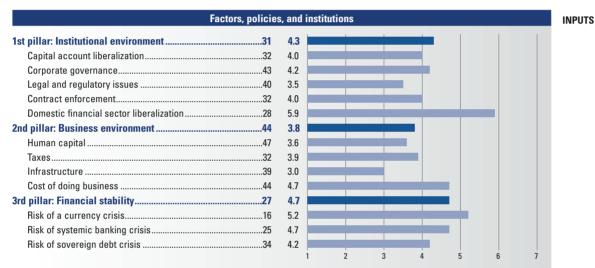
#### Financial assets by major type, 2006

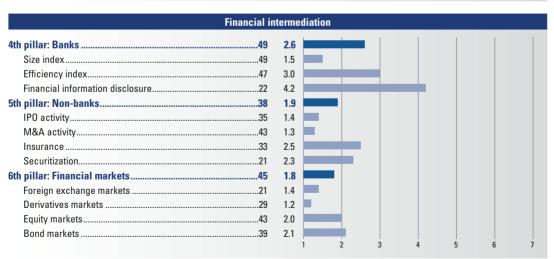


Total/GDP: 111.4%

### **Financial Development Index 2008**











## Mexico

### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	1et nillen Institutional anviscourset				
	1st pillar: Institutional environment				
	Capital account liberalization			NA 1:: 1 (4E)	
01	Capital account liberalization	32■.	1.2	Multiple (15)	2.
	Corporate governance				
02	Extent of incentive-based compensation			France	
03	Efficacy of corporate boards			Sweden	
04	Reliance on professional management			Sweden	
05 06	Willingness to delegate			Sweden	
)O	Strength of auditing and accounting standards			Multiple (8)	
37	Ethical behavior of firms			Finland	
09	Protection of minority shareholders' interests			Sweden	
	,			0110d011	
10	Legal and regulatory issues	40	0.0	C:	_
10	Burden of government regulation			Singapore Switzerland	
11 12	Centralization of economic policymaking Regulation of security exchanges			Switzerland	
13	Property rights			Germany	
14	Intellectual property protection			Germany	
15	Diversion of public funds			Finland	
16	Public trust of politicians			Singapore	
	·			0gaporo	
17	Contract enforcement	47	2.4	Singapore	6
18	Effectiveness of law-making bodies  Judicial independence			Germany	
18	Irregular payments in judicial decisions			Finland	
20	Number of procedures to enforce a contract			Ireland	
20	Time to enforce a contract			Singapore	
22	Cost of enforcing contracts			China	
23	Strength of investor protection			Singapore	
24	Time to close a business			Ireland	
	Domestic financial sector liberalization				
25	Domestic financial sector liberalization	28■.	1.0	Multiple (34)	1.
	2nd pillar: Business environment				
	Human capital				
01	Quality of management schools	31■.	4.4	France	6.
)2	Quality of math and science education	49	2.8	Singapore	6
03	Extent of staff training			Switzerland	
)4	Local availability of research and training services	36■.	4.1	Switzerland	
)5	Brain drain and ease of hiring foreign labor			Kuwait	
06	Tertiary enrollment	42	26.1	Finland	93.
	Taxes				
07	Irregular payments in tax collection	34	4.9	Sweden	6
	Distortive effect on competition of taxes and subsidies	334	4.0	Singapore	5.
78	Corporate tax rate	25■.	28.0	Multiple (4)	0.
	Infrastructure				
		37	3.4	Switzerland	6.
09	Quality of overall infrastructure		5.7	Switzerland	6.
09 10	Quality of overall infrastructure  Quality of telephone/fax infrastructure	3/■.		Netherlands	05
08 09 10 11	•		19.0	Netherlands	00.
09 10 11	Quality of telephone/fax infrastructure	35■.		Netherlands	
10 11 12	Quality of telephone/fax infrastructure	35■. 34■.	2.8		31.

(Cont'd.)

### Mexico

#### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage INDICATOR BEST PERFORMER 2nd pillar: Business environment (cont'd.) Cost of doing business 2.16 Ireland......0.3 United Arab Emirates ......1.5 2.17 Saudi Arabia ......0.0 2.18 China ......390.0 Singapore ......367.0 2.20 2.21 Multiple (4) ......1.0 2.22 3rd pillar: Financial stability Risk of a currency crisis 3.01 Argentina .....-8.5 3.02 Russian Federation......15.4 3.03 Current account balance to GDP......33 ....■.....-0.2 Kuwait ......46.1 Multiple (2) ......0.0 Saudi Arabia ......9.6 3.05A 3.05B Net int'l investment position to GDP (adv. economies) ......n/a ......n/a Switzerland......121.3 Risk of systemic banking crisis 3.06 Indonesia......16.0 3.07 Multiple (24) ......8.0 3.08 Multiple (3) ......9.0 Multiple (3) .....14.0 3.09 South Africa.....9.0 3.10 3.11 Multiple (11) ......0.0 3.12 Cumulative real estate appreciation ......n/a .....n/a Russian Federation.....-68.4 3 13 Risk of sovereign debt crisis 3.14 Multiple (15) .....20.0 Multiple (15) ......20.0 3.15 4th pillar: Banks Size index 4.01 ......49 ........4.2 Hong Kong SAR .....10.8 Size index Efficiency index United Arab Emirates ......6.8 4.02 Public ownership of banks ......n/a Multiple (11) ......0.0 4.03 Financial information disclosure 4.04 Belgium ......57.2 Multiple (7) ......100.0 4.05 4.06 Multiple (14) ......6.0 5th pillar: Non-banks IPO activity 5.01 France......31.0 Kazakhstan ......4.4 Japan .....14.2 M&A activity 5.04 United States ......44.4 5.05 United Kingdom .....14.6 5.06 United States ......33.2

### Mexico

SCORE

#### Financial Development Index in detail (cont'd.)

5th pillar: Non-banks (cont'd.)

INDICATOR

Insurance

Securitization

5.07

5.09

5.12

5.13

7.05

6.10

6 11

6.12

■ Development Advantage ■ Development Disadvantage BEST PERFORMER United States ......1,170,100.6 United Kingdom ......6,466.7 India.....52.6 United Kingdom ......16.5 Switzerland......4.8 United States ......22.9 United States ......64.9

#### 6th pillar: Financial markets Foreign eychange markets

	r oroigir oxonango markoto	
6.01	Spot foreign exchange turnover21	United Kingdom26.6
6.02	Outright forward foreign exchange turnover31 31	United Kingdom29.9
6.03	Foreign exchange swap turnover	United Kingdom42.0
	Derivatives markets	
6.04	Interest rate derivatives turnover:	
	Forward rate agreements	United Kingdom45.6

6.05 6.06 Foreign exchange derivatives turnover: Currency swaps .....33 .......................0.0 6.07 6.08 **Equity market development** 6.09

**Bond market development** 

### 7th pillar: Size, depth, and access

### Size and depth

7.01	M2 to GDP	38	■26.4
7.02	Private debt to GDP	26	22.5
7.03	Public debt to GDP	42	2.9
7.04	Bank deposits to GDP	48	20.3
7.05	Stock market capitalization to GDP	38	33.5
7.06	Relative value-added of financial institutions to GDP	39	2.3
7.07	Private credit to GDP	44	19.5
7.08	Stock market value traded to GDP	/11	9.5
7.00	Stock market value traded to GDI		
7.00	Access		
7.09			
	Access	34	4.6
7.09	Access Financial market sophistication	34	4.6
7.09 7.10	Access Financial market sophistication Venture capital availability	34 49 38	<b>.</b>
7.09 7.10 7.11	Access Financial market sophistication Venture capital availability Ease of access to credit	34 49 38 42	

Hong Kong SAR .....252.3 Netherlands ......216.2 Austria ......7.0 Hong Kong SAR .....250.4 Hong Kong SAR ......713.3 Panama.....9.2 United States ......193.7 Saudi Arabia ......356.2

United Kingdom ......46.0

United States ......42.6

United Kingdom ......47.6

United Kingdom ......42.6

Pakistan......374.3

Hong Kong SAR .....713.3

United States ......114.0

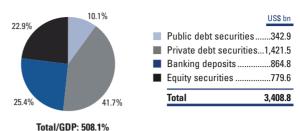
France......7.0 Netherlands ......121.7

Switzerland......6.7 United States ......5.3 Slovak Republic ......5.9 Sweden ......6.2 Spain......95.9 Norway......5.5

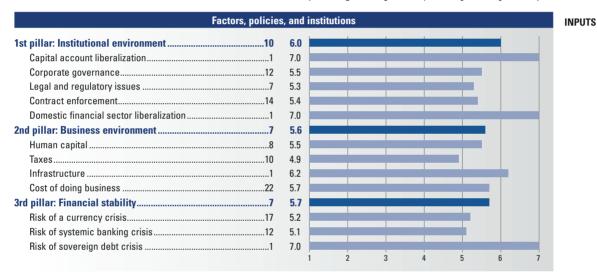
#### **Key indicators**

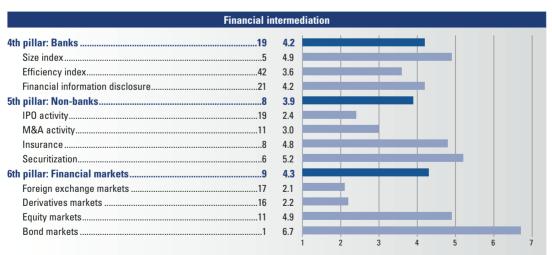
#### 

#### Financial assets by major type, 2006



### **Financial Development Index 2008**









### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

		RANK/52		SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment					
	Capital account liberalization		_			
.01	Capital account liberalization	1		2.6	Multiple (15)	2.6
	Corporate governance					
.02	Extent of incentive-based compensation				France	
.03	Efficacy of corporate boards				Sweden	
.04	Reliance on professional management				Sweden	6.4
.05	Willingness to delegate	3		5.7	Sweden	6.3
.06	Strength of auditing and accounting standards	15		6.0	Germany	6.3
.07	Shareholder rights index				Multiple (8)	
.08	Ethical behavior of firms	6		6.1	Finland	6.6
.09	Protection of minority shareholders' interests	14		5.6	Sweden	6.4
	Legal and regulatory issues					
.10	Burden of government regulation	24		3.2	Singapore	5.3
.11	Centralization of economic policymaking				Switzerland	5.9
.12	Regulation of security exchanges				Sweden	6.3
.13	Property rights				Germany	6.7
.14	Intellectual property protection				Germany	6.5
.15	Diversion of public funds	6		6.1	Finland	6.5
.16	Public trust of politicians				Singapore	6.4
	Contract enforcement					
.17	Effectiveness of law-making bodies	11	-	4 Ω	Singapore	6.1
.17	Judicial independence				Germany	
.10	·				Finland	
.19	Irregular payments in judicial decisions				Ireland	
	Number of procedures to enforce a contract					
.21	Time to enforce a contract				Singapore	
.22	Cost of enforcing contracts				China	
.23	Strength of investor protection				Singapore	
.24	Time to close a business				Ireland	0.4
	Domestic financial sector liberalization					
.25	Domestic financial sector liberalization	1		1.0	Multiple (34)	1.0
	2nd pillar: Business environment					
	Human capital					
.01	Quality of management schools	10		5.6	France	6.0
.02	Quality of math and science education				Singapore	
.02	Extent of staff training				Switzerland	
	Local availability of research and training services				Switzerland	
$\Omega A$					Kuwait	
	Brain drain and ease of hiring foreign labor				Finland	
05	Tertiany enrollment		=	55.6	T IIIIdiid	
.05	Tertiary enrollment					
.05 .06	Taxes		_		0 1	_
.05 .06 .07	Taxes Irregular payments in tax collection	11			Sweden	
.05 .06 .07	Taxes Irregular payments in tax collection Distortive effect on competition of taxes and subsidie	11 s6		5.1	Singapore	5.7
.05 .06 .07	Taxes Irregular payments in tax collection	11 s6		5.1		5.7
.05 .06 .07	Taxes Irregular payments in tax collection Distortive effect on competition of taxes and subsidie	11 s6		5.1	Singapore	5.7
.05 .06 .07 .08 .09	Taxes Irregular payments in tax collection Distortive effect on competition of taxes and subsidie Corporate tax rate	11 s6 20		5.1 26.0	Singapore	5.7 0.0
.05 .06 .07 .08 .09	Taxes Irregular payments in tax collection Distortive effect on competition of taxes and subsidie Corporate tax rate Infrastructure	11 s6 20		5.1 26.0	SingaporeMultiple (4)	5.7 0.0
.04 .05 .06 .07 .08 .09	Taxes Irregular payments in tax collection Distortive effect on competition of taxes and subsidie Corporate tax rate Infrastructure Quality of overall infrastructure	11 s6 20 14		5.1 26.0 5.8 6.7	Singapore	5.7 0.0 6.7
.05 .06 .07 .08 .09	Taxes Irregular payments in tax collection	11		5.1 26.0 5.8 6.7 85.7	Singapore	5.7 0.0 6.7 6.9
.05 .06 .07 .08 .09 .10 .11	Taxes Irregular payments in tax collection	11 s6		5.1 26.0 5.8 6.7 85.7 31.8	Singapore	

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
16	Cost of starting a business	21	6.0	Ireland	0.3
17	Cost of dealing with licenses			United Arab Emirates	
18	Cost of registering property			Saudi Arabia	
19	Cost to export			China	
20	Cost to import			Singapore	
21	Cost of enforcing contracts		,	China	
22	Cost of closing a business	5■.	4.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
)1	Change in real effective exchange rate	28	1 Q	Argentina	.0.
)2	External vulnerability indicator			Russian Federation	
)3	Current account balance to GDP			Kuwait	
)4	Dollarization vulnerability indicator			Multiple (2)	
Α	External debt to GDP (developing economies)			Saudi Arabia	
В	Net int'l investment position to GDP (adv. economies			Switzerland	
	Risk of systemic banking crisis				
)6	Activity restrictions for banks	35 ■	6.0	Indonesia	16.0
17	Entry restrictions for banks			Multiple (24)	
17	Capital restrictions for banks			Multiple (3)	
19	Official supervisory power			Multiple (3)	
0	Private monitoring of the banking industry			South Africa	
1	Frequency of banking crises			Multiple (11)	
2	Stability Index			India	
3	Cumulative real estate appreciation			Russian Federation	
	Risk of sovereign debt crisis				
4	Local currency sovereign rating	1	20.0	Multiple (15)	20.0
5	Foreign currency sovereign rating			Multiple (15)	
	4th pillar: Banks				
	Size index		0.0		
)1	Size index	5■.	8.3	Hong Kong SAR	10.8
	Efficiency index				
12	Efficiency index			United Arab Emirates	
13	Public ownership of banks	16■.	4.5	Multiple (11)	0.0
	Financial information disclosure				
14	Public credit registry coverage	21■.	0.0	Belgium	57.2
)5	Private credit bureau coverage	11■.	78.1	Multiple (7)	100.0
6	Credit Information Index	15■.	5.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
11	IPO market share	14■.	1.7	France	31.0
)2	IPO proceeds amount			Kazakhstan	
3	Share of world IPOs			Japan	
	M&A activity				
)4	M&A market share	11	1.6	United States	44.4
)5	M&A transaction value to GDP			United Kingdom	
)6	Share of total number of M&A deals			United States	

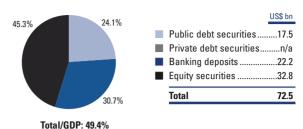
### Financial Development Index in detail (cont'd.) Development Advantage Development Disadvantage Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCOR
	5th pillar: Non-banks (cont'd.)			
	Insurance			
07	Insurance premiums, direct	11	l62,669.1	United States1,170,100.
08	Insurance density	6	I3,828.8	United Kingdom6,466.
09	Real growth of direct insurance premiums	23■	l4.8	India52.
10	Insurance penetration	9	<b>I</b> 9.4	United Kingdom16.
11	Relative value-added of insurance	12	l1.9	Switzerland4.
	Securitization			
12	Securitization to GDP	4	I 13.4	United States22.
13	Share of total number of securitization deals			United States64.
	6th pillar: Financial markets			
	Foreign exchange markets			
01	Spot foreign exchange turnover	26	l0.2	United Kingdom26.
02	Outright forward foreign exchange turnover			United Kingdom29.
03	Foreign exchange swap turnover	16	l0.7	United Kingdom42.
	Derivatives markets			
04	Interest rate derivatives turnover:			
	Forward rate agreements	16■	l0.3	United Kingdom45.
05	Interest rate derivatives turnover: Swaps	8■	I1.6	United Kingdom46.
06	Interest rate derivatives turnover: Options			United States42.
07	Foreign exchange derivatives turnover: Currency swa	ps12	l1.1	United Kingdom47.
80	Foreign exchange derivatives turnover: Options			United Kingdom42.
	Equity market development			
09	Equity market turnover	14	l111.3	Pakistan374.
05	Stock market capitalization to GDP			Hong Kong SAR713.
	Bond market development			
10	Private-sector bonds to GDP	2	l 69.5	United States114.
11	Public-sector bonds to GDP			France7.
12	International bonds to GDP	1■	I121.7	Netherlands121.
	7th pillar: Size, depth, and access			
	Size and depth			
01	M2 to GDP	n/a	n/a	Hong Kong SAR252.
02	Private debt to GDP	1	<b>I</b> 216.2	Netherlands216.
03	Public debt to GDP	15	l5.6	Austria7.
04	Bank deposits to GDP	8	<b>I</b> 118.5	Hong Kong SAR250.
05	Stock market capitalization to GDP	18	l102.9	Hong Kong SAR713.
06	Relative value-added of financial institutions to GDP	15	l4.6	Panama9.
07	Private credit to GDP	3■	<b>I</b> 168.6	United States193.
80	Stock market value traded to GDP	11	l121.3	Saudi Arabia356.
	Access			
09	Financial market sophistication	9	<b>I</b> 6.2	Switzerland6.
10	Venture capital availability	3	<b>I</b> 5.2	United States5.
11	Ease of access to credit	19	l5.1	Slovak Republic5.
12	Ease of access to local equity market	17	l5.6	Sweden6.
13	Bank branches	9	I34.2	Spain95.
14	Ease of access to loans	4	I5.3	Norway5.

#### **Key indicators**

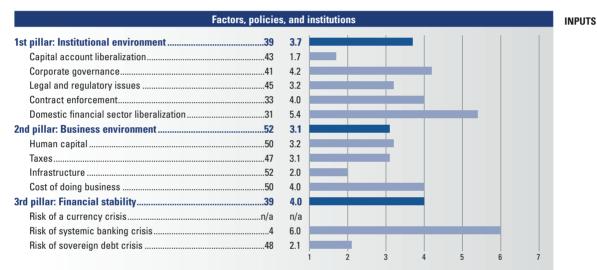
Population (millions), 2007	143.9
GDP (US\$ billions), 2007	166.8
GDP (current prices, US\$) per capita, 2007	1,159.4
GDP (PPP) as share (%) of world total, 2007	0.39
Average annual rate of real GDP growth (%), 2003-07.	7.78

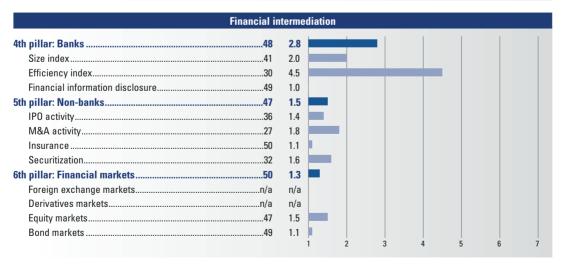
#### Financial assets by major type, 2006



#### **Financial Development Index 2008**











### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR			BEST PERFORMER	
	1st pillar: Institutional environment				
	Capital account liberalization				
1	Capital account liberalization	43	 0.4	Multiple (15)	2.
	Corporate governance				
2	Extent of incentive-based compensation	51	 3.6	France	5.
3	Efficacy of corporate boards	28	 5.0	Sweden	6.
4	Reliance on professional management			Sweden	6
5	Willingness to delegate	43	 3.8	Sweden	6.
6	Strength of auditing and accounting standards	46	 4.1	Germany	6.
7	Shareholder rights index	17	 3.0	Multiple (8)	
8	Ethical behavior of firms			Finland	
9	Protection of minority shareholders' interests	40	 4.3	Sweden	6.
	Legal and regulatory issues				
0	Burden of government regulation	21	 3.3	Singapore	5
1	Centralization of economic policymaking	36	 2.9	Switzerland	5
2	Regulation of security exchanges	32	 5.1	Sweden	6
3	Property rights	46	 3.8	Germany	6.
4	Intellectual property protection	46	 2.9	Germany	6
5	Diversion of public funds	50	 2.4	Finland	6
6	Public trust of politicians	44	 2.0	Singapore	6
	Contract enforcement				
7	Effectiveness of law-making bodies	33	 3.4	Singapore	6
8	Judicial independence			Germany	
9	Irregular payments in judicial decisions			Finland	
0	Number of procedures to enforce a contract			Ireland	20
1	Time to enforce a contract			Singapore	120
2	Cost of enforcing contracts	41	 32.0	China	8
3	Strength of investor protection			Singapore	9
4	Time to close a business	21	 2.0	Ireland	0
	Domestic financial sector liberalization				
5	Domestic financial sector liberalization	31	 1.0	Multiple (34)	1.
	2nd pillar: Business environment				
	Znu pinui. Dusiness environment				
	Human capital				
1		48	 3.6	France	6.
1 2	Human capital			FranceSingapore	
	Human capital  Quality of management schools	42	 3.2		6.
2	Human capital  Quality of management schools  Quality of math and science education	42	 3.2	Singapore	6.
2	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training	42 42 37	 3.2 3.6 4.1	Singapore	6 5
2 3 4	Human capital  Quality of math and science education	42 42 37 44	3.2 3.6 4.1 3.8	Singapore Switzerland Switzerland	
2 3 4 5	Human capital  Quality of management schools	42 42 37 44	3.2 3.6 4.1 3.8	Singapore	
2 3 4 5 6	Human capital  Quality of management schools	42374450	3.2 3.6 4.1 3.8 10.2	Singapore	
2 3 4 5 6	Human capital  Quality of management schools	42 37 44 50	3.2 3.6 4.1 3.8 10.2	Singapore	
2 3 4 5 6	Human capital  Quality of management schools	4237445052	3.2 3.6 4.1 3.8 10.2	Singapore	
2 3 4 5 6	Human capital  Quality of management schools	4237445052	3.2 3.6 4.1 3.8 10.2	Singapore	
2 3 4 5 6 7 8 9	Human capital  Quality of management schools	42 37 44 50 52 s35 30	3.2 3.6 4.1 3.8 10.2 2.9 4.0 30.0	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4)	
2 3 4 5 6 7 8 9	Human capital  Quality of management schools		3.2 3.6 4.1 3.8 10.2 4.0 30.0	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland	
2 3 4 5 6 7 8 9	Human capital  Quality of management schools		3.2 3.6 4.1 3.8 10.2 4.0 30.0	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland	
2 3 4 5 6 7 8 9	Human capital  Quality of management schools		3.2 3.6 4.1 3.8 10.2 4.0 30.0 30.0	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland Netherlands	
2 3 4 5 6 7 8 9 0 1 2 3	Human capital  Quality of management schools		3.2 3.6 4.1 3.8 10.2 30.0 30.0 30.0	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland Netherlands Netherlands	
2 3 4 5 6 7 8 9	Human capital  Quality of management schools		3.2 3.6 4.1 3.8 10.2 30.0 30.0 30.0 30.0	Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland Netherlands	

### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of starting a business	49	56.6	Ireland	0.3
2.17	Cost of dealing with licenses			United Arab Emirates	
2.18	Cost of registering property			Saudi Arabia	0.0
2.19	Cost to export	36■	1,026.0	China	390.0
2.20	Cost to import	30■	1,047.0	Singapore	367.0
2.21	Cost of enforcing contracts	41	32.0	China	8.8
2.22	Cost of closing a business	40	22.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate			Argentina	
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP			Kuwait	
3.04	Dollarization vulnerability indicator			Multiple (2)	
3.05A	External debt to GDP (developing economies)			Saudi Arabia	
3.05B	Net int'l investment position to GDP (adv. economie	es)n/a	n/a	Switzerland	121.3
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks			Indonesia	
3.07	Entry restrictions for banks			Multiple (24)	
3.08	Capital restrictions for banks			Multiple (3)	
3.09	Official supervisory power			Multiple (3)	
3.10	Private monitoring of the banking industry			South Africa	
3.11	Frequency of banking crises			Multiple (11)	
3.12	Stability Index			India	
3.13	Cumulative real estate appreciation	n/a	n/a	Russian Federation	68.4
	Risk of sovereign debt crisis				
3.14	Local currency sovereign rating	48■	9.0	Multiple (15)	20.0
3.15	Foreign currency sovereign rating	45■	8.0	Multiple (15)	20.0
	4th pillar: Banks				
	Size index				
4.01	Size index	41	4.8	Hong Kong SAR	10.8
	Efficiency index				
4.02	Efficiency index	28■	5.0	United Arab Emirates	6.8
4.03	Public ownership of banks			Multiple (11)	
	Financial information disclosure	, -	,		
4.04		21	0.0	Belgium	E7 0
4.04	Public credit registry coverage  Private credit bureau coverage			Multiple (7)	
4.05	Credit Information Index			Multiple (14)	
4.00	Credit information index	49		Ματάριε (14)	0.0
	5th pillar: Non-banks				
	•				
E 01	IPO activity IPO market share	25 =	0.2	Franco	21.0
5.01	IPO market snare			France Kazakhstan	
5.02 5.03	Share of world IPOs			Japan	
0.03			U. I	υαμαι1	14.∠
	M&A activity			11.5	
5.04	M&A market share			United States	
5.05	M&A transaction value to GDP			United Kingdom	
5.06	Share of total number of M&A deals	44	0.1	United States	33.2

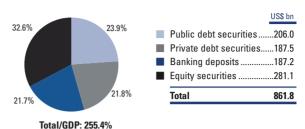
	INDICATOR RA	ANK/52		SCORE	BEST PERFORMER SCOR
	5th pillar: Non-banks (cont'd.)				
	Insurance				
07	Insurance premiums, direct	48		716.4	United States1,170,100.
80	Insurance density	50		5.3	United Kingdom6,466.
09	Real growth of direct insurance premiums	n/a .		n/a	India52.
10	Insurance penetration	49		0.6	United Kingdom16.
11	Relative value-added of insurance	43		0.3	Switzerland4.
	Securitization				
12	Securitization to GDP	29		1.9	United States22.
13	Share of total number of securitization deals	36		0.1	United States64.
	6th pillar: Financial markets				
	Foreign exchange markets				
01	Spot foreign exchange turnover	n/a .		n/a	United Kingdom26.
02	Outright forward foreign exchange turnover	n/a .		n/a	United Kingdom29.
03	Foreign exchange swap turnover	n/a .		n/a	United Kingdom42.
	Derivatives markets				
04	Interest rate derivatives turnover:				
	Forward rate agreements	n/a .		n/a	United Kingdom45.
05	Interest rate derivatives turnover: Swaps	n/a .		n/a	United Kingdom46.
06	Interest rate derivatives turnover: Options				United States42.
07	Foreign exchange derivatives turnover: Currency swaps	n/a .		n/a	United Kingdom47.
80	Foreign exchange derivatives turnover: Options	n/a .		n/a	United Kingdom42.
	Equity market development				
09	Equity market turnover	44		11.4	Pakistan374.
05	Stock market capitalization to GDP	46		21.3	Hong Kong SAR713.
	Bond market development				
10	Private-sector bonds to GDP	n/a .		n/a	United States114.
11	Public-sector bonds to GDP	n/a .		n/a	France7.
12	International bonds to GDP	46		1.5	Netherlands121.
	7th pillar: Size, depth, and access				
	Size and depth				
01	M2 to GDP				Hong Kong SAR252.
02	Private debt to GDP	, -		• -	Netherlands216.
03	Public debt to GDP				Austria7.
04	Bank deposits to GDP				Hong Kong SAR250.
05	Stock market capitalization to GDP				Hong Kong SAR713.
06	Relative value-added of financial institutions to GDP				Panama9.
07 08	Private credit to GDP  Stock market value traded to GDP				United States193. Saudi Arabia356.
00		40			Saudi Alabia
00	Access	40	_	0.7	0 % 1 1
09	Financial market sophistication				Switzerland6.
10 11	Venture capital availability  Ease of access to credit				United States5. Slovak Republic5.
11 12	Ease of access to credit				Sweden6.
13	Bank branches				Spain95.
14	Ease of access to loans				Norway5.
. +	2000 01 000000 to 100110	1			

### Norway

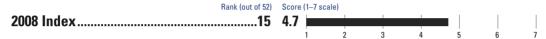
#### **Key indicators**

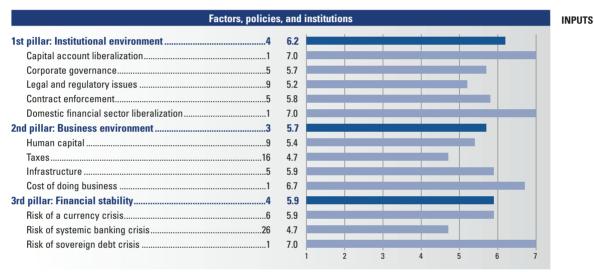
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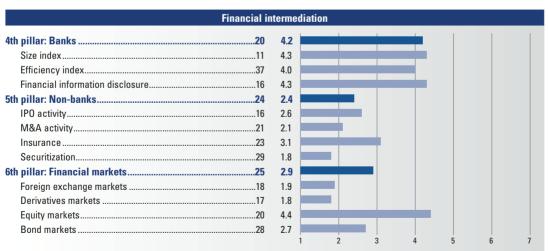
#### Financial assets by major type, 2006



### **Financial Development Index 2008**











# Norway

### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment				
	Capital account liberalization				
1.01	Capital account liberalization	1	2.6	Multiple (15)	2.6
	Corporate governance				
1.02	Extent of incentive-based compensation	27	4.7	France	5.
1.03	Efficacy of corporate boards			Sweden	6.
1.04	Reliance on professional management			Sweden	
1.05	Willingness to delegate			Sweden	6.3
1.06	Strength of auditing and accounting standards	14■	6.1	Germany	6.3
1.07	Shareholder rights index	9■	4.0	Multiple (8)	5.0
1.08	Ethical behavior of firms	4■	6.2	Finland	6.0
1.09	Protection of minority shareholders' interests	8	5.8	Sweden	6.4
	Legal and regulatory issues				
1.10	Burden of government regulation	15■	3.6	Singapore	5.3
1.11	Centralization of economic policymaking			Switzerland	
1.12	Regulation of security exchanges			Sweden	6.3
1.13	Property rights			Germany	6.
1.14	Intellectual property protection	13■	5.6	Germany	6.!
1.15	Diversion of public funds	5■	6.2	Finland	6.!
1.16	Public trust of politicians	4■	5.5	Singapore	6.
	Contract enforcement				
1.17	Effectiveness of law-making bodies	6	5.1	Singapore	6
1.18	Judicial independence			Germany	
1.19	Irregular payments in judicial decisions			Finland	
1.20	Number of procedures to enforce a contract			Ireland	
1.21	Time to enforce a contract			Singapore	
1.22	Cost of enforcing contracts			China	
1.23	Strength of investor protection			Singapore	
1.24	Time to close a business			Ireland	
1.25	Domestic financial sector liberalization  Domestic financial sector liberalization	1	1.0	Multiple (34)	1 (
	2nd pillar: Business environment				
	2nd pillar: Business environment Human capital				
2.01	•	18■	5.3	France	6.0
	Human capital			France	
2.02	Human capital Quality of management schools	30■	4.4		6.3
2.02	Human capital Quality of management schools Quality of math and science education	30 <b>=</b>	4.4 5.4	Singapore	6.3
2.02 2.03 2.04	Human capital Quality of management schools Quality of math and science education Extent of staff training	30 <b>=</b> 9 <b>=</b>	4.4 5.4 5.1	Singapore	6.6 5.9
2.02 2.03 2.04 2.05	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services	30 <b>1</b> 7 <b>1</b> 7 <b>1</b> 7 <b>1</b>	4.4 5.4 5.1 5.4	Singapore Switzerland Switzerland	6.3 5.9 6.0
2.01 2.02 2.03 2.04 2.05 2.06	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor	30 <b>1</b> 7 <b>1</b> 7 <b>1</b> 7 <b>1</b>	4.4 5.4 5.1 5.4	Singapore	6.3 5.9 6.0
2.02 2.03 2.04 2.05 2.06	Human capital  Quality of management schools	30■ 9■ 7■ 7■		Singapore	6.3 6.1 5.8 93.2
2.02 2.03 2.04 2.05 2.06	Human capital  Quality of management schools	30		Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08	Human capital  Quality of management schools	30		Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08	Human capital  Quality of management schools	30		Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools	30		Singapore	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools	30		Singapore	6.3 5.9 5.1 93.1 6.1 6.2 6.3 6.3 6.4 6.4 6.5 6.6 6.6
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09 2.10 2.11	Human capital  Quality of management schools	30		Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland	6.3 5.9 6.6 93.1 6.6 6.6 6.6
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09 2.10 2.11 2.12	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor  Tertiary enrollment  Taxes  Irregular payments in tax collection  Distortive effect on competition of taxes and subsidic Corporate tax rate  Infrastructure  Quality of overall infrastructure  Quality of telephone/fax infrastructure.  Internet users	30		Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland Netherlands	6.5 5.9 6.0 93.2 6.6 6.6 6.6 85.7
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools	30		Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland	6.3 6.4 6.5 93.1 6.6 6.6 6.6 85.1 31.6

# Norway

Financial Development Index in detail (cont'd.)	velopment <b>Advantage 🔳</b> Development <b>Disadvantag</b>
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	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of starting a business	12■	2.3	Ireland	0.3
2.17	Cost of dealing with licenses			United Arab Emirates	
2.18	Cost of registering property			Saudi Arabia	
2.19	Cost to export			China	390.0
2.20	Cost to import	6■	468.0	Singapore	
2.21	Cost of enforcing contracts		9.9	China	8.8
2.22	Cost of closing a business			Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	35	3.9	Argentina	-8.5
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP			Kuwait	
3.04	Dollarization vulnerability indicator			Multiple (2)	
3.05A	External debt to GDP (developing economies)			Saudi Arabia	
3.05B	Net int'l investment position to GDP (adv. economies			Switzerland	
2.000		.,		ozonana	
2.06	Risk of systemic banking crisis	2/2	n/a	Indonesia	16.0
3.06 3.07	Activity restrictions for banks  Entry restrictions for banks			Indonesia	
	•				
3.08	Capital restrictions for banks			Multiple (3)	
3.09	Official supervisory power			Multiple (3) South Africa	
3.10	Private monitoring of the banking industry Frequency of banking crises				
3.11	Stability Index			Multiple (11) India	
3.12	Cumulative real estate appreciation			Russian Federation	
3.13	• •		0.7	nussian rederation	08.4
	Risk of sovereign debt crisis	_			
3.14	Local currency sovereign rating			Multiple (15)	
3.15	Foreign currency sovereign rating	I <b>=</b>	20.0	Multiple (15)	20.0
	4th pillar: Banks				
	Size index				
4.01	Size index	11	7.6	Hong Kong SAR	10.8
4.01			7.0	riong Rong SAN	10.6
	Efficiency index				
4.02	Efficiency index			United Arab Emirates	
4.03	Public ownership of banks	n/a	n/a	Multiple (11)	0.0
	Financial information disclosure				
4.04	Public credit registry coverage	21■	0.0	Belgium	57.2
4.05	Private credit bureau coverage	1■	100.0	Multiple (7)	100.0
4.06	Credit Information Index	31■	4.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	19■	1.1	France	31.0
5.02	IPO proceeds amount	10■	1.0	Kazakhstan	4.4
5.03	Share of world IPOs	17■	1.3	Japan	14.2
	M&A activity				
5.04	M&A market share			United States	
5.05	M&A transaction value to GDP			United Kingdom	
5.06	Share of total number of M&A deals	20■	8	United States	33.2

# Norway age Development Disadvantage

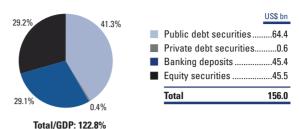
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	INDICATOR	D 4 4 11 / 15 0	20005	DECT REPEABLES	22255
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	5th pillar: Non-banks (cont'd.)				
	Insurance				
5.07	Insurance premiums, direct	24	16,248.8	United States1,	170,100.6
5.08	Insurance density	10■	l3,229.0	United Kingdom	6,466.7
5.09	Real growth of direct insurance premiums			India	
5.10	Insurance penetration			United Kingdom	
5.11	Relative value-added of insurance	41	0.4	Switzerland	4.8
	Securitization				
5.12	Securitization to GDP			United States	22.9
5.13	Share of total number of securitization deals	32	0.1	United States	64.9
	6th pillar: Financial markets				
	Foreign exchange markets				
6.01	Spot foreign exchange turnover			United Kingdom	26.6
6.02	Outright forward foreign exchange turnover			United Kingdom	29.9
6.03	Foreign exchange swap turnover	13	l1.2	United Kingdom	42.0
	Derivatives markets				
6.04	Interest rate derivatives turnover:	_			
	Forward rate agreements			United Kingdom	
6.05	Interest rate derivatives turnover: Swaps			United Kingdom	
6.06	Interest rate derivatives turnover: Options			United States	
6.07	Foreign exchange derivatives turnover: Currency swa			United Kingdom	
6.08	Foreign exchange derivatives turnover: Options	28■	0.0	United Kingdom	42.6
0.00	Equity market development	10	1104	D 1	0740
6.09	Equity market turnover			Pakistan	
7.05	Stock market capitalization to GDP	26■	69.0	Hong Kong SAR	/13.3
	Bond market development				
6.10	Private-sector bonds to GDP			United States	
6.11	Public-sector bonds to GDP			France	
6.12	International bonds to GDP	20	27.9	Netherlands	121.7
	7th pillar: Size, depth, and access				
	Size and depth				
7.01	M2 to GDP	• -	, -	Hong Kong SAR	
7.02	Private debt to GDP			Netherlands	
7.03	Public debt to GDP			Austria	
7.04	Bank deposits to GDP			Hong Kong SAR	
7.05	Stock market capitalization to GDP			Hong Kong SAR	
7.06	Relative value-added of financial institutions to GDP.			Panama	
7.07	Private credit to GDP			United States	
7.08	Stock market value traded to GDP	21	65.9	Saudi Arabia	356.2
	Access				
7.09	Financial market sophistication			Switzerland	
7.10	Venture capital availability			United States	
7.11	Ease of access to credit			Slovak Republic	
7.12	Ease of access to local equity market			Sweden	
7.13	Bank branches	14 <b></b> 1		Spain	
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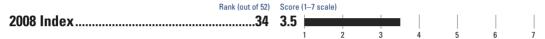
#### **Key indicators**

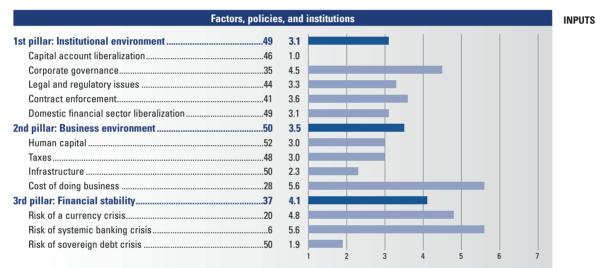
Population (millions), 2007	158.2
GDP (US\$ billions), 2007	143.8
GDP (current prices, US\$) per capita, 2007	908.9
GDP (PPP) as share (%) of world total, 2007	0.63
Average annual rate of real GDP growth (%), 2003-07	6.64

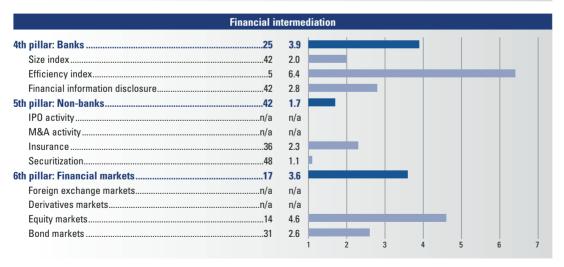
#### Financial assets by major type, 2006

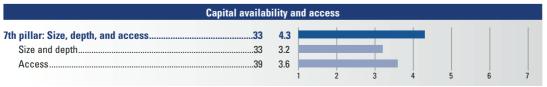


### **Financial Development Index 2008**











### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment				
	Capital account liberalization				
1.01	Capital account liberalization	46	 1.1	Multiple (15)	2.0
	Corporate governance				
1.02	Extent of incentive-based compensation	52	 3.6	France	5.
1.03	Efficacy of corporate boards	52	 3.6	Sweden	6.
1.04	Reliance on professional management	50	 3.9	Sweden	6.
1.05	Willingness to delegate	44	 3.7	Sweden	6.
1.06	Strength of auditing and accounting standards	34	 4.9	Germany	6.3
1.07	Shareholder rights index	1	 5.0	Multiple (8)	5.
1.08	Ethical behavior of firms			Finland	
1.09	Protection of minority shareholders' interests	26	 5.0	Sweden	6.
	Legal and regulatory issues				
1.10	Burden of government regulation	31	 3.0	Singapore	5.3
1.11	Centralization of economic policymaking	44	 2.4	Switzerland	5.9
1.12	Regulation of security exchanges	46	 4.0	Sweden	6.3
1.13	Property rights	45	 4.0	Germany	6.
1.14	Intellectual property protection	35	 3.6	Germany	
1.15	Diversion of public funds	36	 3.5	Finland	6.!
1.16	Public trust of politicians	36	 2.3	Singapore	6.
	Contract enforcement				
1.17	Effectiveness of law-making bodies	35	 3.4	Singapore	6.
1.18	Judicial independence	41	 3.5	Germany	6.!
1.19	Irregular payments in judicial decisions	47	 3.5	Finland	6.
1.20	Number of procedures to enforce a contract	49	 47.0	Ireland	20.
1.21	Time to enforce a contract	46	 880.0	Singapore	120.
1.22	Cost of enforcing contracts	27	 23.8	China	8.
1.23	Strength of investor protection	14	 6.3	Singapore	9.:
1.24	Time to close a business	28	 2.8	Ireland	0.
	Domestic financial sector liberalization				
1.25	Domestic financial sector liberalization	49	 2.0	Multiple (34)	1.0
	2nd pillar: Business environment				
	Human capital				
2.01	Quality of management schools			France	
2.02	Quality of math and science education			Singapore	
2.03	Extent of staff training			Switzerland	
2.04	Local availability of research and training services			Switzerland	
2.05	Brain drain and ease of hiring foreign labor			Kuwait Finland	
2.06	Tertiary enrollment	52	 4.5	Fillidilu	93
	Taxes				
	Irregular payments in tax collection			Sweden	
2.07	Distortive effect on competition of taxes and subsidie			Singapore	
2.08		E 1	 37.0	Multiple (4)	0.0
2.07 2.08 2.09	Corporate tax rate				
2.08	Corporate tax rate Infrastructure				
2.08			 3.4	Switzerland	6.
2.08 2.09	Infrastructure	38		Switzerland	
<ul><li>2.08</li><li>2.09</li><li>2.10</li></ul>	Infrastructure Quality of overall infrastructure	38	 5.3	Switzerland	6.9
2.08 2.09 2.10 2.11	Infrastructure  Quality of overall infrastructure	38 44 49	 5.3 7.6	Switzerland Netherlands Netherlands	
2.08 2.09 2.10 2.11 2.12	Infrastructure  Quality of overall infrastructure	38 44 49 51	 5.3 7.6 0.0	Switzerland	

	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCOR
	2nd pillar: Business environment (cont'd.)			
	Cost of doing business			
2.16	Cost of starting a business			Ireland0.
2.17	Cost of dealing with licenses			United Arab Emirates1.
2.18	Cost of registering property			Saudi Arabia0.
2.19	Cost to export			China390.
2.20	Cost to import			Singapore367.
2.21	Cost of enforcing contracts			China8.
2.22	Cost of closing a business	5■	4.0	Multiple (4)1.
	3rd pillar: Financial stability			
	Risk of a currency crisis			
3.01	Change in real effective exchange rate	20■	0.2	Argentina8.
3.02	External vulnerability indicator			Russian Federation15.
3.03	Current account balance to GDP			Kuwait46.
3.04	Dollarization vulnerability indicator			Multiple (2)0.
.05A	External debt to GDP (developing economies)	10■	27.7	Saudi Arabia9.
.05B	Net int'l investment position to GDP (adv. economies			Switzerland121.
	Risk of systemic banking crisis			
3.06	Activity restrictions for banks	n/a	n/a	Indonesia16.
3.00	Entry restrictions for banks			Multiple (24)8.
3.08	Capital restrictions for banks			Multiple (3)9.
3.09	Official supervisory power			Multiple (3)14.
	Private monitoring of the banking industry			South Africa9.
3.10	Frequency of banking crises			
3.11	Stability Index			Multiple (11)0. India7
3.12	Cumulative real estate appreciation			Russian Federation68.
3.13			I/a	nussidii rederatiori002
	Risk of sovereign debt crisis	_		
3.14	Local currency sovereign rating			Multiple (15)20.
3.15	Foreign currency sovereign rating	50	7.3	Multiple (15)20.
	4th pillar: Banks			
	Size index			
4.01	Size index	42	4.8	Hong Kong SAR10.
	Efficiency index			
4.02	Efficiency index	5 <b>=</b>	6.0	United Arab Emirates6.
4.02	Public ownership of banks			Multiple (11)
4.03			I/a	ividitiple (11)
	Financial information disclosure			
4.04	Public credit registry coverage			Belgium57.
4.05	Private credit bureau coverage			Multiple (7)100.
4.06	Credit Information Index	31	4.0	Multiple (14)6.
	5th pillar: Non-banks			
	IPO activity			
5.01	IPO market share	n/a	n/a	France31.
5.02	IPO proceeds amount			Kazakhstan4.
5.03	Share of world IPOs			Japan14.
		,	,	
- o ·	M&A activity	,	,	11 % 100 4
5.04	M&A market share			United States44.
5.05	M&A transaction value to GDP Share of total number of M&A deals	, -		United Kingdom14.
5.06		,	,	United States33.

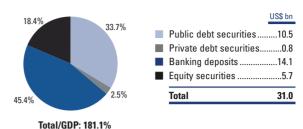
### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52		SCORE	BEST PERFORMER SCO
	5th pillar: Non-banks (cont'd.)				
	Insurance				
07	Insurance premiums, direct	45		949.0	United States1,170,100
08	Insurance density				United Kingdom6,466
09	Real growth of direct insurance premiums				India52
10	Insurance penetration				United Kingdom16
11	Relative value-added of insurance	n/a .		n/a	Switzerland4
	Securitization				
12	Securitization to GDP	16		0.4	United States22
13	Share of total number of securitization deals				United States64
10	Share of total number of secunitization deals	40			Officed States04
	6th pillar: Financial markets				
	Foreign exchange markets				
01	Spot foreign exchange turnover	n/a .		n/a	United Kingdom26
02	Outright forward foreign exchange turnover				United Kingdom29
03	Foreign exchange swap turnover	n/a .		n/a	United Kingdom42
	Derivatives markets				
04	Interest rate derivatives turnover:				
	Forward rate agreements	n/a		n/a	United Kingdom45
)5	Interest rate derivatives turnover: Swaps				United Kingdom46
06	Interest rate derivatives turnover: Options				United States42
07	Foreign exchange derivatives turnover: Currency swap				United Kingdom47
38	Foreign exchange derivatives turnover: Options				United Kingdom42
09	Equity market development  Equity market turnover	1		274.2	Pakistan374
)9 )5	Stock market capitalization to GDP				Hong Kong SAR713
JO	Stock market capitalization to GDF		=		Holig Kolig SAn713
	Bond market development				
10	Private-sector bonds to GDP	, ,			United States114
11	Public-sector bonds to GDP				France7
12	International bonds to GDP	49		0.8	Netherlands121
	7th pillar: Size, depth, and access				
	Size and depth				
21	M2 to GDP	27 .		45.4	Hong Kong SAR252
02	Private debt to GDP	50 .		0.5	Netherlands216
03	Public debt to GDP	12 .		6.3	Austria7
04	Bank deposits to GDP	42 .		34.5	Hong Kong SAR250
)5	Stock market capitalization to GDP	37 .		33.6	Hong Kong SAR713
06	Relative value-added of financial institutions to GDP	n/a .		n/a	Panama9
07	Private credit to GDP	39 .		26.5	United States193
38	Stock market value traded to GDP	16		98.2	Saudi Arabia356
	Access				
)9	Financial market sophistication	42		4.0	Switzerland6
10	Venture capital availability				United States5
11	Ease of access to credit				Slovak Republic5
12	Ease of access to local equity market				Sweden6
13	Bank branches				Spain95
10	Ease of access to loans				Norway5
		· · · · · · · · · · · · · · · · · · ·			,
14					

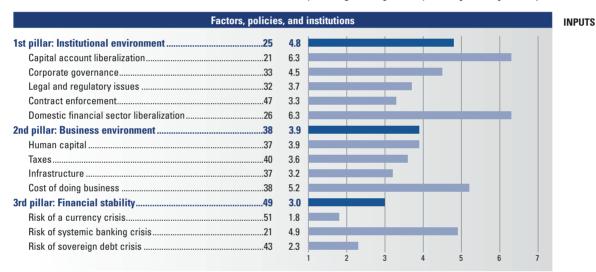
#### **Key indicators**

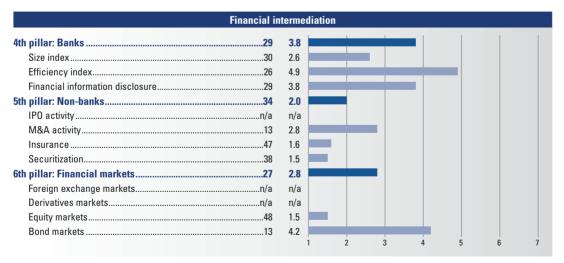
Population (millions), 2007	3.3
GDP (US\$ billions), 2007	19.7
GDP (current prices, US\$) per capita, 2007	5,904.3
GDP (PPP) as share (%) of world total, 2007	0.05
Average annual rate of real GDP growth (%), 2003-07	7.75

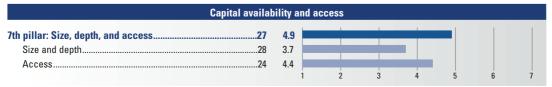
#### Financial assets by major type, 2006



### **Financial Development Index 2008**









### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment				
	Capital account liberalization				
.01	Capital account liberalization	21	I2.6	Multiple (15)	2.6
	Corporate governance				
.02	Extent of incentive-based compensation	24	<b>I</b> 4.7	France	5.7
.03	Efficacy of corporate boards	37	l4.7	Sweden	6.1
.04	Reliance on professional management	42	l4.4	Sweden	6.4
.05	Willingness to delegate	34	l4.0	Sweden	6.3
.06	Strength of auditing and accounting standards	28	l5.2	Germany	6.3
.07	Shareholder rights index	n/a	n/a	Multiple (8)	5.0
.08	Ethical behavior of firms			Finland	
.09	Protection of minority shareholders' interests	43	l4.2	Sweden	6.4
	Legal and regulatory issues				
.10	Burden of government regulation	22	I3.3	Singapore	5.3
.11	Centralization of economic policymaking	45	l2.3	Switzerland	5.9
.12	Regulation of security exchanges	17	<b>I</b> 5.8	Sweden	6.3
.13	Property rights	30	l5.1	Germany	6.7
.14	Intellectual property protection			Germany	6.5
.15	Diversion of public funds	38	l3.5	Finland	6.5
.16	Public trust of politicians	43	l2.0	Singapore	6.4
	Contract enforcement				
.17	Effectiveness of law-making bodies	48	l2.4	Singapore	6.1
.18	Judicial independence	49	l2.5	Germany	6.5
.19	Irregular payments in judicial decisions	43	l3.7	Finland	6.8
.20	Number of procedures to enforce a contract	18	I31.0	Ireland	20.0
.21	Time to enforce a contract	42	l686.0	Singapore	120.0
.22	Cost of enforcing contracts	49	l50.0	China	8.
.23	Strength of investor protection	40	l4.7	Singapore	9.3
.24	Time to close a business	26	l2.5	Ireland	0.4
	Domestic financial sector liberalization				
.25	Domestic financial sector liberalization	26	l1.0	Multiple (34)	1.C
	2nd niller Pusiness environment				
	2nd pillar: Business environment				
01	Human capital	45	0.7	France	6.0
	Human capital Quality of management schools			France	
.02	Human capital  Quality of management schools  Quality of math and science education	47	l2.9	Singapore	6.3
.02	Human capital Quality of management schools Quality of math and science education Extent of staff training	47 <b>.</b>	l2.9 l3.9	Singapore	6.3
.02 .03 .04	Human capital  Quality of management schools	47 34 42	l2.9 l3.9 l3.9	Singapore Switzerland Switzerland	6.3 5.9
.02 .03 .04 .05	Human capital  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor	47	l2.9 l3.9 l3.9 l4.4	Singapore	6.3 5.9 6.0
.02 .03 .04 .05	Human capital  Quality of management schools	47	l2.9 l3.9 l3.9 l4.4	Singapore Switzerland Switzerland	6.3 5.9 6.0
.02 .03 .04 .05	Human capital  Quality of management schools	47	2.9 13.9 13.9 14.4 145.5	Singapore	6.3 6.0 5.8 93.2
.02 .03 .04 .05 .06	Human capital  Quality of management schools	47		Singapore	
.02 .03 .04 .05 .06	Human capital  Quality of management schools	47		Singapore	
.02 .03 .04 .05 .06	Human capital  Quality of management schools	47		Singapore	
.02 .03 .04 .05 .06	Human capital  Quality of management schools	47		Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4)	
.02 .03 .04 .05 .06 .07 .08	Human capital  Quality of management schools	47		Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland	
.02 .03 .04 .05 .06 .07 .08 .09	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor  Tertiary enrollment  Taxes  Irregular payments in tax collection  Distortive effect on competition of taxes and subsidie  Corporate tax rate  Infrastructure	47		Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland	
02 03 04 05 06 07 08 09	Human capital  Quality of management schools			Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland Netherlands	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09 2.11 2.12 2.13	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor  Tertiary enrollment  Taxes  Irregular payments in tax collection  Distortive effect on competition of taxes and subsidie  Corporate tax rate  Infrastructure  Quality of overall infrastructure  Quality of telephone/fax infrastructure.			Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland Netherlands Netherlands	
02 03 04 05 06 07 08 09	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor  Tertiary enrollment  Taxes  Irregular payments in tax collection  Distortive effect on competition of taxes and subsidie Corporate tax rate  Infrastructure  Quality of overall infrastructure  Quality of telephone/fax infrastructure.			Singapore Switzerland Switzerland Kuwait Finland Sweden Singapore Multiple (4) Switzerland Switzerland Netherlands	6.3 5.9 6.0 93.2 6.8 5.7 0.0 6.8 85.7

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
.16	Cost of doing business  Cost of starting a business	42	22.0	Ireland	0.3
2.17	Cost of dealing with licenses			United Arab Emirates	
2.18	Cost of registering property			Saudi Arabia	
2.19	Cost to export			China	390.0
2.20	Cost to import	21■	850.0	Singapore	367.0
2.21	Cost of enforcing contracts	49	50.0	China	8.8
2.22	Cost of closing a business	33■	18.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	n/a	n/a	Argentina	8 5
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP			Kuwait	
3.04	Dollarization vulnerability indicator	n/a	n/a	Multiple (2)	0.C
05A	External debt to GDP (developing economies)	28■	54.3	Saudi Arabia	9.6
05B	Net int'l investment position to GDP (adv. econor	mies)n/a	n/a	Switzerland	121.3
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks	8■	11.0	Indonesia	16.0
3.07	Entry restrictions for banks			Multiple (24)	8.0
3.08	Capital restrictions for banks	18■	5.0	Multiple (3)	9.C
3.09	Official supervisory power	13■	12.0	Multiple (3)	14.0
3.10	Private monitoring of the banking industry	10■	7.0	South Africa	9.0
3.11	Frequency of banking crises	12■	1.0	Multiple (11)	0.C
3.12	Stability Index	21■	5.2	India	
3.13	Cumulative real estate appreciation	n/a	n/a	Russian Federation	68.4
	Risk of sovereign debt crisis				
3.14	Local currency sovereign rating	48	9.0	Multiple (15)	20.0
3.15	Foreign currency sovereign rating	41■	9.0	Multiple (15)	20.0
	4th pillar: Banks				
4.01	Size index	20 =	F.0	Hann Kana CAD	10.0
4.01	Size index	30	5.6	Hong Kong SAR	10.8
	Efficiency index				
4.02	Efficiency index			United Arab Emirates	
4.03	Public ownership of banks	21■	12.3	Multiple (11)	0.0
	Financial information disclosure				
4.04	Public credit registry coverage	21■	0.0	Belgium	
4.05	Private credit bureau coverage	23■	41.6	Multiple (7)	
4.06	Credit Information Index	1■	6.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	n/a	n/a	France	31.0
5.02	IPO proceeds amount			Kazakhstan	4.4
5.03	Share of world IPOs			Japan	14.2
	M&A activity				
5.04	M&A market share	39	0.1	United States	44 /
5.05	M&A transaction value to GDP			United States	
		49		United States	

### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCORE
	5th pillar: Non-banks (cont'd.)			
	Insurance			
5.07	Insurance premiums, direct	50	474.4	United States1,170,100.6
5.08	Insurance density			United Kingdom6,466.7
5.09	Real growth of direct insurance premiums			India52.6
5.10	Insurance penetration			United Kingdom16.5
5.11	Relative value-added of insurance	30■	0.9	Switzerland4.8
	Securitization			
5.12	Securitization to GDP	30	1 7	United States
5.12	Share of total number of securitization deals			United States64.9
0.10	ondro of total number of cocantization dedic			Officed States
	6th pillar: Financial markets			
	Foreign exchange markets			
6.01	Spot foreign exchange turnover	n/a	n/a	United Kingdom26.6
6.02	Outright forward foreign exchange turnover			United Kingdom29.9
6.03	Foreign exchange swap turnover			United Kingdom42.0
	Derivatives markets			
6.04	Interest rate derivatives turnover:			
0.04	Forward rate agreements	n/a	n/a	United Kingdom45.6
6.05	Interest rate derivatives turnover: Swaps			United Kingdom46.0
6.06	Interest rate derivatives turnover: Options			United States42.6
6.07	Foreign exchange derivatives turnover: Currency sw			United Kingdom47.6
6.08	Foreign exchange derivatives turnover: Options	'		United Kingdom42.6
6.09	Equity market development  Equity market turnover	40	1.0	Pakistan374.3
7.05	Stock market capitalization to GDP			
7.05	Stock market capitalization to GDP	41■	30.9	Hong Kong SAR713.3
	Bond market development			
6.10	Private-sector bonds to GDP			United States114.0
6.11	Public-sector bonds to GDP	• -	, -	France7.0
6.12	International bonds to GDP	12■	45.9	Netherlands121.7
	7th pillar: Size, depth, and access			
	Size and denth			
7.01	Size and depth M2 to GDP	14	72.3	Hong Kong SAR252.3
	Size and depth  M2 to GDP  Private debt to GDP			Hong Kong SAR252.3  Netherlands216.2
7.02	M2 to GDP	39■	4.5	Netherlands216.2
7.02 7.03	M2 to GDP	39■	4.5	Netherlands216.2 Austria7.0
7.02 7.03 7.04	M2 to GDP Private debt to GDP Public debt to GDP	39 <b>=</b> 2 <b>=</b>	4.5 6.9 74.3	Netherlands216.2
7.02 7.03 7.04 7.05	M2 to GDP	39 <b>3</b> 9 <b>21</b> 9 <b>1</b> 9 <b>4</b> 1 <b>8</b>	4.5 6.9 74.3 30.9	Netherlands       216.2         Austria       7.0         Hong Kong SAR       250.4
7.02 7.03 7.04 7.05 7.06	M2 to GDP Private debt to GDP Public debt to GDP Bank deposits to GDP Stock market capitalization to GDP	39	4.5 6.9 74.3 30.9 9.2	Netherlands
7.02 7.03 7.04 7.05 7.06 7.07	M2 to GDP	39	4.5 74.3 30.9 9.2	Netherlands       216.2         Austria       7.0         Hong Kong SAR       250.4         Hong Kong SAR       713.3         Panama       9.2
7.02 7.03 7.04 7.05 7.06 7.07	M2 to GDP	39	4.5 74.3 30.9 9.2	Netherlands       216.2         Austria       7.0         Hong Kong SAR       250.4         Hong Kong SAR       713.3         Panama       9.2         United States       193.7
7.02 7.03 7.04 7.05 7.06 7.07 7.08	M2 to GDP	39		Netherlands       216.2         Austria       7.0         Hong Kong SAR       250.4         Hong Kong SAR       713.3         Panama       9.2         United States       193.7         Saudi Arabia       356.2
7.02 7.03 7.04 7.05 7.06 7.07 7.08	M2 to GDP	39		Netherlands       216.2         Austria       7.0         Hong Kong SAR       250.4         Hong Kong SAR       713.3         Panama       9.2         United States       193.7
7.02 7.03 7.04 7.05 7.06 7.07 7.08 7.09 7.10	M2 to GDP	39		Netherlands       216.2         Austria       7.0         Hong Kong SAR       250.4         Hong Kong SAR       713.3         Panama       9.2         United States       193.7         Saudi Arabia       356.2         Switzerland       6.7
7.04 7.05 7.06 7.07 7.08 7.09 7.10 7.11	M2 to GDP	39		Netherlands       216.2         Austria       7.0         Hong Kong SAR       250.4         Hong Kong SAR       713.3         Panama       9.2         United States       193.7         Saudi Arabia       356.2         Switzerland       6.7         United States       5.3
7.02 7.03	M2 to GDP	39		Netherlands       216.2         Austria       7.0         Hong Kong SAR       250.4         Hong Kong SAR       713.3         Panama       9.2         United States       193.7         Saudi Arabia       356.2         Switzerland       6.7         United States       5.3         Slovak Republic       5.9
7.02 7.03 7.04 7.05 7.06 7.07 7.08 7.09 7.10 7.11 7.12	M2 to GDP	39		Netherlands       216.2         Austria       7.0         Hong Kong SAR       250.4         Hong Kong SAR       713.3         Panama       9.2         United States       193.7         Saudi Arabia       356.2         Switzerland       6.7         United States       5.3         Slovak Republic       5.9         Sweden       6.2

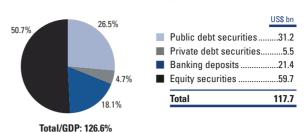
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### Peru

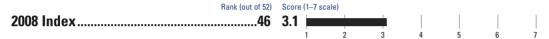
#### **Key indicators**

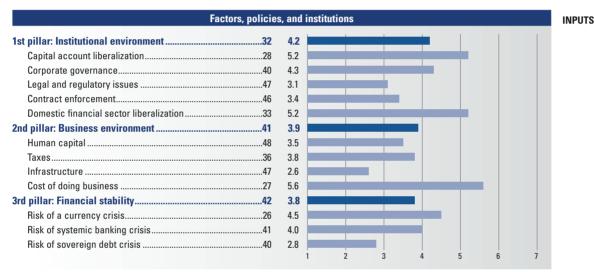
Population (millions), 2007	28.1
GDP (US\$ billions), 2007	109.1
GDP (current prices, US\$) per capita, 2007	3,885.9
GDP (PPP) as share (%) of world total, 2007	0.33
Average annual rate of real GDP growth (%), 2003-07	6.49

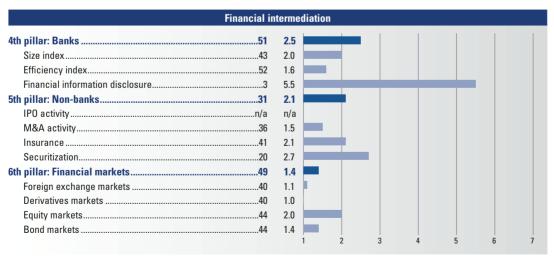
### Financial assets by major type, 2006



### **Financial Development Index 2008**











### **Financial Development Index in detail**

■ Development **Advantage** ■ Development **Disadvantage** 

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment				
	Capital account liberalization				
01	Capital account liberalization	28■	2.6	Multiple (15)	2.6
	Corporate governance				
02	Extent of incentive-based compensation	46■	3.9	France	5.
03	Efficacy of corporate boards	38■	4.7	Sweden	6.
04	Reliance on professional management	43■	4.4	Sweden	6.4
05	Willingness to delegate		3.9	Sweden	6.3
06	Strength of auditing and accounting standards	37■	4.8	Germany	6.3
07	Shareholder rights index			Multiple (8)	5.
80	Ethical behavior of firms			Finland	
09	Protection of minority shareholders' interests	42	4.2	Sweden	6.4
	Legal and regulatory issues				
10	Burden of government regulation			Singapore	5.5
11	Centralization of economic policymaking	37■	2.9	Switzerland	5.
12	Regulation of security exchanges	26■	5.3	Sweden	6.
13	Property rights	47	3.6	Germany	6.
14	Intellectual property protection	50■	2.7	Germany	6.
15	Diversion of public funds	44■	3.1	Finland	6.
16	Public trust of politicians	48■	1.7	Singapore	6.
	Contract enforcement				
17	Effectiveness of law-making bodies	50■	2.0	Singapore	6.
18	Judicial independence	50■	2.2	Germany	6.
19	Irregular payments in judicial decisions	51■	2.8	Finland	6.
20	Number of procedures to enforce a contract	43	41.0	Ireland	20.
21	Time to enforce a contract	23■	468.0	Singapore	120.
22	Cost of enforcing contracts	45■	35.7	China	8.
23	Strength of investor protection	12■	6.7	Singapore	9.
24	Time to close a business	35■	3.1	Ireland	0.
	Domestic financial sector liberalization				
25	Domestic financial sector liberalization	33■	1.0	Multiple (34)	1.
	2nd pillar: Business environment				
0.1	Human capital	20 =	4.4	France	6
01	Quality of management schools			Singapore	
02 03	Quality of math and science education			Switzerland	
03 04	Extent of staff training  Local availability of research and training services		3.5	Switzerland	
04 05	Brain drain and ease of hiring foreign labor			Kuwait	
06	Tertiary enrollment			Finland	
50	•			T ITTIGETO	
	Taxes			0 1	0
07	Irregular payments in tax collection			Sweden	
80	Distortive effect on competition of taxes and subside			Singapore	
09	Corporate tax rate	30	30.0	Multiple (4)	0.
	Infrastructure				
	Quality of overall infrastructure			Switzerland	
10	0 11: ( 1 1 1 1/4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	35■		Switzerland	
	Quality of telephone/fax infrastructure		00.0	Netherlands	85.
11	Quality of telephone/fax infrastructure Internet users	31■	22.9		
10 11 12 13				Netherlands	
11 12	Internet users	37■	1.7		66.9

### Peru

#### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage INDICATOR BEST PERFORMER 2nd pillar: Business environment (cont'd.) Cost of doing business 2.16 Ireland......0.3 United Arab Emirates ......1.5 2.17 Saudi Arabia ......0.0 2.18 Singapore ......367.0 2.20 2.21 Multiple (4) ......1.0 2.22 3rd pillar: Financial stability Risk of a currency crisis Change in real effective exchange rate......12 .....■.....-0.9 3.01 Argentina .....-8.5 3.02 Russian Federation......15.4 3.03 Kuwait ......46.1 Multiple (2) ......0.0 Saudi Arabia ......9.6 3.05A 3.05B Net int'l investment position to GDP (adv. economies) ......n/a ......n/a Switzerland......121.3 Risk of systemic banking crisis 3.06 Indonesia......16.0 3.07 Multiple (24) ......8.0 3.08 Multiple (3) ......9.0 Multiple (3) .....14.0 South Africa.....9.0 3.11 Multiple (11) ......0.0 3.12 Cumulative real estate appreciation ......n/a .....n/a Russian Federation.....-68.4 3 13 Risk of sovereign debt crisis 3.14 Multiple (15) .....20.0 Multiple (15) ......20.0 3.15 4th pillar: Banks Size index 4.01 Hong Kong SAR .....10.8 Size index Efficiency index United Arab Emirates ......6.8 4.02 Multiple (11) ......0.0 4.03 Financial information disclosure 4.04 Belgium ......57.2 Multiple (7) ......100.0 4.05 4.06 Multiple (14) ......6.0 5th pillar: Non-banks IPO activity 5.01 France 31.0 Kazakhstan ......4.4 Japan .....14.2 Share of world IPOs ......n/a M&A activity 5.04 United States ......44.4 5.05 United Kingdom .....14.6 5.06 United States ......33.2

### Peru

### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

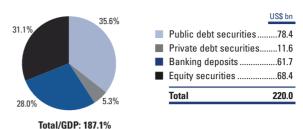
.07	Esh willow Alam hander (const)				
.07	5th pillar: Non-banks (cont'd.)				
.07	Insurance				
	Insurance premiums, direct	44		1,082.7	United States1,170,100
80	Insurance density	44		38.1	United Kingdom6,466
09	Real growth of direct insurance premiums	20		8.1	India52
10	Insurance penetration	45		1.2	United Kingdom16
11	Relative value-added of insurance	27		0.9	Switzerland4
	Securitization				
12	Securitization to GDP	22		2.2	United States22
13	Share of total number of securitization deals	19		0.7	United States64.
	6th pillar: Financial markets				
	Foreign exchange markets				
01	Spot foreign exchange turnover	41		0.0	United Kingdom26
02	Outright forward foreign exchange turnover				United Kingdom29
03	Foreign exchange swap turnover				United Kingdom42
	Derivatives markets	,		,-	<u> </u>
04	Interest rate derivatives turnover:				
04	Forward rate agreements	n/a		n/a	United Kingdom45.
05	Interest rate derivatives turnover: Swaps				United Kingdom46.
06	Interest rate derivatives turnover: Options				United States42
07	Foreign exchange derivatives turnover: Currency swa				United States47.
08	Foreign exchange derivatives turnover: Options				United Kingdom42.
00		,		, a	Omtod Kingdom12
09	Equity market development  Equity market turnover	45		7.2	Pakistan374.
05 05	Stock market capitalization to GDP				Hong Kong SAR713.
00	·		=		Tiong Rong SAR
4.0	Bond market development	00	_	4.0	11 % 100 /
10	Private-sector bonds to GDP				United States114.
11 12	Public-sector bonds to GDP				France
12	The matter as the desired to deli				Notificial de la constant de la cons
	7th pillar: Size, depth, and access				
	Size and depth				
01	M2 to GDP				Hong Kong SAR252
02	Private debt to GDP				Netherlands216
03	Public debt to GDP				Austria7
04	Bank deposits to GDP				Hong Kong SAR250
05	Stock market capitalization to GDP				Hong Kong SAR713.
06	Relative value-added of financial institutions to GDP.				Panama9
07 08	Private credit to GDP  Stock market value traded to GDP				United States
UB	Stock market value traded to GDP	44		4.0	Saudi Arabia356.
	Access				
09	Financial market sophistication				Switzerland6
10	Venture capital availability				United States5
11	Ease of access to credit				Slovak Republic5.
	Ease of access to local equity market				Sweden6.
12	Bank branches				Spain95.
12 13 14	Ease of access to loans	27		3.4	Norway5

### Philippines

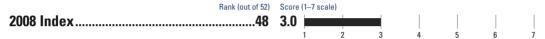
#### **Key indicators**

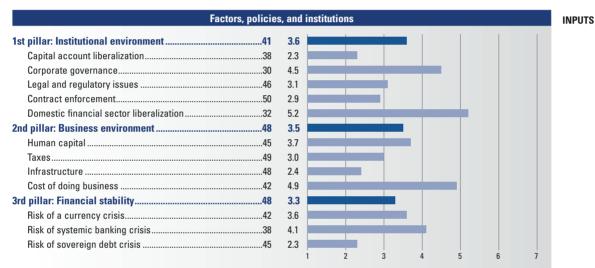
Population (millions), 2007	88.7
GDP (US\$ billions), 2007	144.1
GDP (current prices, US\$) per capita, 2007	1,624.7
GDP (PPP) as share (%) of world total, 2007	0.46
Average annual rate of real GDP growth (%), 2003–07	5.79

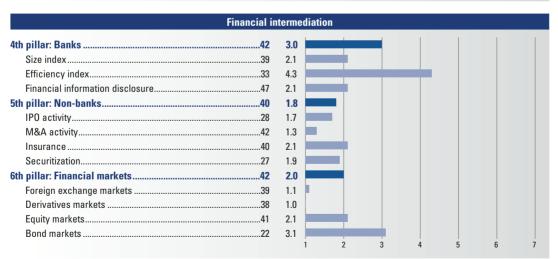
#### Financial assets by major type, 2006

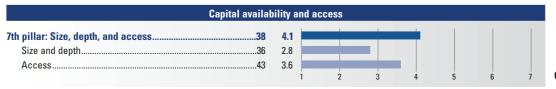


### **Financial Development Index 2008**











# Philippines

### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52		SCORE	BEST PERFORMER	SCOR			
	1st pillar: Institutional environment								
	Capital account liberalization								
1.01	Capital account liberalization	38		0.2	Multiple (15)	2.6			
	Corporate governance								
1.02	Extent of incentive-based compensation	39		4.3	France	5.7			
1.03	Efficacy of corporate boards				Sweden	6.			
1.04	Reliance on professional management	28		5.1	Sweden	6.4			
1.05	Willingness to delegate	25		4.4	Sweden	6.3			
1.06	Strength of auditing and accounting standards	32		5.0	Germany	6.3			
1.07	Shareholder rights index	17		3.0	Multiple (8)	5.0			
1.08	Ethical behavior of firms	48		3.5	Finland	6.6			
1.09	Protection of minority shareholders' interests	30		4.7	Sweden	6.4			
	Legal and regulatory issues								
1.10	Burden of government regulation	46		2.5	Singapore	5.3			
1.11	Centralization of economic policymaking	42		2.6	Switzerland	5.9			
1.12	Regulation of security exchanges	38		4.8	Sweden	6.3			
1.13	Property rights	39		4.3	Germany	6.7			
1.14	Intellectual property protection	45		3.1	Germany	6.!			
1.15	Diversion of public funds	48		2.5	Finland	6.!			
1.16	Public trust of politicians	49		1.7	Singapore	6.4			
	Contract enforcement								
1.17	Effectiveness of law-making bodies	44		2.5	Singapore	6.			
1.18	Judicial independence	43		3.3	Germany	6.!			
1.19	Irregular payments in judicial decisions	49		3.1	Finland	6.8			
1.20	Number of procedures to enforce a contract	35		37.0	Ireland	20.0			
1.21	Time to enforce a contract	45		842.0	Singapore	120.0			
1.22	Cost of enforcing contracts	32		26.0	China	8.8			
1.23	Strength of investor protection	47		3.7	Singapore	9.3			
1.24	Time to close a business	49		5.7	Ireland	0.4			
	Domestic financial sector liberalization								
1.25	Domestic financial sector liberalization	32		1.0	Multiple (34)	1.0			
	2nd pillar: Business environment								
	•								
	Human capital		_		-				
2.01	Quality of management schools				France				
2.02	Quality of math and science education				Singapore				
2.03	Extent of staff training.				Switzerland				
2.04	Local availability of research and training services				Switzerland				
2.05 2.06	Brain drain and ease of hiring foreign labor  Tertiary enrollment				Kuwait Finland				
2.00	•	41		20.5	i iiilaiiu				
	Taxes								
2.07	Irregular payments in tax collection				Sweden				
2.08	Distortive effect on competition of taxes and subsidie				Singapore				
2.09	Corporate tax rate	47		35.0	Multiple (4)	0.0			
	Infrastructure								
2.10	Quality of overall infrastructure				Switzerland				
2.10	Quality of telephone/fax infrastructure				Switzerland				
	The second secon	51		5.9	Netherlands				
2.11	Internet users		_	0.1	Netherlands	31.8			
2.11 2.12	Internet users  Broadband Internet subscribers	49		0.1					
2.10 2.11 2.12 2.13 2.14		49		4.3	SwitzerlandItaly	66.9			

5.06

### Philippines

#### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage INDICATOR BEST PERFORMER 2nd pillar: Business environment (cont'd.) Cost of doing business 2.16 Ireland......0.3 United Arab Emirates ......1.5 2.17 Saudi Arabia ......0.0 2.18 Singapore ......367.0 2.21 Multiple (4) ......1.0 2.22 3rd pillar: Financial stability Risk of a currency crisis 3.01 Argentina .....-8.5 3.02 Russian Federation......15.4 3.03 Kuwait ......46.1 Multiple (2) ......0.0 Saudi Arabia ......9.6 3.05A 3.05B Net int'l investment position to GDP (adv. economies) ......n/a ......n/a Switzerland......121.3 Risk of systemic banking crisis 3.06 Indonesia......16.0 3.07 Multiple (24) ......8.0 3.08 Multiple (3) ......9.0 Official supervisory power......n/a .....n/a Multiple (3) .....14.0 Private monitoring of the banking industry ......n/a .....n/a South Africa.....9.0 3.11 Multiple (11) ......0.0 3.12 Russian Federation.....-68.4 3 13 Risk of sovereign debt crisis 3.14 Multiple (15) .....20.0 Multiple (15) ......20.0 3.15 4th pillar: Banks Size index 4.01 Hong Kong SAR .....10.8 Size index Efficiency index United Arab Emirates ......6.8 4.02 Multiple (11) ......0.0 Financial information disclosure 4.04 Belgium ......57.2 4.05 Multiple (7) ......100.0 4.06 Multiple (14) ......6.0 5th pillar: Non-banks IPO activity 5.01 Kazakhstan ......4.4 Japan .....14.2 M&A activity 5.04 United States ......44.4 5.05 United Kingdom .....14.6

United States ......33.2

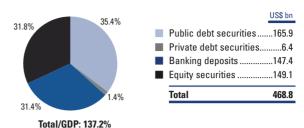
# Philippines

.07 .08 .09 .10 .11	5th pillar: Non-banks (cont'd.) Insurance Insurance premiums, direct					
.07 .08 .09 .10 .11	Insurance					
.07 .08 .09 .10 .11						
.08 .09 .10 .11		12		1 751 0	United States	1 170 100 6
.09 .10 .11	Insurance density				United Kingdom	
.10	Real growth of direct insurance premiums				India	
.11	Insurance penetration				United Kingdom	
.12	Relative value-added of insurance				Switzerland	
.12	Securitization					
	Securitization Securitization to GDP	22	-	2.2	United Ctates	22.0
	Share of total number of securitization deals				United States United States	
. 10	onare of total number of securitization deals	20		0.2	Officed States	04.0
	6th pillar: Financial markets					
	Foreign exchange markets					
	Spot foreign exchange turnover				United Kingdom	
	Outright forward foreign exchange turnover				United Kingdom	
.03	Foreign exchange swap turnover	34		0.0	United Kingdom	42.0
	Derivatives markets					
.04	Interest rate derivatives turnover:					
	Forward rate agreements	30		0.0	United Kingdom	45.6
.05	Interest rate derivatives turnover: Swaps	36		0.0	United Kingdom	46.0
.06	Interest rate derivatives turnover: Options	n/a		n/a	United States	42.6
	Foreign exchange derivatives turnover: Currency swap				United Kingdom	47.6
.08	Foreign exchange derivatives turnover: Options	38		0.0	United Kingdom	42.6
	Equity market development					
.09	Equity market turnover	40		20.0	Pakistan	374.3
.05	Stock market capitalization to GDP	34		43.6	Hong Kong SAR	713.3
	Bond market development					
.10	Private-sector bonds to GDP	35		0.3	United States	114.0
.11	Public-sector bonds to GDP	14		5.2	France	7.0
.12	International bonds to GDP	19	■	29.7	Netherlands	121.7
	7th pillar: Size, depth, and access					
	Size and depth					
	M2 to GDP	23		51.3	Hong Kong SAR	252.3
	Private debt to GDP				Netherlands	
.03	Public debt to GDP	4		6.9	Austria	7.0
.04	Bank deposits to GDP	33		46.6	Hong Kong SAR	250.4
.05	Stock market capitalization to GDP	34		43.6	Hong Kong SAR	713.3
.06	Relative value-added of financial institutions to $\ensuremath{GDP}$	26		3.8	Panama	9.2
.07	Private credit to GDP	37		29.0	United States	193.7
.08	Stock market value traded to GDP	40		9.6	Saudi Arabia	356.2
	Access					
.09	Financial market sophistication	39		4.2	Switzerland	6.7
.10	Venture capital availability	44		2.9	United States	5.3
.11	Ease of access to credit	36		4.7	Slovak Republic	5.9
.12	Ease of access to local equity market	33		5.2	Sweden	6.2
	Bank branches				Spain	
.14	Ease of access to loans	43		2.9	Norway	5.5

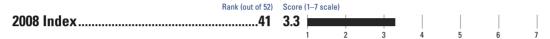
#### **Key indicators**

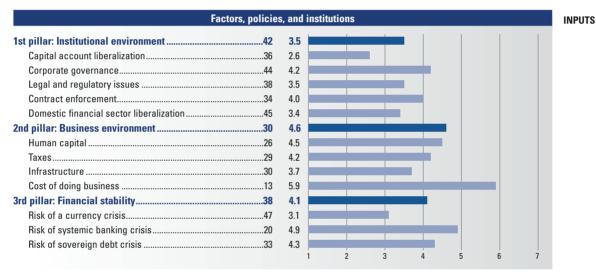
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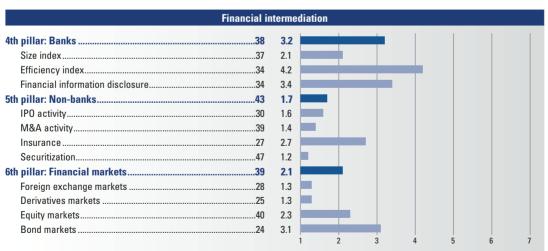
#### Financial assets by major type, 2006



### **Financial Development Index 2008**











mane	cial Development Index in detail		■ Developilien	t <b>Advantage III</b> Developme	ant <b>Disauvanta</b>
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment				
	Capital account liberalization				
1.01	Capital account liberalization	36■.	0.2	Multiple (15)	2.6
	Corporate governance				
1.02	Extent of incentive-based compensation	44■.	4.2	France	5.7
1.03	Efficacy of corporate boards			Sweden	6.1
1.04	Reliance on professional management			Sweden	
1.05	Willingness to delegate	37■.	3.9	Sweden	6.3
1.06	Strength of auditing and accounting standards	44	4.4	Germany	6.3
1.07	Shareholder rights index	n/a	n/a	Multiple (8)	5.0
1.08	Ethical behavior of firms	35■.	4.2	Finland	6.6
1.09	Protection of minority shareholders' interests	41	4.2	Sweden	6.4
	Legal and regulatory issues				
1.10	Burden of government regulation	37■.	2.8	Singapore	5.3
1.11	Centralization of economic policymaking	22■.	3.6	Switzerland	5.9
1.12	Regulation of security exchanges	34■.	4.9	Sweden	6.3
1.13	Property rights	43■.	4.0	Germany	6.7
1.14	Intellectual property protection	39■.	3.5	Germany	6.5
1.15	Diversion of public funds	37	3.5	Finland	6.5
1.16	Public trust of politicians	37■.	2.3	Singapore	6.4
	Contract enforcement				
1.17	Effectiveness of law-making bodies	45■.	2.5	Singapore	6.1
1.18	Judicial independence	39■.	3.5	Germany	6.5
1.19	Irregular payments in judicial decisions	35■.	4.4	Finland	6.8
1.20	Number of procedures to enforce a contract	37■.	38.0	Ireland	20.0
1.21	Time to enforce a contract	44	830.0	Singapore	120.0
1.22	Cost of enforcing contracts	4■.	10.0	China	8.8
1.23	Strength of investor protection			Singapore	
1.24	Time to close a business	32■.	3.0	Ireland	0.4
	Domestic financial sector liberalization				
1.25	Domestic financial sector liberalization	45	2.0	Multiple (34)	1.0
	2nd pillar: Business environment				
2.01	Human capital  Quality of management schools	22 ■	11	France	6.0
2.02	Quality of math and science education			Singapore	
2.03	Extent of staff training			Switzerland	
2.04	Local availability of research and training services			Switzerland	
2.05	Brain drain and ease of hiring foreign labor			Kuwait	
2.06	Tertiary enrollment			Finland	
	Taxes				
2.07	Irregular payments in tax collection	30	4.6	Sweden	6.8
2.08	Distortive effect on competition of taxes and subsidi-			Singapore	
2.09	Corporate tax rate			Multiple (4)	
	·				
2 10	Infrastructure	44 =	20	Switzerland	6.7
2.10	Quality of telephone/fax infrastructure			Switzerland	
2.11	Quality of telephone/fax infrastructure			Netherlands	
2.12	Broadband Internet subscribers			Netherlands	
2.13	Telephone lines			Switzerland	
4.14	1010PHOHE III 163	∠∪■.	∠೨.0	OVVIIZEIIAIIU	

(Cont'd.)

Italy.....135.1

#### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage INDICATOR BEST PERFORMER 2nd pillar: Business environment (cont'd.) Cost of doing business 2.16 Ireland......0.3 United Arab Emirates ......1.5 2.17 Saudi Arabia ......0.0 2.18 China ......390.0 Singapore ......367.0 2.20 2.21 Multiple (4) ......1.0 2.22 3rd pillar: Financial stability Risk of a currency crisis 3.01 Argentina .....-8.5 3.02 Russian Federation......15.4 3.03 Current account balance to GDP......38 ....■....-2.3 Kuwait ......46.1 Multiple (2) ......0.0 Saudi Arabia ......9.6 3.05A 3.05B Net int'l investment position to GDP (adv. economies) ......n/a ......n/a Switzerland......121.3 Risk of systemic banking crisis 3.06 Indonesia......16.0 3.07 Multiple (24) ......8.0 3.08 Multiple (3) ......9.0 Multiple (3) .....14.0 3.09 Private monitoring of the banking industry ......n/a .....n/a South Africa.....9.0 3.10 3.11 Multiple (11) ......0.0 3.12 Cumulative real estate appreciation ......n/a .....n/a Russian Federation.....-68.4 3 13 Risk of sovereign debt crisis 3.14 Multiple (15) .....20.0 Multiple (15) ......20.0 3.15 4th pillar: Banks Size index 4.01 Hong Kong SAR .....10.8 Size index Efficiency index United Arab Emirates ......6.8 4.02 Multiple (11) ......0.0 4.03 Financial information disclosure 4.04 Belgium ......57.2 Multiple (7) ......100.0 4.05 4.06 Multiple (14) ......6.0 5th pillar: Non-banks IPO activity 5.01 France 31.0 Kazakhstan ......4.4 Japan .....14.2 M&A activity 5.04 United States ......44.4 5.05 United Kingdom .....14.6 5.06 United States ......33.2

### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

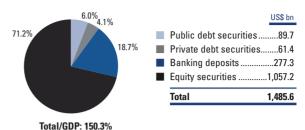
pillar: Non-banks (cont'd.)  urance  urance premiums, direct  urance density  Il growth of direct insurance premiums  urance penetration  uritization  uritization  uritization to GDP  ure of total number of securitization deals  pillar: Financial markets  eign exchange markets  t foreign exchange turnover  uritight forward foreign exchange turnover  eign exchange swap turnover  ivatives markets  rest rate derivatives turnover:  ward rate agreements  rest rate derivatives turnover: Options  eign exchange derivatives turnover: Options  eign exchange derivatives turnover: Options  ity market development  ity market development  ity market turnover.			310.3 19.0 3.5 0.2 0.1 0.1 0.3	United States
prance premiums, direct prance density prance density prance density prance penetration p			310.3 19.0 3.5 0.2 0.1 0.1 0.3	United Kingdom
rance density			310.3 19.0 3.5 0.2 0.1 0.1 0.3	United Kingdom
I growth of direct insurance premiums				India       55         United Kingdom       16         Switzerland       22         United States       23         United States       64         United Kingdom       26         United Kingdom       25         United Kingdom       44         United States       45
priliar: Financial markets  pillar: Financial markets  pign exchange markets  t foreign exchange turnover  pign exchange swap turnover  pign exchange derivatives turnover: Options			3.5 0.2 0.1 0.1 0.3 0.4 0.1 0.0 0.2	India       55         United Kingdom       16         Switzerland       22         United States       23         United States       64         United Kingdom       26         United Kingdom       25         United Kingdom       44         United States       45
uritization uritization uritization to GDP	4545		0.20.10.20.10.30.40.10.00.2	United States
uritization  uritization to GDP  re of total number of securitization deals  pillar: Financial markets  eign exchange markets  t foreign exchange turnover  right forward foreign exchange turnover  eign exchange swap turnover  ivatives markets  rest rate derivatives turnover: Swaps  rest rate derivatives turnover: Options  eign exchange derivatives turnover: Currency swap  eign exchange derivatives turnover: Options  ity market development  ity market turnover			0.2 0.1 0.2 0.1 0.3	United States
pillar: Financial markets eign exchange markets t foreign exchange turnover. right forward foreign exchange turnover. eign exchange swap turnover. eign exchange swap turnover. eivatives markets rest rate derivatives turnover: evard rate agreements. erest rate derivatives turnover: Swaps. erest rate derivatives turnover: Options. eign exchange derivatives turnover: Options.	2824		0.10.20.10.30.40.10.00.2	United Kingdom
pillar: Financial markets eign exchange markets t foreign exchange turnover	2824		0.10.20.10.30.40.10.00.2	United Kingdom
pillar: Financial markets eign exchange markets t foreign exchange turnover right forward foreign exchange turnover eign exchange swap turnover ivatives markets rest rate derivatives turnover: ward rate agreements rest rate derivatives turnover: Swaps rest rate derivatives turnover: Options eign exchange derivatives turnover: Options eign exchange derivatives turnover: Options iity market development ity market turnover	2824		0.2 0.1 0.3 0.4 0.1 00	United Kingdom
eign exchange markets t foreign exchange turnover	2824		0.1 0.3 0.4 0.1 0.0 0.2	United Kingdom
eign exchange markets t foreign exchange turnover	2824		0.1 0.3 0.4 0.1 0.0 0.2	United Kingdom
t foreign exchange turnover	2824		0.1 0.3 0.4 0.1 0.0 0.2	United Kingdom
right forward foreign exchange turnover	2824		0.1 0.3 0.4 0.1 0.0 0.2	United Kingdom
eign exchange swap turnover	24		0.3 0.4 0.1 0.0	United Kingdom
ivatives markets rest rate derivatives turnover: ward rate agreements	15 . 23 . 26 . 24 . 21 .		0.4 0.1 0.0	United Kingdom
rest rate derivatives turnover: ward rate agreements rest rate derivatives turnover: Swaps rest rate derivatives turnover: Options sign exchange derivatives turnover: Currency swap sign exchange derivatives turnover: Options ity market development ity market turnover	23 . 26 . 24 . 21 .		0.1 0.0 0.2	United Kingdom40 United States4
ward rate agreements	23 . 26 . 24 . 21 .		0.1 0.0 0.2	United Kingdom40 United States4
rest rate derivatives turnover: Swaps rest rate derivatives turnover: Options eign exchange derivatives turnover: Currency swap eign exchange derivatives turnover: Options ity market development ity market turnover	23 . 26 . 24 . 21 .		0.1 0.0 0.2	United Kingdom40 United States4
rest rate derivatives turnover: Options	26 . os24 . 21 .		0.0	United States42
eign exchange derivatives turnover: Currency swap eign exchange derivatives turnover: Options ity market development ity market turnover	os24 . 21 .		0.2	United Kingdom4
eign exchange derivatives turnover: Options  ity market development  ity market turnover	21 .			
ity market development ity market turnover			0.1	United Kingdom42
ity market turnover	35 .			C .
			36.1	Pakistan374
	36			Hong Kong SAR713
d market development ate-sector bonds to GDP	n/o		2/2	United States114
lic-sector bonds to GDP				France
rnational bonds to GDP				Netherlands12
pillar: Size, depth. and access				
•				
•	30 .		40.4	Hong Kong SAR252
				Netherlands216
lic debt to GDP	20 .		5.3	Austria
				Hong Kong SAR250
ck market capitalization to GDP	36 .		35.5	Hong Kong SAR713
ative value-added of financial institutions to GDP	47 .		0.4	Panama
ate credit to GDP	41 .		26.2	United States193
ck market value traded to GDP	37 .		16.2	Saudi Arabia356
ess				
ncial market sophistication	40 .		4.1	Switzerland
ture capital availability	32 .		3.6	United States
e of access to credit	46 .		4.4	Slovak Republic
e of access to local equity market	41 .		4.6	Sweden
k branches	34 .		8.2	Spain99
e of access to loans	36 .		3.4	Norway
p t a li k c a a c e k	and depth to GDP	sillar: Size, depth, and access         and depth         to GDP       30         te debt to GDP       46         to debt to GDP       20         to deposits to GDP       39         k market capitalization to GDP       36         tive value-added of financial institutions to GDP       47         the credit to GDP       41         k market value traded to GDP       37         ess         ncial market sophistication       40         ure capital availability       32         e of access to credit       46         e of access to local equity market       41         c branches       34	and depth  or GDP	and depth  or GDP

### Russian Federation

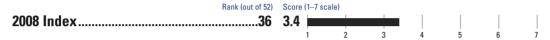
#### **Key indicators**

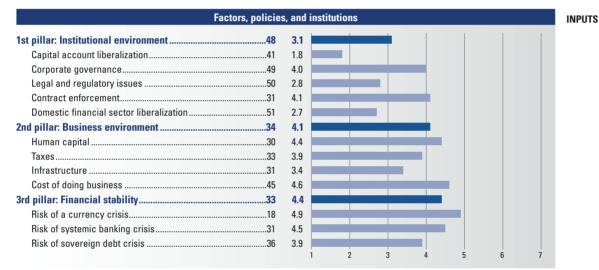
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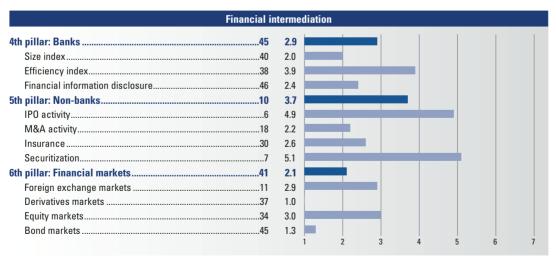
#### Financial assets by major type, 2006

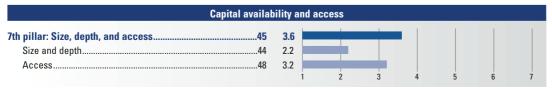


#### **Financial Development Index 2008**











### **Russian Federation**

inanc	ial Development Index in detail		■ Developmen	t <b>Advantage</b> Developm	ent <b>Disadvanta</b> ç
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment				
	Capital account liberalization				
1.01	Capital account liberalization	41	0.1	Multiple (15)	2.6
	Corporate governance				
1.02	Extent of incentive-based compensation	30■	4.6	France	5.7
1.03	Efficacy of corporate boards			Sweden	6.1
1.04	Reliance on professional management			Sweden	6.4
1.05	Willingness to delegate	46	3.6	Sweden	6.3
1.06	Strength of auditing and accounting standards	49	3.9	Germany	6.3
1.07	Shareholder rights index	n/a	n/a	Multiple (8)	5.0
1.08	Ethical behavior of firms	51■	3.3	Finland	6.6
1.09	Protection of minority shareholders' interests	51■	3.1	Sweden	6.4
	Legal and regulatory issues				
1.10	Burden of government regulation	47	2.5	Singapore	5.3
1.11	Centralization of economic policymaking			Switzerland	
1.12	Regulation of security exchanges			Sweden	
1.13	Property rights			Germany	
1.14	Intellectual property protection			Germany	
1.15	Diversion of public funds			Finland	
1.16	Public trust of politicians			Singapore	
	·			g-p	
4 47	Contract enforcement	40 =	0.4	0.	0.4
1.17	Effectiveness of law-making bodies			Singapore	
1.18	Judicial independence			Germany	
1.19	Irregular payments in judicial decisions			Finland	
1.20	Number of procedures to enforce a contract			Ireland	
1.21	Time to enforce a contract			Singapore	
1.22	Cost of enforcing contracts			China	
1.23	Strength of investor protection			Singapore	
1.24	Time to close a business	38■	3.8	Ireland	0.4
	Domestic financial sector liberalization				
1.25	Domestic financial sector liberalization	51■	2.0	Multiple (34)	1.0
	2nd pillar: Business environment				
	Human capital				
2.01	Quality of management schools	43	3.8	France	6.0
2.02	Quality of math and science education	23■	4.7	Singapore	6.3
2.03	Extent of staff training	50■	3.3	Switzerland	
2.04	Local availability of research and training services	46	3.7	Switzerland	6.0
2.05	Brain drain and ease of hiring foreign labor			Kuwait	
2.06	Tertiary enrollment  Taxes	8■	72.3	Finland	93.2
2.07	Irregular payments in tax collection	32	5.2	Sweden	6.8
2.08	Distortive effect on competition of taxes and subsid			Singapore	
2.09	Corporate tax rate			Multiple (4)	
	Infrastructure			,	
2.10	Quality of overall infrastructure	43	3.0	Switzerland	6.7
2.10	Quality of telephone/fax infrastructure			Switzerland	
2.11	Internet users			Netherlands	
2.12	Broadband Internet subscribers			Netherlands	
4.15				Switzerland	
2.14	Telephone lines				

### Russian Federation

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	•				
2.16	Cost of ctarting a business	14	27	Ireland	0.3
2.10	Cost of starting a business  Cost of dealing with licenses			United Arab Emirates	
2.17	Cost of dealing with licenses			Saudi Arabia	
2.10	Cost to export			China	
2.20	Cost to import			Singapore	
2.21	Cost of enforcing contracts			China	
2.22	Cost of closing a business			Multiple (4)	
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	44	6.4	Argentina	_Q F
3.01	External vulnerability indicator			Russian Federation	
3.02	Current account balance to GDP			Kuwait	
3.04	Dollarization vulnerability indicator			Multiple (2)	
.05A	External debt to GDP (developing economies)			Saudi Arabia	
05B	Net int'l investment position to GDP (adv. econom			Switzerland	
2.06	Risk of systemic banking crisis	25	0.0	Indonesia	16.0
3.06 3.07	Activity restrictions for banks Entry restrictions for banks				
3.07	Capital restrictions for banks			Multiple (24) Multiple (3)	
3.09	Official supervisory power			Multiple (3)	
3.10	Private monitoring of the banking industry			South Africa	
3.10	Frequency of banking crises			Multiple (11)	
3.12	Stability Index			India	
3.12	Cumulative real estate appreciation			Russian Federation	
0.10	• •			ridobidir i odoration	
211	Risk of sovereign debt crisis	2E ■	100	Multiple (15)	20.0
3.14 3.15	Local currency sovereign rating  Foreign currency sovereign rating			Multiple (15) Multiple (15)	
3.15	Foreign currency sovereign rating		12.3	iviuitipie (15)	20.0
	4th pillar: Banks				
	Size index				
4.01	Size index	40	4.8	Hong Kong SAR	10.8
	Efficiency index				
4.02	Efficiency index		4.7	United Arab Emirates	36.8
4.03	Public ownership of banks			Multiple (11)	0.0
	Financial information disclosure				
4.04	Public credit registry coverage	21	0.0	Belgium	57.2
4.05	Private credit bureau coverage			Multiple (7)	
4.06	Credit Information Index			Multiple (14)	
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	6■	6.4	France	31.0
5.02	IPO proceeds amount			Kazakhstan	
5.03	Share of world IPOs			Japan	14.2
	M&A activity				
5.04	M&A market share	12	1 1	United States	11.1
5.04	M&A transaction value to GDP			United Kingdom	
J.UJ	Share of total number of M&A deals			United States	

## **Russian Federation**

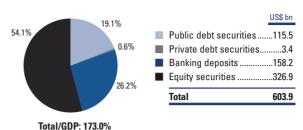
Financial Development Index in detail (cont'd.)	Development Advantage	■ Development <b>Disadvantage</b>
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	5th pillar: Non-banks (cont'd.)				
	Insurance				
07	Insurance premiums, direct	20	21,5	03.6	United States1,170,100.
38	Insurance density				United Kingdom6,466.
09	Real growth of direct insurance premiums	15		11.6	India52.
10	Insurance penetration	38		2.3	United Kingdom16.
11	Relative value-added of insurance	20		1.2	Switzerland4.
	Securitization				
12	Securitization to GDP	11		3.9	United States22.
13	Share of total number of securitization deals	2		4.6	United States64.
	6th pillar: Financial markets				
	Foreign exchange markets		_		
01	Spot foreign exchange turnover				United Kingdom26.
02	Outright forward foreign exchange turnover				United Kingdom29.
03	Foreign exchange swap turnover	15	.=	0.7	United Kingdom42.
	Derivatives markets				
04	Interest rate derivatives turnover:				
	Forward rate agreements				United Kingdom45.
)5	Interest rate derivatives turnover: Swaps				United Kingdom46.
06	Interest rate derivatives turnover: Options	n/a		n/a	United States42.
07	Foreign exchange derivatives turnover: Currency swap				United Kingdom47.
98	Foreign exchange derivatives turnover: Options	36		0.0	United Kingdom42.
	Equity market development				
09	Equity market turnover				Pakistan
)5	Stock market capitalization to GDP	24		74.5	Hong Kong SAR713.
	Bond market development				
10	Private-sector bonds to GDP	n/a		n/a	United States114.
11	Public-sector bonds to GDP	40		1.0	France7.
12	International bonds to GDP	35		8.4	Netherlands121.
	7th pillar: Size, depth, and access				
	Size and depth				
01	M2 to GDP	34		29.4	Hong Kong SAR252.
)2	Private debt to GDP	36		6.2	Netherlands216.
03	Public debt to GDP	50		1.4	Austria7.
04	Bank deposits to GDP	44		23.5	Hong Kong SAR250.
)5	Stock market capitalization to GDP	24		74.5	Hong Kong SAR713.
06	Relative value-added of financial institutions to $\ensuremath{GDP}\xspace$ .	37		2.6	Panama9.
07	Private credit to GDP	40		26.2	United States193.
80	Stock market value traded to GDP	26		52.1	Saudi Arabia356.
	Access				
)9	Financial market sophistication	49		3.3	Switzerland6.
10	Venture capital availability	37		3.1	United States5.
11	Ease of access to credit	29		4.9	Slovak Republic5.
12	Ease of access to local equity market	46		4.2	Sweden6.
13	Bank branches	46		2.2	Spain95.
14	Ease of access to loans	46		2.8	Norway5.

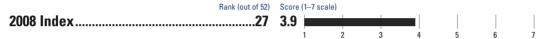
### **Key indicators**

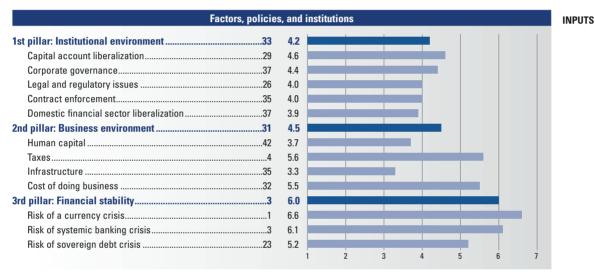
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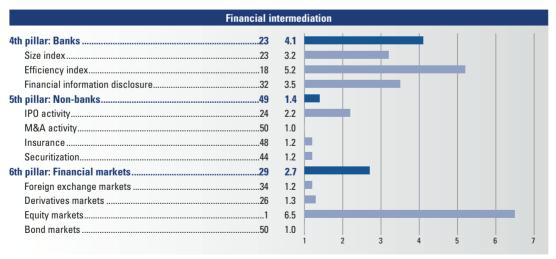
### Financial assets by major type, 2006

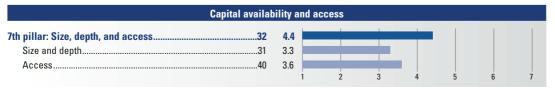


## **Financial Development Index 2008**











							ent <b>Disadvantage</b>
	INDICATOR	RANK/52		SCORE	BEST PE	RFORMER	SCORE
	1st pillar: Institutional environment						
	Capital account liberalization						
1.01	Capital account liberalization	29		1.2	Multiple	e (15)	2.6
	Corporate governance						
1.02	Extent of incentive-based compensation	40		4.3	France.		5.7
1.03	Efficacy of corporate boards	34		4.7	Sweder	า	6.1
1.04	Reliance on professional management	45		4.3	Sweder	า	6.4
1.05	Willingness to delegate	33		4.1	Sweder	า	6.3
1.06	Strength of auditing and accounting standards	38		4.7	German	ny	6.3
	Shareholder rights index					e (8)	
	Ethical behavior of firms						6.6
1.09	Protection of minority shareholders' interests	39		4.4	Sweder	າ	6.4
	Legal and regulatory issues						
1.10	Burden of government regulation	10	■	3.9	Singapo	ore	5.3
1.11	Centralization of economic policymaking	35		3.0	Switzer	land	5.9
1.12	Regulation of security exchanges	48	■	3.9	Sweder	า	6.3
	Property rights				German	ny	6.7
1.14	Intellectual property protection	32		3.9	German	ny	6.5
	Diversion of public funds						
1.16	Public trust of politicians	13		4.2	Singapo	ore	6.4
	Contract enforcement						
1.17	Effectiveness of law-making bodies	31		3.8	Singapo	ore	6.1
1.18	Judicial independence	29		4.4	German	ny	6.5
1.19	Irregular payments in judicial decisions	34		4.4	Finland		6.8
1.20	Number of procedures to enforce a contract	46		44.0	Ireland.		20.0
1.21	Time to enforce a contract	41		635.0	Singapo	ore	120.0
1.22	Cost of enforcing contracts	35	■	27.5	China		8.8
1.23	Strength of investor protection	22		5.7	Singapo	ore	9.3
1.24	Time to close a business	28		2.8	Ireland.		0.4
	Domestic financial sector liberalization						
1.25	Domestic financial sector liberalization	37		2.0	Multiple	9 (34)	1.0
	Human capital						
2.01	Quality of management schools	42		3.8	France.		6.0
2.02	Quality of math and science education	34		3.9	Singapo	ore	6.3
2.03	Extent of staff training	43		3.6	Switzer	land	5.9
2.04	Local availability of research and training services	41		3.9	Switzer	land	6.0
2.05	Brain drain and ease of hiring foreign labor	23		4.5	Kuwait		5.8
2.06	Tertiary enrollment	39		29.2	Finland		93.2
	Taxes						
2.07	Irregular payments in tax collection	33		5.0	Sweder	າ	6.8
2.08	Distortive effect on competition of taxes and subsidie	es8		5.0	Singapo	ore	5.7
2.09	Corporate tax rate	1		0.0	Multiple	e (4)	0.0
	Infrastructure						
	Quality of overall infrastructure	28		4.3	Switzer	land	6.7
	Quality of telephone/fax infrastructure						6.9
	Internet users						85.7
	Broadband Internet subscribers						31.8
	Telephone lines					land	
	Mobile telephone subscribers						
-	,				,		

(Cont'd.)

		RANK/52	SCORE	BEST PERFORMER SC	CORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
6	Cost of starting a business	46	32.3	Ireland	0.3
7	Cost of dealing with licenses			United Arab Emirates	
8	Cost of registering property			Saudi Arabia	
9	Cost to export			China39	90.0
0	Cost to import	15■	758.0	Singapore36	67.0
1	Cost of enforcing contracts	35	27.5	China	8.8
2	Cost of closing a business	40	22.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
1	Change in real effective exchange rate	6	_4.0	Argentina	_Q F
2	External vulnerability indicator			Russian Federation1	
3	Current account balance to GDP			Kuwait4	
4	Dollarization vulnerability indicator			Multiple (2)	
Α	External debt to GDP (developing economies)			Saudi Arabia	
3	Net int'l investment position to GDP (adv. econor			Switzerland12	
	Risk of systemic banking crisis		•		
6	Activity restrictions for banks	4	12.0	Indonesia1	16 (
7	Entry restrictions for banks			Multiple (24)	
8	Capital restrictions for banks			Multiple (3)	
9	Official supervisory power			Multiple (3)1	
0	Private monitoring of the banking industry			South Africa	
1	Frequency of banking crises			Multiple (11)	
2	Stability Index	n/a	n/a	India	
3	Cumulative real estate appreciation	n/a	n/a	Russian Federation6	68.4
	Risk of sovereign debt crisis				
4	Local currency sovereign rating	22	16.0	Multiple (15)2	20.0
5	Foreign currency sovereign rating			Multiple (15)2	
	4th pillar: Banks				
	Size index				
1	Size index	23■	6.3	Hong Kong SAR1	10.8
2	Efficiency index Efficiency index	17	E 4	United Arab Emirates	6.0
2 3	Public ownership of banks				
J		∠/■	1 భ.ర	Multiple (11)	0.0
	Financial information disclosure				
4	Public credit registry coverage			Belgium	
5	Private credit bureau coverage			Multiple (7)10	
6	Credit Information Index	1	6.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
1	IPO market share	21■	1.0	France	31.0
2	IPO proceeds amount	15■	8	Kazakhstan	4.4
3	Share of world IPOs	23	0.6	Japan1	14.2
	M&A activity				
4	M&A market share	50	0.0	United States4	44.4
5	M&A transaction value to GDP	51	0.0	United Kingdom1	14.6
6	Share of total number of M&A deals	48	0.0	United States	33.2

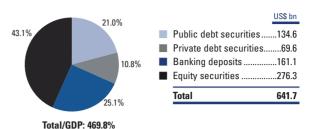
## Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	•	SCORE	BEST PERFORMER	SCORE
	5th pillar: Non-banks (cont'd.)					
	Insurance					
.07	Insurance premiums, direct	43	1,!	590.1	United States1	,170,100.6
.08	Insurance density	40		63.1	United Kingdom	
.09	Real growth of direct insurance premiums	n/a		n/a	India	52.6
.10	Insurance penetration	50		0.5	United Kingdom	16.5
.11	Relative value-added of insurance	36		0.7	Switzerland	4.8
	Securitization					
.12	Securitization to GDP	42		0.7	United States	22.9
.13	Share of total number of securitization deals	44		0.0	United States	64.9
	6th pillar: Financial markets					
	Foreign exchange markets					
.01	Spot foreign exchange turnover	27		0.2	United Kingdom	26 F
.02	Outright forward foreign exchange turnover				United Kingdom	
.03	Foreign exchange swap turnover				United Kingdom	
-	Derivatives markets				3-2	
.04	Interest rate derivatives turnover:					
.0-	Forward rate agreements	30		0.0	United Kingdom	45.6
.05	Interest rate derivatives turnover: Swaps				United Kingdom	
.06	Interest rate derivatives turnover: Options				United States	
.07	Foreign exchange derivatives turnover: Currency swa				United Kinadom	
.08	Foreign exchange derivatives turnover: Options				United Kingdom	
	Equity market development					
.09	Equity market turnover	2		231.0	Pakistan	374.3
.05	Stock market capitalization to GDP				Hong Kong SAR	
	Bond market development				3 3 3	
.10	Private-sector bonds to GDP	n/a		n/a	United States	114 (
.10	Public-sector bonds to GDP	, .		, -	France	
.12	International bonds to GDP	, .		, -	Netherlands	
	7th pillar: Size, depth, and access					
	Size and depth					
.01	M2 to GDP	29		44.4	Hong Kong SAR	252.3
.02	Private debt to GDP				Netherlands	
.03	Public debt to GDP				Austria	
.04	Bank deposits to GDP				Hong Kong SAR	
.05	Stock market capitalization to GDP				Hong Kong SAR	
.06	Relative value-added of financial institutions to GDP.	42		1.5	Panama	9.2
.07	Private credit to GDP	31		49.2	United States	193.7
.08	Stock market value traded to GDP	1		356.2	Saudi Arabia	356.2
	Access					
.09	Financial market sophistication	41		4.1	Switzerland	6.7
.10	Venture capital availability				United States	
.11	Ease of access to credit				Slovak Republic	
.12	Ease of access to local equity market				Sweden	
.13	Bank branches				Spain	95.9
	Ease of access to loans	35		3.6	Norway	5.5
7.14						

### **Key indicators**

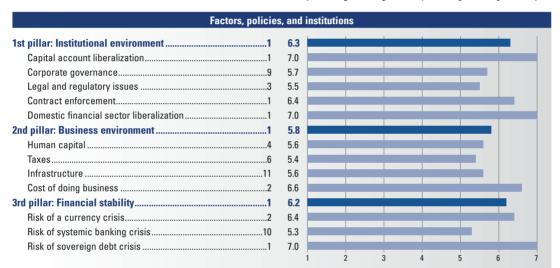
### GDP (US\$ billions), 2007 ......161.3 GDP (current prices, US\$) per capita, 2007 ......35,162.9 Average annual rate of real GDP growth (%), 2003-07 ......7.14

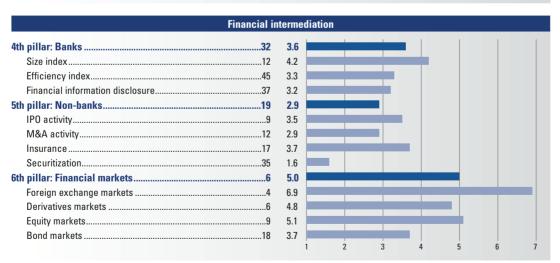
### Financial assets by major type, 2006



## **Financial Development Index 2008**

Rank (out of 52) Score (1-7 scale) 2008 Index......10 5.1









**INPUTS** 

## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORI
	1st pillar: Institutional environment				
	Capital account liberalization				
01	Capital account liberalization	1	2.6	Multiple (15)	2.6
	Corporate governance				
02	Extent of incentive-based compensation	12	5.2	France	5.7
03	Efficacy of corporate boards	9■	5.6	Sweden	6.
04	Reliance on professional management	10■	5.9	Sweden	6.4
05	Willingness to delegate	20	4.9	Sweden	6.3
06	Strength of auditing and accounting standards	12■	6.1	Germany	6.3
07	Shareholder rights index			Multiple (8)	
80	Ethical behavior of firms			Finland	
09	Protection of minority shareholders' interests	15■	5.5	Sweden	6.4
	Legal and regulatory issues				
10	Burden of government regulation			Singapore	5.3
11	Centralization of economic policymaking	50	1.9	Switzerland	5.9
12	Regulation of security exchanges	5■	6.0	Sweden	6.3
13	Property rights			Germany	6.7
14	Intellectual property protection			Germany	
15	Diversion of public funds			Finland	
16	Public trust of politicians	1■	6.4	Singapore	6.4
	Contract enforcement				
17	Effectiveness of law-making bodies	1	6.1	Singapore	6.
18	Judicial independence	14	5.6	Germany	6.
19	Irregular payments in judicial decisions	4	6.6	Finland	6.
20	Number of procedures to enforce a contract	2■	22.0	Ireland	20.
21	Time to enforce a contract	1	120.0	Singapore	120.0
22	Cost of enforcing contracts	20	17.8	China	8.8
23	Strength of investor protection	1	9.3	Singapore	9.
24	Time to close a business	3	8	Ireland	0.4
	Domestic financial sector liberalization				
25	Domestic financial sector liberalization	1■	1.0	Multiple (34)	1.0
	2nd nillow Ducinose equivenment				
	2nd pillar: Business environment				
04	Human capital		<b>5</b> 7	France	0.4
01	Quality of management schools			Singapore	
02 03	Quality of math and science education			Switzerland	
03 04	Extent of staff training			Switzerland	
04 05	Brain drain and ease of hiring foreign labor			Kuwait	
06	Tertiary enrollment			Finland	
00	•				
	Taxes		0.7	0 1	0
07	Irregular payments in tax collection			Sweden	
80	Distortive effect on competition of taxes and subs			Singapore	
	Corporate tax rate		20.0	Multiple (4)	0.0
09	Infrastructure		6.6	Switzerland	
09	Quality of overall infrastructure			0 1: 1 1	6.9
09 10				Switzerland	
09 10 11	Quality of overall infrastructure  Quality of telephone/fax infrastructure  Internet users	4 <b>.</b> 9 <b>.</b>	6.8	Netherlands	85.
09 10 11 12	Quality of overall infrastructure	4 <b>.</b> 9 <b>.</b>	6.8	Netherlands	
09 10 11 12 13	Quality of overall infrastructure  Quality of telephone/fax infrastructure  Internet users		6.8 59.4 18.3	Netherlands	

Financial Development Index in detail (cont'd.)	velopment <b>Advantage 🔳</b> Development <b>Disadvantag</b>
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	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of doing business  Cost of starting a business	4	0.8	Ireland	0.3
2.17	Cost of dealing with licenses			United Arab Emirates	
2.18	Cost of registering property			Saudi Arabia	
2.19	Cost to export			China	390.0
2.20	Cost to import			Singapore	
2.21	Cost of enforcing contracts			China	
2.22	Cost of closing a business	1	1.0	Multiple (4)	
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	31	2.7	Argentina	-8 5
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP			Kuwait	
3.04	Dollarization vulnerability indicator			Multiple (2)	
3.05A	External debt to GDP (developing economies)			Saudi Arabia	
3.05B	Net int'l investment position to GDP (adv. econom			Switzerland	
0.005	·			OWITZGITATIA	121.0
	Risk of systemic banking crisis		40.0		40.0
3.06	Activity restrictions for banks			Indonesia	
3.07	Entry restrictions for banks			Multiple (24)	
3.08	Capital restrictions for banks			Multiple (3)	
3.09	Official supervisory power			Multiple (3)	
3.10	Private monitoring of the banking industry			South Africa	
3.11	Frequency of banking crises			Multiple (11)	
3.12	Stability Index			India	
3.13	Cumulative real estate appreciation		8.5	Russian Federation	68.4
	Risk of sovereign debt crisis				
3.14	Local currency sovereign rating			Multiple (15)	
3.15	Foreign currency sovereign rating	1■	20.0	Multiple (15)	20.0
	4th pillar: Banks				
	Size index				
4.01	Size index	12	7.4	Hong Kong SAR	10.8
4.01				riong Rong SAIT	
	Efficiency index				
4.02	Efficiency index			United Arab Emirates	
4.03	Public ownership of banks	1	0.0	Multiple (11)	0.0
	Financial information disclosure				
4.04	Public credit registry coverage	21■	0.0	Belgium	57.2
4.05	Private credit bureau coverage	22■	42.7	Multiple (7)	100.0
4.06	Credit Information Index	31■	4.0	Multiple (14)	6.0
	Ed. 20 No. 1 1				
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share			France	
5.02	IPO proceeds amount			Kazakhstan	
5.03	Share of world IPOs	12■	2.1	Japan	14.2
	M&A activity				
5.04	M&A market share	22■	0.5	United States	44.4
5.05	M&A transaction value to GDP	6	10.4	United Kingdom	14.6
5.06	Share of total number of M&A deals			United States	33.2

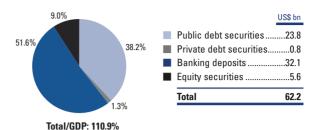
					BEST PERFORMER	SCORE
	5th pillar: Non-banks (cont'd.)					
	Insurance					
07	Insurance premiums, direct	27		10,775.5	United States1,1	70,100.6
08	Insurance density	19		1,957.7	United Kingdom	
09	Real growth of direct insurance premiums	31		1.4	India	
10	Insurance penetration	18		6.5	United Kingdom	16.
11	Relative value-added of insurance	3	■	3.2	Switzerland	4.8
	Securitization					
12	Securitization to GDP	34		1.4	United States	22.9
13	Share of total number of securitization deals	31		0.1	United States	64.9
	6th pillar: Financial markets					
	Foreign exchange markets					
01	Spot foreign exchange turnover	5		7.1	United Kingdom	26.6
02	Outright forward foreign exchange turnover	4		6.1	United Kingdom	
03	Foreign exchange swap turnover	5	■	5.4	United Kingdom	42.0
	Derivatives markets					
04	Interest rate derivatives turnover:					
	Forward rate agreements	14		0.5	United Kingdom	45.0
05	Interest rate derivatives turnover: Swaps	6		3.5	United Kingdom	46.0
06	Interest rate derivatives turnover: Options				United States	
07	Foreign exchange derivatives turnover: Currency swap	s7	■	3.1	United Kingdom	47.0
38	Foreign exchange derivatives turnover: Options	5		4.0	United Kingdom	42.0
	Equity market development					
09	Equity market turnover	25	■	62.6	Pakistan	374.3
)5	Stock market capitalization to GDP	4		221.5	Hong Kong SAR	713.3
	Bond market development					
10	Private-sector bonds to GDP	19	■	18.8	United States	114.0
11	Public-sector bonds to GDP				France	7.0
12	International bonds to GDP	16		32.4	Netherlands	121.
	7th pillar: Size, depth, and access					
	Size and depth					
01	M2 to GDP	8		109.5	Hong Kong SAR	252.3
02	Private debt to GDP				Netherlands	
03	Public debt to GDP				Austria	
04	Bank deposits to GDP				Hong Kong SAR	
05	Stock market capitalization to GDP				Hong Kong SAR	
06	Relative value-added of financial institutions to GDP				Panama	
07	Private credit to GDP				United States Saudi Arabia	
38	Stock market value traded to GDP	15		102.7	Saudi Arabia	356
	Access		_			
09	Financial market sophistication				Switzerland	
10	Venture capital availability				United States	
11	Ease of access to credit				Slovak Republic	
12 13	Ease of access to local equity market				Sweden Spain	
13 14	Ease of access to loans				Norway	
14	2430 OT 800033 TO TORITS		=	4.0	14014Vay	

## Slovak Republic

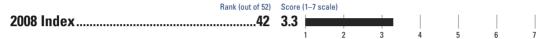
### **Key indicators**

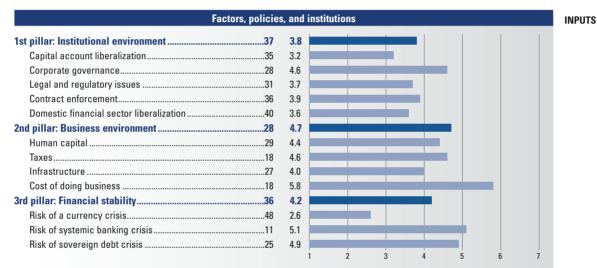
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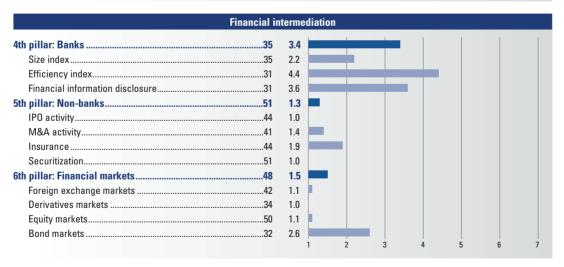
### Financial assets by major type, 2006



## **Financial Development Index 2008**











## Slovak Republic

## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment				
	Capital account liberalization				
01	Capital account liberalization	35	0.5	Multiple (15)	2.6
	Corporate governance				
02	Extent of incentive-based compensation	34■.	4.4	France	5.7
03	Efficacy of corporate boards	22■.	5.2	Sweden	6.
04	Reliance on professional management	27■.	5.2	Sweden	6.4
05	Willingness to delegate	26	4.4	Sweden	6.3
06	Strength of auditing and accounting standards	31■.	5.0	Germany	6.3
07	Shareholder rights index			Multiple (8)	
80	Ethical behavior of firms			Finland	
09	Protection of minority shareholders' interests	45■.	4.0	Sweden	6.4
	Legal and regulatory issues				
10	Burden of government regulation			Singapore	5.3
11	Centralization of economic policymaking	15■.	4.0	Switzerland	5.9
12	Regulation of security exchanges	41■.	4.5	Sweden	6.3
13	Property rights	33■.	5.0	Germany	6.7
14	Intellectual property protection	33■.	3.8	Germany	6.!
15	Diversion of public funds	32■.	3.7	Finland	6.
16	Public trust of politicians	41■.	2.1	Singapore	6.4
	Contract enforcement				
17	Effectiveness of law-making bodies	36■.	3.4	Singapore	6.
18	Judicial independence	36■.	3.6	Germany	6.!
19	Irregular payments in judicial decisions	40■.	3.8	Finland	6.8
20	Number of procedures to enforce a contract	10■.	30.0	Ireland	20.0
21	Time to enforce a contract	32■.	565.0	Singapore	120.0
22	Cost of enforcing contracts	31■.	25.7	China	8.8
23	Strength of investor protection	40■.	4.7	Singapore	9.3
24	Time to close a business	39■.	4.0	Ireland	0.4
	Domestic financial sector liberalization				
25	Domestic financial sector liberalization	40■.	2.0	Multiple (34)	1.0
	2nd pillar: Business environment				
01	Human capital  Quality of management schools	20	4.1	France	6.1
02	Quality of math and science education			Singapore	
02	Extent of staff training			Switzerland	
03 04	Local availability of research and training services			Switzerland	
05	Brain drain and ease of hiring foreign labor			Kuwait	
06	Tertiary enrollment			Finland	
	,				
~~	Taxes	0.4		Considera	0
07	Irregular payments in tax collection			Sweden	
80	Distortive effect on competition of taxes and subside			Singapore	
09	Corporate tax rate	9■.	19.0	iviuitipie (4)	0.0
	Infrastructure				
	Quality of overall infrastructure			Switzerland	
		18■.		Switzerland	
	Quality of telephone/fax infrastructure			Netherlands	85.
11	Internet users				
10 11 12 13				Netherlands	31.8
11 12	Internet users	26■.	5.9		31.8

(Cont'd.)

## Slovak Republic

nanc	cial Development Index in detail (cont'd.)		Development	Advantage Deve	lopment <b>Disadvanta</b>
	INDICATOR R	ANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of starting a business			Ireland	0.3
2.17	Cost of dealing with licenses			United Arab Em	irates1.5
2.18	Cost of registering property				0.0
2.19	Cost to export		,		390.0
2.20	Cost to import			3-1	367.0
2.21	Cost of enforcing contracts				8.8
2.22	Cost of closing a business	33■.	18.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	45	7.0	Argentina	8.5
3.02	External vulnerability indicator			~	tion15.4
3.03	Current account balance to GDP	50	8.3	Kuwait	46.1
3.04	Dollarization vulnerability indicator	n/a	n/a	Multiple (2)	0.0
.05A	External debt to GDP (developing economies)	27	53.2	Saudi Arabia	9.6
.05B	Net int'l investment position to GDP (adv. economies) .	n/a	n/a	Switzerland	121.3
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks				16.0
3.07	Entry restrictions for banks			· ·	8.0
3.08	Capital restrictions for banks				9.0
3.09	Official supervisory power			· ·	14.0
3.10	Private monitoring of the banking industry				9.0
3.11	Frequency of banking crises				0.0
3.12	Stability Index  Cumulative real estate appreciation				7.2 tion68.4
5.15		II/a		nussian i euera	00.4
0.14	Risk of sovereign debt crisis	00	15.0	M II: 1 (45)	00.0
3.14 3.15	Local currency sovereign rating  Foreign currency sovereign rating				20.0
	4th pillar: Banks				
	Size index				
4.01	Size index	35■.	5.1	Hong Kong SAF	R10.8
	Efficiency index				
4.02	Efficiency index	32■.	4.9	United Arab Em	irates6.8
4.03	Public ownership of banks	25■.	18.2	Multiple (11)	0.0
	Financial information disclosure				
4.04	Public credit registry coverage	19	1.2	Relaium	57.2
4.05	Private credit bureau coverage				100.0
4.06	Credit Information Index				6.0
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	45	0.0	France	31.0
5.02	IPO proceeds amount	44	0.1	Kazakhstan	4.4
5.03	Share of world IPOs	39■.	0.1	Japan	14.2
	M&A activity				
5.04	M&A market share	45	0.0	United States	44.4
5.05	M&A transaction value to GDP				n14.6
5.06	Share of total number of M&A deals			Ü	33.2

Norway......5.5

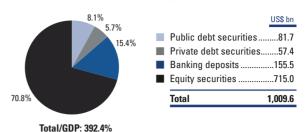
## Slovak Republic

ıdilC	cial Development Index in detail (cont'd.	./	■ Developmen	t <b>Advantage ■</b> Development <b>Disadvan</b>
	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCORE
	5th pillar: Non-banks (cont'd.)			
	Insurance			
.07	Insurance premiums, direct	41	1,819.6	United States1,170,100.6
.08	Insurance density	26	336.9	United Kingdom6,466.7
.09	Real growth of direct insurance premiums	n/a	n/a	India52.6
.10	Insurance penetration	28	3.4	United Kingdom16.5
.11	Relative value-added of insurance	22	1.1	Switzerland4.8
	Securitization			
.12	Securitization to GDP	51	0.0	United States22.9
5.13	Share of total number of securitization deals	50	0.0	United States64.9
	6th pillar: Financial markets			
	Foreign exchange markets			
.01	Spot foreign exchange turnover	42	0.0	United Kingdom26.6
.02	Outright forward foreign exchange turnover	41	0.0	United Kingdom29.9
6.03	Foreign exchange swap turnover	29	0.1	United Kingdom42.0
	Derivatives markets			
.04	Interest rate derivatives turnover:			
	Forward rate agreements	n/a	n/a	United Kingdom45.6
.05	Interest rate derivatives turnover: Swaps	n/a	n/a	United Kingdom46.0
.06	Interest rate derivatives turnover: Options	n/a	n/a	United States42.6
6.07	Foreign exchange derivatives turnover: Currency swa	apsn/a	n/a	United Kingdom47.6
80.8	Foreign exchange derivatives turnover: Options	32	0.0	United Kingdom42.6
	Equity market development			
.09	Equity market turnover	50	1.6	Pakistan374.3
.05	Stock market capitalization to GDP	47	8.7	Hong Kong SAR713.3
	Bond market development			
.10	Private-sector bonds to GDP	n/a	n/a	United States114.0
5.11	Public-sector bonds to GDP	28■	3.6	France7.0
.12	International bonds to GDP	37	7.6	Netherlands121.7
	7th pillar: Size, depth, and access			
.01	Size and depth M2 to GDP	20 -	57.1	Hong Kong SAR252.3
.02	Private debt to GDP			Netherlands216.2
.02	Public debt to GDP			Austria
.03	Bank deposits to GDP			Hong Kong SAR250.4
.05	Stock market capitalization to GDP			Hong Kong SAR713.3
.06	Relative value-added of financial institutions to GDP.			Panama9.2
.07	Private credit to GDP			United States193.7
.08	Stock market value traded to GDP			Saudi Arabia356.2
	Access			
.09	Financial market sophistication	31	48	Switzerland6.7
.10	Venture capital availability			United States5.3
.10	Ease of access to credit			Slovak Republic5.9
· · · · '.12	Ease of access to local equity market			Sweden6.2
7 10	Pank branches	24		Chain OF 0

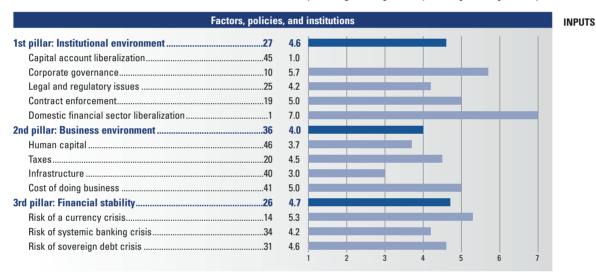
### **Key indicators**

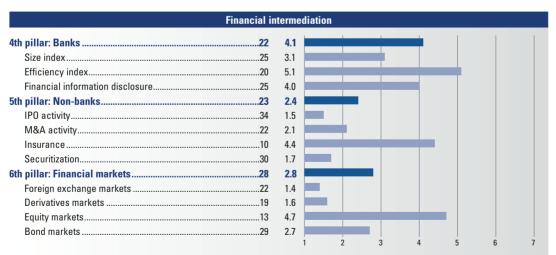
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### Financial assets by major type, 2006



## **Financial Development Index 2008**









## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment				
	Capital account liberalization				
.01	Capital account liberalization	45	1.1	Multiple (15)	2.6
	Corporate governance				
.02	Extent of incentive-based compensation	2■	5.7	France	5.
1.03	Efficacy of corporate boards			Sweden	6.
1.04	Reliance on professional management	13■	5.8	Sweden	6.4
1.05	Willingness to delegate	22■	4.6	Sweden	6.3
1.06	Strength of auditing and accounting standards	6■	6.2	Germany	
1.07	Shareholder rights index			Multiple (8)	5.0
1.08	Ethical behavior of firms			Finland	
1.09	Protection of minority shareholders' interests	10■	5.6	Sweden	6.4
	Legal and regulatory issues				
.10	Burden of government regulation		2.7	Singapore	5.3
.11	Centralization of economic policymaking		2.8	Switzerland	5.9
.12	Regulation of security exchanges	4■	6.0	Sweden	6.3
1.13	Property rights	17■	5.8	Germany	6.7
1.14	Intellectual property protection	19■	5.2	Germany	6.!
1.15	Diversion of public funds	27	4.0	Finland	6.!
1.16	Public trust of politicians	28■	3.0	Singapore	6.4
	Contract enforcement				
1.17	Effectiveness of law-making bodies	13■	4.6	Singapore	6.
1.18	Judicial independence	16■	5.5	Germany	6.!
1.19	Irregular payments in judicial decisions	18■	5.7	Finland	6.8
1.20	Number of procedures to enforce a contract	10■	30.0	Ireland	20.0
1.21	Time to enforce a contract	37	600.0	Singapore	120.0
1.22	Cost of enforcing contracts	44	33.2	China	8.8
1.23	Strength of investor protection	8	8.0	Singapore	9.3
1.24	Time to close a business	21■	2.0	Ireland	0.4
	Domestic financial sector liberalization				
.25	Domestic financial sector liberalization	1■	1.0	Multiple (34)	1.0
	2nd pillar: Business environment				
	Human capital				
2.01	Quality of management schools			France	
2.02	Quality of math and science education			Singapore	
2.03	Extent of staff training			Switzerland	
2.04	Local availability of research and training services			Switzerland	
2.05	Brain drain and ease of hiring foreign labor			Kuwait	
2.06	Tertiary enrollment	48■	15.4	Finland	93.2
	Taxes				
2.07	Irregular payments in tax collection	22■	5.9	Sweden	
2.08	Distortive effect on competition of taxes and subsid			Singapore	
2.09	Corporate tax rate	28■	29.0	Multiple (4)	0.0
	Infrastructure				
2.10	Quality of overall infrastructure	26	4.5	Switzerland	6.
2.11	Quality of telephone/fax infrastructure	50	4.8	Switzerland	6.9
2.12	Internet users	48	7.8	Netherlands	
	Broadband Internet subscribers	43	0.7	Netherlands	
2.13			0.0	Switzerland	66.9
2.13 2.14	Telephone lines	46■	9.9	Italy	

(Cont'd.)

	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCORE
	2nd pillar: Business environment (cont'd.)	10 1114 02	000.112	
	•			
2.16	Cost of doing business Cost of starting a business	22	7 1	Ireland0.3
2.10	Cost of dealing with licenses			United Arab Emirates1.5
2.17	Cost of dealing with licenses			Saudi Arabia0.0
2.10	Cost to registering property			China390.0
2.19	Cost to export			Singapore367.0
2.20	Cost of enforcing contracts			China8.8
2.21	Cost of closing a business			Multiple (4)1.0
	Cost of closing a business		10.0	Widiuple (4)
	3rd pillar: Financial stability			
	Risk of a currency crisis			
3.01	Change in real effective exchange rate	2■	4.7	Argentina8.5
3.02	External vulnerability indicator	34■	61.8	Russian Federation15.4
3.03	Current account balance to GDP			Kuwait46.1
3.04	Dollarization vulnerability indicator			Multiple (2)0.0
.05A	External debt to GDP (developing economies)	7■	22.4	Saudi Arabia9.6
.05B	Net int'l investment position to GDP (adv. economies	)n/a	n/a	Switzerland121.3
	Risk of systemic banking crisis			
3.06	Activity restrictions for banks	16■	10.0	Indonesia16.0
3.07	Entry restrictions for banks			Multiple (24)8.0
3.08	Capital restrictions for banks			Multiple (3)9.0
3.09	Official supervisory power			Multiple (3)14.0
3.10	Private monitoring of the banking industry			South Africa9.0
3.11	Frequency of banking crises			Multiple (11)0.0
3.12	Stability Index			India7.2
3.13	Cumulative real estate appreciation			Russian Federation68.4
3.14	Risk of sovereign debt crisis  Local currency sovereign rating	22	16.0	Multiple (15)20.0
3.14	Foreign currency sovereign rating			Multiple (15)20.0
0.10	Toroigh currency sovereigh running		10.0	Widiuple (19)20.0
	4th pillar: Banks			
	Size index			
4.01	Size index	25	6.1	Hong Kong SAR10.8
	Efficiency index			
4.02	Efficiency index	20	5.2	United Arab Emirates6.8
4.03	Public ownership of banks			Multiple (11)0.0
	,	·····		
4.04	Financial information disclosure	04	0.0	D. I.:
4.04	Public credit registry coverage			Belgium
4.05	Private credit bureau coverage			Multiple (7)100.0
4.06	Credit Information Index	1	6.0	Multiple (14)6.0
	5th pillar: Non-banks			
	IPO activity			
5.01	IPO market share	29	0.3	France31.0
5.02	IPO proceeds amount			Kazakhstan4.4
5.03	Share of world IPOs			Japan14.2
- 0 -	M&A activity	06 =	2 =	11 % 10%
5.04	M&A market share			United States44.4
5.05	M&A transaction value to GDP			United Kingdom14.6
5.06	Share of total number of M&A deals	27■	0.5	United States33.2

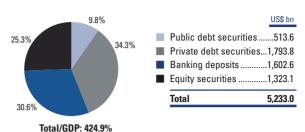
## Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCOR
	5th pillar: Non-banks (cont'd.)			
	Insurance			
.07	Insurance premiums, direct	16	40,730.6	United States1,170,100.
80	Insurance density	22	855.8	United Kingdom6,466.
09	Real growth of direct insurance premiums	4	19.1	India52.
10	Insurance penetration	2	16.0	United Kingdom16.
11	Relative value-added of insurance	11	11.9	Switzerland4.
	Securitization			
.12	Securitization to GDP	31	I1.6	United States22.
13	Share of total number of securitization deals	28	0.2	United States64.
	6th pillar: Financial markets			
	Foreign exchange markets			
01	Spot foreign exchange turnover	25 ■	<b>1</b> 0.3	United Kingdom26.
02	Outright forward foreign exchange turnover			United Kingdom29.
03	Foreign exchange swap turnover			United Kingdom42.
-	Derivatives markets			<u> </u>
04	Interest rate derivatives turnover:			
04	Forward rate agreements	12	0.7	United Kingdom45.
05	Interest rate derivatives turnover: Swaps			United Kingdom46.
06	Interest rate derivatives turnover: Options			United States42.
07	Foreign exchange derivatives turnover: Currency swa			United Kingdom47.
08	Foreign exchange derivatives turnover: Options			United Kingdom42.
	Equity market development			3.1
09	Equity market development  Equity market turnover	32	39.0	Pakistan374.
05 05	Stock market capitalization to GDP			Hong Kong SAR713.
00	•		240.4	Tiong Rong DAIT710.
4.0	Bond market development	00	10.0	11.5.10.1
10	Private-sector bonds to GDP			United States114.
11 12	Public-sector bonds to GDP			France7.  Netherlands
12	international bonds to GDF	30	1/.0	Netrieriarius121.
	7th pillar: Size, depth, and access			
	Size and depth			
01	M2 to GDP	21	56.7	Hong Kong SAR252.
02	Private debt to GDP	25	22.5	Netherlands216.
03	Public debt to GDP	34	I4.0	Austria7.
04	Bank deposits to GDP			Hong Kong SAR250.
05	Stock market capitalization to GDP			Hong Kong SAR713.
06	Relative value-added of financial institutions to GDP.			Panama9.
07	Private credit to GDP			United States193.
80	Stock market value traded to GDP	10	122.5	Saudi Arabia356
	Access			
	Financial market sophistication	13	6.0	Switzerland6.
09	Venture capital availability	30	I3.7	United States5.
	Ease of access to credit			Slovak Republic5.
10			6.0	Sweden6.
09 10 11 12	Ease of access to local equity market			
10 11	Ease of access to local equity market	39	l6.0	Spain95 Norway5.

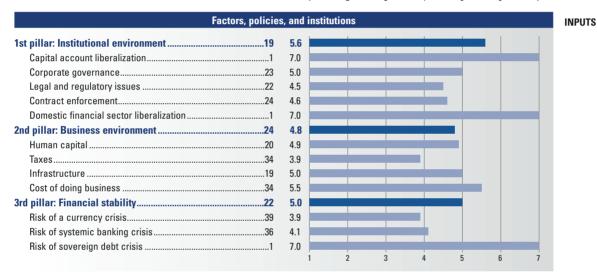
### **Key indicators**

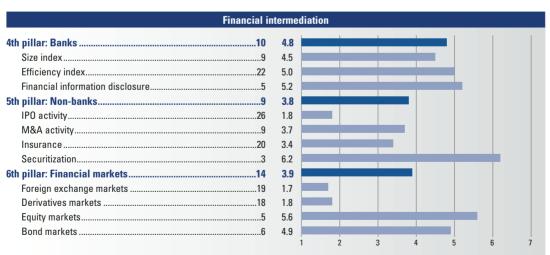
Population (millions), 2007	44.9
GDP (US\$ billions), 2007	1,439.0
GDP (current prices, US\$) per capita, 2007	32,067.0
GDP (PPP) as share (%) of world total, 2007	2.09
Average annual rate of real GDP growth (%), 2003-0	73.53

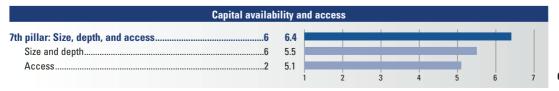
### Financial assets by major type, 2006



### **Financial Development Index 2008**









## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment				
	Capital account liberalization				
1.01	Capital account liberalization	1■	2.3	Multiple (15)	2.0
	Corporate governance				
1.02	Extent of incentive-based compensation	23■	4.9	France	5.
1.03	Efficacy of corporate boards	27■	5.0	Sweden	6.
1.04	Reliance on professional management	26	5.2	Sweden	6.
1.05	Willingness to delegate	31■	4.2	Sweden	6.
1.06	Strength of auditing and accounting standards	25■	5.2	Germany	6.
1.07	Shareholder rights index	9	4.0	Multiple (8)	5.
1.08	Ethical behavior of firms			Finland	
1.09	Protection of minority shareholders' interests	32■	4.6	Sweden	6.
	Legal and regulatory issues				
1.10	Burden of government regulation	28■	3.1	Singapore	5.
1.11	Centralization of economic policymaking	3■	5.2	Switzerland	5.
1.12	Regulation of security exchanges	36	4.9	Sweden	6.3
1.13	Property rights			Germany	
1.14	Intellectual property protection			Germany	
1.15	Diversion of public funds			Finland	
1.16	Public trust of politicians	27■	3.1	Singapore	6.
	Contract enforcement				
1.17	Effectiveness of law-making bodies	24	4.1	Singapore	6.
1.18	Judicial independence	35	3.8	Germany	
1.19	Irregular payments in judicial decisions	20■	5.6	Finland	
1.20	Number of procedures to enforce a contract			Ireland	
1.21	Time to enforce a contract			Singapore	
1.22	Cost of enforcing contracts			China	
1.23	Strength of investor protection			Singapore	
1.24	Time to close a business	■	1.0	Ireland	0.
	Domestic financial sector liberalization				
1.25	Domestic financial sector liberalization	1	1.0	Multiple (34)	1.0
	2nd pillar: Business environment				
	Human capital				
2.01	Quality of management schools	5	5.8	France	6.
2.02	Quality of math and science education			Singapore	
2.03	Extent of staff training	33■	4.0	Switzerland	5.
2.04	Local availability of research and training services	29	4.4	Switzerland	6.
2.05	Brain drain and ease of hiring foreign labor	18■	4.7	Kuwait	
	Tertiary enrollment	10■	67.4	Finland	93.2
2.06	_				
2.06	Taxes				6
	Taxes  Irregular payments in tax collection	18■	6.0	Sweden	
2.07				SwedenSingapore	
2.07 2.08	Irregular payments in tax collection	s40■	3.9		5.
2.07 2.08	Distortive effect on competition of taxes and subsidie Corporate tax rate	s40■	3.9	Singapore	5.
2.07 2.08 2.09	Distortive effect on competition of taxes and subsidie Corporate tax rate	s40 <b>I</b>	3.9 35.0	Singapore	5. 0.
2.07 2.08 2.09	Irregular payments in tax collection	s40 <b>1</b>	3.9 35.0	Singapore	5. 0.
2.06 2.07 2.08 2.09 2.10 2.11 2.12	Irregular payments in tax collection  Distortive effect on competition of taxes and subsidie Corporate tax rate  Infrastructure Quality of overall infrastructure  Quality of telephone/fax infrastructure	s40	3.9 35.0 5.3 6.0	Singapore	5. 0.
2.07 2.08 2.09 2.10 2.11 2.12	Irregular payments in tax collection  Distortive effect on competition of taxes and subsidie Corporate tax rate  Infrastructure Quality of overall infrastructure Quality of telephone/fax infrastructure	s40	3.9 35.0 5.3 6.0 42.8	Singapore	5. 6. 6.
2.07 2.08 2.09 2.10 2.11	Irregular payments in tax collection  Distortive effect on competition of taxes and subsidie Corporate tax rate  Infrastructure Quality of overall infrastructure  Quality of telephone/fax infrastructure	s40	3.9 5.3 6.0 42.8 15.4	Singapore	

## Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

0	2nd pillar: Business environment (cont'd.)				
_	Cost of doing business				
6	Cost of starting a business	33■	15.1	Ireland	0.:
7	Cost of dealing with licenses	21■	64.9	United Arab Emirates	s1.!
8	Cost of registering property			Saudi Arabia	
9	Cost to export			China	
0	Cost to import			Singapore	
1	Cost of enforcing contracts			China	
2	Cost of closing a business			Multiple (4)	
_	Cook of Glooming a Datamood IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII				
	3rd pillar: Financial stability				
	Risk of a currency crisis				
1	Change in real effective exchange rate	34	3.8	Argentina	8.!
2	External vulnerability indicator			Russian Federation	
3	Current account balance to GDP			Kuwait	
4	Dollarization vulnerability indicator			Multiple (2)	
Α	External debt to GDP (developing economies)			Saudi Arabia	
3	. •			Switzerland	
)	Net int'l investment position to GDP (adv. econom	les)14	00.8	Switzerianu	
_	Risk of systemic banking crisis				
6	Activity restrictions for banks			Indonesia	
7	Entry restrictions for banks			Multiple (24)	
3	Capital restrictions for banks	1■	9.0	Multiple (3)	9.
9	Official supervisory power	18■	11.5	Multiple (3)	14.0
)	Private monitoring of the banking industry	2■	8.0	South Africa	9.0
1	Frequency of banking crises	12■	1.0	Multiple (11)	0.
2	Stability Index	24	5.0	India	7.:
3	Cumulative real estate appreciation	28	49.0	Russian Federation	68.4
	Risk of sovereign debt crisis				
4	Local currency sovereign rating	1	20.0	Multiple (15)	20
5	Foreign currency sovereign rating			Multiple (15)	
	4th pillar: Banks Size index				
1	Size index	ο •	7.0	Hong Kong SAR	10.9
	olze muex		7.0	Tiong Rong SAIT	10.0
	Efficiency index				
2	Efficiency index	24	5.1	United Arab Emirates	66.
3	Public ownership of banks	1■	0.0	Multiple (11)	0.0
	Financial information disclosure				
4	Public credit registry coverage	3 ■	<i>11</i> 9	Belgium	57
5	Private credit bureau coverage			Multiple (7)	
6	Credit Information Index			Multiple (14)	
	5th pillar: Non-banks				
	IPO activity				
1	IPO market share	15	1.4	France	31.0
2	IPO proceeds amount	31	0.3	Kazakhstan	4.4
3	Share of world IPOs	22■	0.7	Japan	14.:
	M&A activity				
	M&A market share	7■	2.8	United States	44.
4					
	M&A transaction value to GDP	11	7.0	United Kingdom	14.0

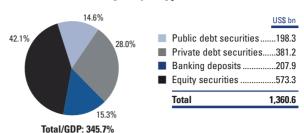
## Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

District Research   Search   Search		INDICATOR		SCORE	BEST PERFORMER SCOR
10		5th pillar: Non-banks (cont'd.)			
		Insurance			
Real growth of direct insurance premiums	)7	Insurance premiums, direct	10■.	65,813.4	United States1,170,100.
Insurance penetration	8(	Insurance density	20■.	1,514.6	United Kingdom6,466.
Relative value-added of insurance	9	Real growth of direct insurance premiums	24	4.1	India52.
Securitization 2 Securitization to GDP	0	Insurance penetration	21■.	5.4	United Kingdom16.
Securitization to GDP	1	Relative value-added of insurance	38■.	0.7	Switzerland4.
6th pillar: Financial markets         Foreign exchange markets           10         ■		Securitization			
Sith pillar: Financial markets   Foreign exchange markets   15   Spot foreign exchange turnover   18   18   0.5   United Kingdom   2.2   United Kingdom   2.3   Foreign exchange swap turnover   17   0.5   United Kingdom   2.3   Foreign exchange swap turnover   22   0.0   United Kingdom   2.4   United Kingdom   4.4   United Kingdom   4.5   United Kingdom   4.6   United Kingdom   4.7   U	2	Securitization to GDP	5■.	10.6	United States22.
Foreign exchange markets	3	Share of total number of securitization deals	10■.	1.4	United States64.
Spot foreign exchange turnover		6th pillar: Financial markets			
Spot foreign exchange turnover		Foreign exchange markets			
Outright forward foreign exchange turnover	)1		18■	0.5	United Kingdom26.
Perivatives markets					*
Derivatives markets					United Kingdom42.
Interest rate derivatives turnover:					
Forward rate agreements.	1/1				
Interest rate derivatives turnover: Swaps	-		20	0.2	United Kingdom 45
6 Interest rate derivatives turnover: Options	5	3			*
Foreign exchange derivatives turnover: Currency swaps   19					*
Foreign exchange derivatives turnover: Options					
Equity market development 9					United Kingdom42.
9 Equity market turnover					· ·
Stock market capitalization to GDP	9		3	162.4	Pakistan 374
Bond market development   Private-sector bonds to GDP					Hong Kong SAR713.
0 Private-sector bonds to GDP		•			0 0
1 Public-sector bonds to GDP	Λ	•	7	12.1	United States 114
2       International bonds to GDP					
Size and depth         01       M2 to GDP       .n/a       .n/a       Hong Kong SAR       .25         02       Private debt to GDP       .4       .146.6       Netherlands       .21         03       Public debt to GDP       .27       .4.7       Austria          04       Bank deposits to GDP       .9       .112.4       Hong Kong SAR       .25         05       Stock market capitalization to GDP       .20       .90.0       Hong Kong SAR       .71         06       Relative value-added of financial institutions to GDP       .16       .4.6       Panama          07       Private credit to GDP       .7        .151.1       United States          08       Stock market value traded to GDP       .8        .138.5       Saudi Arabia          09       Financial market sophistication       .20        .5.7       Switzerland          0       Venture capital availability					Netherlands121.
M2 to GDP		7th pillar: Size, depth, and access			
Private debt to GDP		Size and depth			
Public debt to GDP	)1	M2 to GDP	n/a	n/a	Hong Kong SAR252.
94       Bank deposits to GDP.       9       112.4       Hong Kong SAR       .25         95       Stock market capitalization to GDP.       20       90.0       Hong Kong SAR       .71         96       Relative value-added of financial institutions to GDP       16       .46       Panama       .9         97       Private credit to GDP.       .7       .151.1       United States       .19         98       Stock market value traded to GDP.       .8       .138.5       Saudi Arabia       .35         Access         99       Financial market sophistication       .20       .5.7       Switzerland          1       Ease of access to credit       .37       .4.7       Slovak Republic          2       Ease of access to local equity market       .34       .5.1       Sweden          3       Bank branches       .1       .95.9       Spain	)2	Private debt to GDP	4■.	146.6	Netherlands216.
Stock market capitalization to GDP	3	Public debt to GDP	27■.	4.7	Austria7.
Relative value-added of financial institutions to GDP	)4	Bank deposits to GDP	9■.	112.4	Hong Kong SAR250.
97       Private credit to GDP	)5	Stock market capitalization to GDP	20■.	90.0	Hong Kong SAR713.
Access       Saudi Arabia       35         99 Financial market sophistication       20       5.7       Switzerland         10 Venture capital availability       19       4.2       United States         1 Ease of access to credit       37       4.7       Slovak Republic         2 Ease of access to local equity market       34       5.1       Sweden         3 Bank branches       1       95.9       Spain       9	6	Relative value-added of financial institutions to GDP.	16■.	4.6	Panama9.
Access         99 Financial market sophistication       20       5.7       Switzerland         10 Venture capital availability       19       4.2       United States         1 Ease of access to credit       37       4.7       Slovak Republic         2 Ease of access to local equity market       34       5.1       Sweden         3 Bank branches       1       95.9       Spain       9	)7	Private credit to GDP	7■.	151.1	United States193.
9 Financial market sophistication 20	8	Stock market value traded to GDP	8■.	138.5	Saudi Arabia356.
0 Venture capital availability		Access			
1       Ease of access to credit       .37       .47       Slovak Republic         2       Ease of access to local equity market       .34       .5.1       Sweden         3       Bank branches       .1       .95.9       Spain       .9	9	Financial market sophistication	20■.	5.7	Switzerland6.
2       Ease of access to local equity market	0	Venture capital availability	19■.	4.2	United States5.
3 Bank branches	1	Ease of access to credit	37■.	4.7	Slovak Republic5.
·	2	Ease of access to local equity market	34■.	5.1	Sweden6.
4 Ease of access to loans	3	Bank branches	1■.	95.9	Spain95.
	4	Ease of access to loans	29■.	4.0	Norway5.

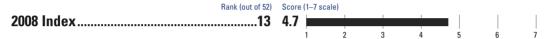
### **Key indicators**

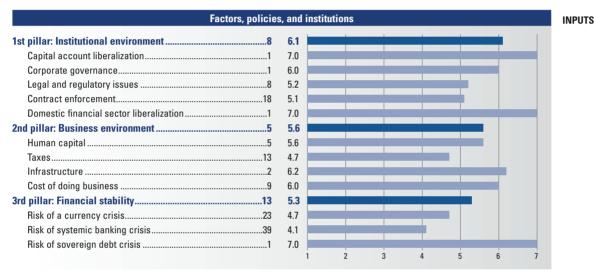
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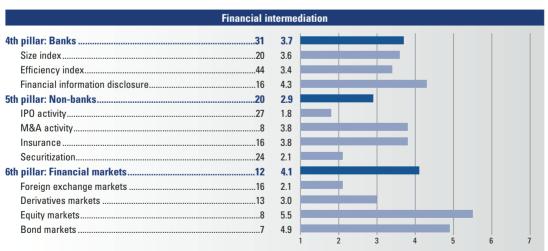
### Financial assets by major type, 2006



### **Financial Development Index 2008**











## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

		RANK/52		SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment					
	Capital account liberalization					
.01	Capital account liberalization	1		2.3	Multiple (15)	2.6
	Corporate governance					
.02	Extent of incentive-based compensation	13		5.2	France	5.7
.03	Efficacy of corporate boards	1		6.1	Sweden	6.1
.04	Reliance on professional management	1		6.4	Sweden	6.4
.05	Willingness to delegate	1		6.3	Sweden	6.3
.06	Strength of auditing and accounting standards	2		6.3	Germany	6.3
.07	Shareholder rights index	17		3.0	Multiple (8)	5.0
.08	Ethical behavior of firms	2		6.4	Finland	6.6
.09	Protection of minority shareholders' interests	1		6.4	Sweden	6.4
	Legal and regulatory issues					
.10	Burden of government regulation	23		3.2	Singapore	5.3
.11	Centralization of economic policymaking				Switzerland	
.12	Regulation of security exchanges				Sweden	
.13	Property rights				Germany	
.14	Intellectual property protection				Germany	
.15	Diversion of public funds				Finland	
.16	Public trust of politicians				Singapore	
	·				omgaporo minimi	
	Contract enforcement	_	_		0.	
.17	Effectiveness of law-making bodies				Singapore	
.18	Judicial independence				Germany	
19	Irregular payments in judicial decisions				Finland	
.20	Number of procedures to enforce a contract				Ireland	
.21	Time to enforce a contract				Singapore	
.22	Cost of enforcing contracts				China	
.23	Strength of investor protection				Singapore	
.24	Time to close a business	21		2.0	Ireland	0.4
	Domestic financial sector liberalization					
.25	Domestic financial sector liberalization	1		1.0	Multiple (34)	1.C
	2nd pillar: Business environment					
	Human capital					
.01	Quality of management schools	12		5.5	France	6.0
.02	Quality of math and science education				Singapore	
.03	Extent of staff training				Switzerland	
.03	Local availability of research and training services				Switzerland	
.04	Brain drain and ease of hiring foreign labor				Kuwait	
.06	Tertiary enrollment				Finland	
.00	•			70.0		
07	Taxes	4	_	0.0	Considera	0.0
.07	Irregular payments in tax collection				Sweden	
.08	Distortive effect on competition of taxes and subsidie.				Singapore	
.09	Corporate tax rate	25		28.0	Multiple (4)	0.0
	Infrastructure					
	Quality of overall infrastructure				Switzerland	6.7
.10	Quality of telephone/fax infrastructure	5		6.8	Switzerland	6.9
	Quality of telephone/lax lilitastructure	0		77.0	Netherlands	85.7
.11	Internet users	3				
.10 .11 .12 .13				25.9	Netherlands	31.8
.11 .12	Internet users	6			Netherlands Switzerland	

(Cont'd.)

	ial Development Index in detail (cont'o		•	t <b>Advantage</b> Development <b>Disadva</b>
	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCORE
	2nd pillar: Business environment (cont'd.)			
	Cost of doing business			
.16	Cost of starting a business	2	0.6	Ireland0.3
.17	Cost of dealing with licenses	27	106.4	United Arab Emirates1.5
.18	Cost of registering property	22	3.0	Saudi Arabia0.0
.19	Cost to export	10■	561.0	China390.0
.20	Cost to import	9	619.0	Singapore367.0
.21	Cost of enforcing contracts	40	31.3	China8.8
.22	Cost of closing a business	18■	9.0	Multiple (4)1.0
	3rd pillar: Financial stability			
	Risk of a currency crisis			
.01	Change in real effective exchange rate	24	8.0	Argentina8.5
.02	External vulnerability indicator	1	n/a	Russian Federation15.4
.03	Current account balance to GDP	14	7.4	Kuwait46.1
.04	Dollarization vulnerability indicator	1	n/a	Multiple (2)0.0
5A	External debt to GDP (developing economies)	n/a	n/a	Saudi Arabia9.6
5B	Net int'l investment position to GDP (adv. economie	s)10	18.5	Switzerland121.3
	Risk of systemic banking crisis			
.06	Activity restrictions for banks	16	10.0	Indonesia16.0
.07	Entry restrictions for banks	33	6.0	Multiple (24)8.0
80	Capital restrictions for banks			Multiple (3)9.0
.09	Official supervisory power	n/a	n/a	Multiple (3)14.0
.10	Private monitoring of the banking industry	23	6.0	South Africa9.0
.11	Frequency of banking crises	12■	1.0	Multiple (11)0.0
.12	Stability Index	14	5.3	India7.2
.13	Cumulative real estate appreciation	23	36.3	Russian Federation68.4
	Risk of sovereign debt crisis			
.14	Local currency sovereign rating			Multiple (15)20.0
.15	Foreign currency sovereign rating		20.0	Multiple (15)20.0
	4th pillar: Banks			
	Size index			
.01	Size index	20	6.8	Hong Kong SAR10.8
00	Efficiency index	45 =	4.0	
.02	Efficiency index			United Arab Emirates6.8
03	Public ownership of banks	1	0.0	Multiple (11)0.0
	Financial information disclosure			
.04	Public credit registry coverage	21	0.0	Belgium57.2
.05	Private credit bureau coverage	1■	100.0	Multiple (7)100.0
.06	Credit Information Index	31	4.0	Multiple (14)6.0
	5th pillar: Non-banks			
	IPO activity			
.01	IPO market share	27	0.6	France31.0
.02	IPO proceeds amount	24	0.4	Kazakhstan4.4
.03	Share of world IPOs			Japan14.2
	M&A activity			
.04	M&A market share	10■	1.6	United States44.4
.05	M&A transaction value to GDP	2	12.7	United Kingdom14.6
.06	Share of total number of M&A deals	10	1.0	United States33.2

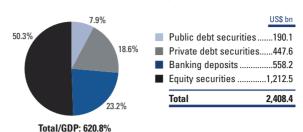
## Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52		SCORE	BEST PERFORMER	SCOR
	5th pillar: Non-banks (cont'd.)					
	Insurance					
.07	Insurance premiums, direct	19		29,182.2	United States1,1	70,100.6
80	Insurance density	11		3,226.2	United Kingdom	6,466.
09	Real growth of direct insurance premiums	27		2.5	India	52.6
.10	Insurance penetration	13		7.6	United Kingdom	16.
.11	Relative value-added of insurance	35		0.7	Switzerland	4.8
	Securitization					
.12	Securitization to GDP	18		3.1	United States	22 (
.13	Share of total number of securitization deals				United States	
					0	
	6th pillar: Financial markets					
	Foreign exchange markets					
01	Spot foreign exchange turnover	17		0.6	United Kingdom	26
02	Outright forward foreign exchange turnover				United Kingdom	
03	Foreign exchange swap turnover				United Kingdom	
0.4	Derivatives markets					
04	Interest rate derivatives turnover: Forward rate agreements	E		26	United Kingdom	/E
05	Interest rate derivatives turnover: Swaps				United Kingdom	
06 06	Interest rate derivatives turnover: Swaps				United States	
07	Foreign exchange derivatives turnover: Currency swa				United Kingdom	
07	Foreign exchange derivatives turnover: Currency swa				United Kingdom	
00	Toleight exchange derivatives turnover. Options				Officed Kingdom	42.
	Equity market development					
09	Equity market turnover				Pakistan	
05	Stock market capitalization to GDP	10		125.5	Hong Kong SAR	713.3
	Bond market development					
10	Private-sector bonds to GDP	5	■	42.9	United States	114.0
11	Public-sector bonds to GDP	8	■	5.6	France	7.0
12	International bonds to GDP	9		49.6	Netherlands	121.
	7th pillar: Size, depth, and access					
	Size and depth					
01	M2 to GDP	25		483	Hong Kong SAR	252
02	Private debt to GDP				Netherlands	
03	Public debt to GDP				Austria	
04	Bank deposits to GDP				Hong Kong SAR	
05	Stock market capitalization to GDP				Hong Kong SAR	
06	Relative value-added of financial institutions to GDP.				Panama	
07	Private credit to GDP				United States	
08	Stock market value traded to GDP				Saudi Arabia	
00	Access	0	_	0.0	0 : 1 1	0
09	Financial market sophistication				Switzerland	
10	Venture capital availability				United States	
11	Ease of access to credit				Slovak Republic	
.12	Ease of access to local equity market				Sweden	
.13	Bank branches				Spain	
.14	Ease of access to loans	b		5.2	Norway	5.

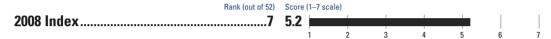
### **Key indicators**

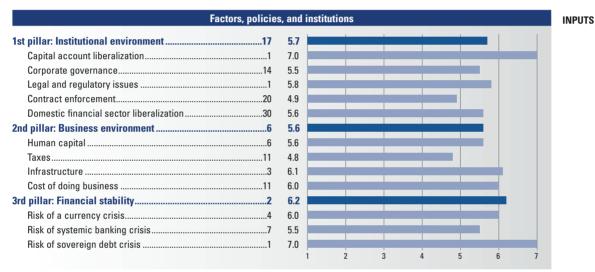
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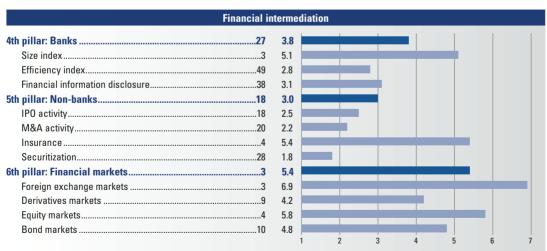
### Financial assets by major type, 2006

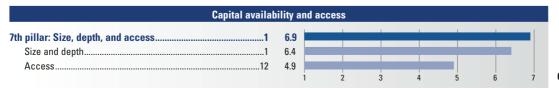


### **Financial Development Index 2008**











## **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52		SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment					
	Capital account liberalization					
.01	Capital account liberalization	1		2.3	Multiple (15)	2.6
	Corporate governance					
.02	Extent of incentive-based compensation	3		5.6	France	5.7
.03	Efficacy of corporate boards	16		5.4	Sweden	6.1
.04	Reliance on professional management	11		5.9	Sweden	6.4
.05	Willingness to delegate	4		5.7	Sweden	6.3
.06	Strength of auditing and accounting standards	10		6.1	Germany	6.3
.07	Shareholder rights index	25		2.0	Multiple (8)	5.0
.08	Ethical behavior of firms	5		6.2	Finland	6.6
.09	Protection of minority shareholders' interests	20		5.3	Sweden	6.4
	Legal and regulatory issues					
.10	Burden of government regulation	7		4.3	Singapore	5.3
.11	Centralization of economic policymaking				Switzerland	
.12	Regulation of security exchanges				Sweden	6.3
.13	Property rights				Germany	6.7
.14	Intellectual property protection				Germany	
.15	Diversion of public funds	4		6.2	Finland	6.5
.16	Public trust of politicians				Singapore	6.4
	Contract enforcement					
.17	Effectiveness of law-making bodies	8		5.0	Singapore	6.1
.18	Judicial independence				Germany	
.19	Irregular payments in judicial decisions				Finland	
.20	Number of procedures to enforce a contract				Ireland	
.21	Time to enforce a contract				Singapore	
.22	Cost of enforcing contracts				China	
.23	Strength of investor protection				Singapore	
.24	Time to close a business				Ireland	
.25	Domestic financial sector liberalization  Domestic financial sector liberalization	30	-	2.0	Multiple (34)	1.0
	2nd pillar: Business environment					
	Human capital					
	Quality of management schools	_		6.0	France	6.0
.01						
	Quality of math and science education	5		5.7	Singapore	6.3
.02		5		5.7	Singapore Switzerland	
.02	Quality of math and science education	5		5.7 5.9		5.9
.02 .03 .04	Quality of math and science education Extent of staff training	5 1 1		5.7 5.9 6.0	Switzerland	5.9 6.0
.02 .03 .04	Quality of math and science education  Extent of staff training  Local availability of research and training services	5 1 1		5.7 5.9 6.0 5.3	Switzerland	5.9 6.0
2.02 2.03 2.04 2.05	Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor	5 1 1		5.7 5.9 6.0 5.3	Switzerland Switzerland Kuwait	5.9 6.0
.02 .03 .04 .05	Quality of math and science education	5 1 8 30		5.7 5.9 6.0 5.3 45.8	Switzerland Switzerland Kuwait	5.9 5.8 93.2
.02 .03 .04 .05 .06	Quality of math and science education	51		5.7 5.9 6.0 5.3 45.8	Switzerland Switzerland Kuwait Finland	5.9 5.8 93.2
.02 .03 .04 .05 .06	Quality of math and science education	51		5.7 5.9 6.0 5.3 45.8	Switzerland	5.9 5.8 93.2 6.8
2.02 2.03 2.04 2.05 2.06	Quality of math and science education	51		5.7 5.9 6.0 5.3 45.8	Switzerland	5.9 5.8 93.2 6.8
.02 .03 .04 .05 .06	Quality of math and science education	5		5.7 6.0 5.3 45.8 45.8 45.8	Switzerland	
.02 .03 .04 .05 .06 .07 .08 .09	Quality of math and science education	5		5.7 6.0 5.3 45.8 6.5 4.8 25.0	Switzerland	
	Quality of math and science education	5		5.7 6.0 45.8 45.8 45.8 45.0	Switzerland	
2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Quality of math and science education	5		5.7 6.9 45.8 45.8 45.8 45.8 45.0 46.5 4.8 25.0	Switzerland	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.10 2.11 2.12 2.13 2.14	Quality of math and science education	5		5.7 5.9 6.0 5.3 45.8 45.8 25.0 6.5 25.0	Switzerland	

(Cont'd.)

	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCORE
	2nd pillar: Business environment (cont'd.)		000.112	
	•			
2.16	Cost of doing business Cost of starting a business	11	2.1	Ireland0.3
2.10	Cost of dealing with licenses			United Arab Emirates1.5
2.17	Cost of dealing with licenses			Saudi Arabia0.0
2.19	Cost to export			China
2.20	Cost to export			Singapore367.0
2.20	Cost of enforcing contracts			China8.8
2.22	Cost of closing a business			Multiple (4)1.0
	3rd pillar: Financial stability			
	Risk of a currency crisis			
3.01	Change in real effective exchange rate			Argentina8.5
3.02	External vulnerability indicator			Russian Federation15.4
3.03	Current account balance to GDP			Kuwait46.1
3.04	Dollarization vulnerability indicator			Multiple (2)0.0
.05A	External debt to GDP (developing economies)			Saudi Arabia9.6
.05B	Net int'l investment position to GDP (adv. economies	)1	121.3	Switzerland121.3
	Risk of systemic banking crisis			
3.06	Activity restrictions for banks	25■		Indonesia16.0
3.07	Entry restrictions for banks	1■	8.0	Multiple (24)8.0
3.08	Capital restrictions for banks			Multiple (3)9.0
3.09	Official supervisory power	1■	14.0	Multiple (3)14.0
3.10	Private monitoring of the banking industry	23	6.0	South Africa9.0
3.11	Frequency of banking crises	1■	0.0	Multiple (11)0.0
3.12	Stability Index	6■	5.6	India7.2
3.13	Cumulative real estate appreciation	11	7.3	Russian Federation68.4
	Risk of sovereign debt crisis			
3.14	Local currency sovereign rating	1■	20.0	Multiple (15)20.0
3.15	Foreign currency sovereign rating	1■	20.0	Multiple (15)20.0
	4th pillar: Banks			
	Size index			
4.01	Size index	3	8.6	Hong Kong SAR10.8
4.01				Tiong Kong SAIT10.0
	Efficiency index			
4.02	Efficiency index			United Arab Emirates6.8
4.03	Public ownership of banks	19■	11.6	Multiple (11)0.0
	Financial information disclosure			
4.04	Public credit registry coverage	21■	0.0	Belgium57.2
4.05	Private credit bureau coverage	29■	24.0	Multiple (7)100.0
4.06	Credit Information Index	15	5.0	Multiple (14)6.0
	5th pillar: Non-banks			
	IPO activity			
5.01	IPO market share	16	1.4	France31.0
5.02	IPO proceeds amount			Kazakhstan4.4
5.03	Share of world IPOs			Japan14.2
F 0 4	M&A activity	10 =	0.7	Haite of Charter
5.04	M&A market share			United States
5.05	M&A transaction value to GDP			United Kingdom14.6
5.06	Share of total number of M&A deals	19■	0.9	United States33.2

## Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

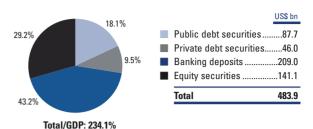
5.07 5.08 5.09 5.10	5th pillar: Non-banks (cont'd.)	<u> </u>			
5.08 5.09	•				
5.08 5.09	Insurance				
5.08 5.09	Insurance premiums, direct	15	41.757.6	United States1	170 100 6
	Insurance density		,	United Kingdom	
= 10	Real growth of direct insurance premiums			India	
3.10	Insurance penetration	4■	11.0	United Kingdom	16.5
5.11	Relative value-added of insurance	1■	4.8	Switzerland	4.8
	Securitization				
5.12	Securitization to GDP	28■	1.9	United States	22.9
5.13	Share of total number of securitization deals	23	0.2	United States	64.9
	6th pillar: Financial markets				
6.01	Foreign exchange markets  Spot foreign exchange turnover	ર ■	26	United Kingdom	26.6
6.02	Outright forward foreign exchange turnover			United Kingdom	
6.03	Foreign exchange swap turnover			United Kingdom	
5.00	Derivatives markets			omea migaem iiii	
5.04	Interest rate derivatives turnover:				
3.04	Forward rate agreements	6	1.9	United Kingdom	45.6
3.05	Interest rate derivatives turnover: Swaps			United Kingdom	
5.06	Interest rate derivatives turnover: Options			United States	
6.07	Foreign exchange derivatives turnover: Currency sy			United Kingdom	
6.08	Foreign exchange derivatives turnover: Options	•		United Kingdom	
	Equity market development			· ·	
5.09	Equity market development  Equity market turnover	15	99.3	Pakistan	37/1 3
7.05	Stock market capitalization to GDP			Hong Kong SAR	
.00	·		200.2	Tiong Rong of Itt	
2.10	Bond market development  Private-sector bonds to GDP	10	22.4	United States	1140
6.10 6.11	Public-sector bonds to GDP			France	
5.11	International bonds to GDP			Netherlands	
J. 12	michialoral solido to del			140 thoridings	
	7th pillar: Size, depth, and access				
	Size and depth				
.01	M2 to GDP			Hong Kong SAR	
.02	Private debt to GDP			Netherlands	
.03	Public debt to GDP			Austria	
.04	Bank deposits to GDP			Hong Kong SAR	
.05	Stock market capitalization to GDP			Hong Kong SAR	
7.06	Relative value-added of financial institutions to GDF Private credit to GDP			Panama United States	
7.07 7.08	Stock market value traded to GDP			Saudi Arabia	
.00			2 10.7	Gadai / Ilabia	
7 00	Access	1 -	6.7	Curitzarland	6.7
7.09	Financial market sophistication			Switzerland United States	
7.10 7.11	Ease of access to credit			Slovak Republic	
7.11 7.12	Ease of access to credit			Sweden	
7.12	Bank branches			Spain	
7.13 7.14	Ease of access to loans			Norway	
				,	

## Thailand

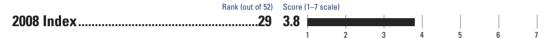
### **Key indicators**

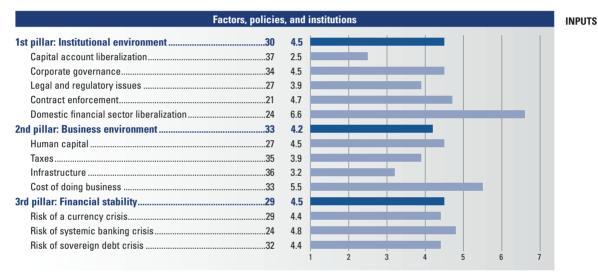
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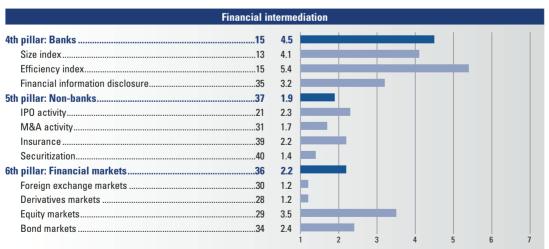
### Financial assets by major type, 2006



### **Financial Development Index 2008**











nancial Development Index in detail ■ Development Advantage ■ Development Disadvantage						
	INDICATOR	RANK/52	SCORE	E	BEST PERFORMER	SCORE
	1st pillar: Institutional environment					
	Capital account liberalization					
.01	Capital account liberalization	37	■0.1	I	Multiple (15)	2.6
	Corporate governance					
.02	Extent of incentive-based compensation	35	4.4	1	France	5.7
03	Efficacy of corporate boards				Sweden	
.04	Reliance on professional management				Sweden	
.05	Willingness to delegate				Sweden	
.06	Strength of auditing and accounting standards				Germany Multiple (8)	
.07	Ethical behavior of firms				Finland	
09	Protection of minority shareholders' interests				Sweden	
20	•					
10	Legal and regulatory issues	10	• o		Singaporo	E 2
.10 .11	Burden of government regulation  Centralization of economic policymaking				Singapore Switzerland	
12	Regulation of security exchanges				Sweden	
13	Property rights				Germany	
14	Intellectual property protection				Germany	
15	Diversion of public funds				Finland	6.5
16	Public trust of politicians	32	2.7	7	Singapore	6.4
	Contract enforcement					
.17	Effectiveness of law-making bodies	27	3.9	9	Singapore	6.1
18	Judicial independence				Germany	
19	Irregular payments in judicial decisions				Finland	
20	Number of procedures to enforce a contract				Ireland	20.0
21	Time to enforce a contract	24	479.0	)	Singapore	120.0
22	Cost of enforcing contracts	12	14.3	3	China	8.8
23	Strength of investor protection				Singapore	
24	Time to close a business	27	2.7	7	Ireland	0.4
	Domestic financial sector liberalization					
.25	Domestic financial sector liberalization	24	I1.C	)	Multiple (34)	1.0
	2nd pillar: Business environment					
	Human capital					
.01	Quality of management schools				France	
02	Quality of math and science education				Singapore	
.03	Extent of staff training				Switzerland Switzerland	
04 05	Local availability of research and training services  Brain drain and ease of hiring foreign labor				Switzeriand Kuwait	
06	Tertiary enrollment				Finland	
,,,	,	∠⊍■	=40.8	,		
\ <del>-</del>	Taxes	07 -		,	Cuadan	0.0
)7	Irregular payments in tax collection				Sweden	
08	Distortive effect on competition of taxes and subsidie Corporate tax rate				Singapore	
υIJ	'	30	■3U.C	,	Multiple (4)	0.0
	Infrastructure		_			
10	Quality of overall infrastructure				Switzerland	
11	Quality of telephone/fax infrastructure				Switzerland	
.12	Internet users				Netherlands	
.13	Broadband Internet subscribers				Netherlands Switzerland	
.14	Telephone lines					

(Cont'd.)

## Thailand

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
16	Cost of starting a business	19	5.6	Ireland	0.3
.17	Cost of dealing with licenses			United Arab Emirates	
.18	Cost of registering property			Saudi Arabia	
.19	Cost to export			China	390.0
2.20	Cost to import	17■	786.0	Singapore	367.0
2.21	Cost of enforcing contracts	12	14.3	China	8.8
2.22	Cost of closing a business	48■	36.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	32	3.0	Argentina	-8.5
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP			Kuwait	
3.04	Dollarization vulnerability indicator			Multiple (2)	
05A	External debt to GDP (developing economies).			Saudi Arabia	
05B	Net int'l investment position to GDP (adv. econ	nomies)n/a	n/a	Switzerland	121.3
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks	3	13.0	Indonesia	16.0
3.07	Entry restrictions for banks			Multiple (24)	
3.08	Capital restrictions for banks			Multiple (3)	
3.09	Official supervisory power			Multiple (3)	
3.10	Private monitoring of the banking industry			South Africa	
3.11	Frequency of banking crises			Multiple (11)	
3.12	Stability Index			India	
3.13	Cumulative real estate appreciation			Russian Federation	
	• • • • • • • • • • • • • • • • • • • •			riacolari rodoratioriii.	
0 1 4	Risk of sovereign debt crisis	20	15.0	NAULEIGIA (4E)	20.0
3.14 3.15	Local currency sovereign rating			Multiple (15) Multiple (15)	
5.15	Foreign currency sovereign rating		13.0	ινιαιτιριε (15)	20.0
	4th pillar: Banks				
	Size index				
1.01	Size index	13■	7.4	Hong Kong SAR	10.8
	Efficiency index				
1.02	Efficiency index	15	5.4	United Arab Emirates	6.8
1.03	Public ownership of banks			Multiple (11)	
	Financial information disclosure				
1 0 1		01	0.0	Dalairea	F7.0
1.04	Public credit registry coverage			Belgium	
1.05	Private credit bureau coverage  Credit Information Index			Multiple (7) Multiple (14)	
1.06	Credit Information Index	15	5.0	iviuitipie (14)	0.0
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	23■	8	France	31.0
5.02	IPO proceeds amount			Kazakhstan	
5.03	Share of world IPOs			Japan	14.2
	M8-A activity				
. 04	M&A activity M&A market share	20 -	0.0	United States	4.4.4
5.04	M&A transaction value to GDP			United States United Kingdom	
5.05 5.06	Share of total number of M&A deals			United Kingdom	
.UO	Share of total nutriber of IvidA deals	∠4■	٥.٠٠	Officed States	33.2

## Thailand

## Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

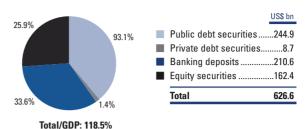
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	5th pillar: Non-banks (cont'd.)				
	Insurance				
.07	Insurance premiums, direct	30■	7,127.9	United States	,170,100.6
.08	Insurance density			United Kingdom	
.09	Real growth of direct insurance premiums	34	0.5	India	52.6
.10	Insurance penetration	27■	3.5	United Kingdom	16.5
.11	Relative value-added of insurance	n/a	n/a	Switzerland	4.8
	Securitization				
.12	Securitization to GDP	40	8	United States	22.9
.13	Share of total number of securitization deals	32	0.1	United States	64.9
	6th pillar: Financial markets				
.01	Foreign exchange markets  Spot foreign exchange turnover	35 ■	0.1	United Kingdom	26.6
.02	Outright forward foreign exchange turnover			United Kingdom	
.02	Foreign exchange swap turnover			United Kingdom	
				Sintou Ainguoiri	
0.4	Derivatives markets				
.04	Interest rate derivatives turnover: Forward rate agreements	26	0.0	United Vinadom	4E 6
.05	Interest rate derivatives turnover: Swaps			United Kingdom United Kingdom	
.06	Interest rate derivatives turnover: Swaps			United States	
.00	Foreign exchange derivatives turnover: Currency su			United Kingdom	
.08	Foreign exchange derivatives turnover: Options	•		United Kingdom	
.00				Offica Kingdom	
00	Equity market development	00	74.4	D.11.	0746
.09	Equity market turnover			Pakistan	
.05	Stock market capitalization to GDP	∠/■	02.1	Hong Kong SAR	/13.3
	Bond market development				
.10	Private-sector bonds to GDP			United States	
.11	Public-sector bonds to GDP			France	
.12	International bonds to GDP	40	b. I	Netherlands	121.7
	7th pillar: Size, depth, and access				
	Size and depth				
.01	M2 to GDP	9■	105.6	Hong Kong SAR	252.3
.02	Private debt to GDP	27	22.3	Netherlands	216.2
.03	Public debt to GDP			Austria	7.0
.04	Bank deposits to GDP			Hong Kong SAR	
.05	Stock market capitalization to GDP			Hong Kong SAR	
.06	Relative value-added of financial institutions to GDI			Panama	
.07	Private credit to GDP			United States	
.08	Stock market value traded to GDP	28	45.1	Saudi Arabia	356.2
	Access				
.09	Financial market sophistication	29	4.8	Switzerland	6.7
.10	Venture capital availability	35	3.4	United States	5.3
.11	Ease of access to credit			Slovak Republic	
.12	Ease of access to local equity market			Sweden	
.13	Bank branches			Spain	
.14	Ease of access to loans	26	4.1	Norway	5.5

## Turkey

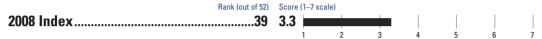
### **Key indicators**

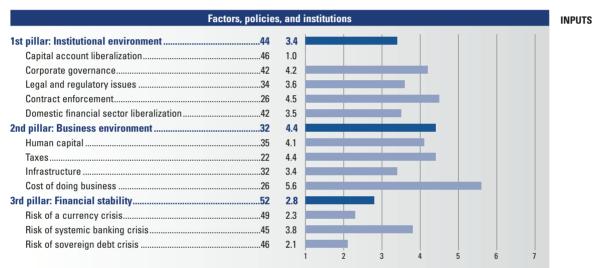
Population (millions), 2007	68.9
GDP (US\$ billions), 2007	663.4
GDP (current prices, US\$) per capita, 2007	9,629.1
GDP (PPP) as share (%) of world total, 2007	1.37
Average annual rate of real GDP growth (%), 2003-07	6.97

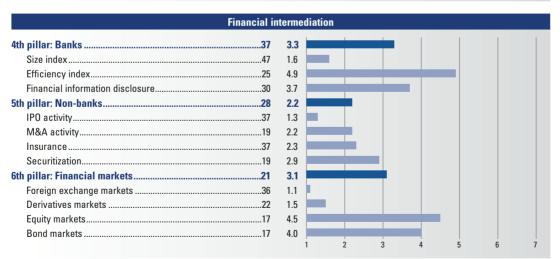
### Financial assets by major type, 2006

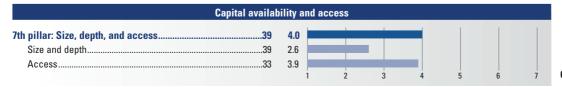


## **Financial Development Index 2008**











# Turkey

## **Financial Development Index in detail**

■ Development **Advantage** ■ Development **Disadvantage** 

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment				
	Capital account liberalization				
1.01	Capital account liberalization	46	 1.1	Multiple (15)	2.6
	Corporate governance				
1.02	Extent of incentive-based compensation	50	 3.6	France	5.7
1.03	Efficacy of corporate boards	46	 4.3	Sweden	6.
1.04	Reliance on professional management	40	 4.5	Sweden	6.4
1.05	Willingness to delegate	41	 3.8	Sweden	6.3
1.06	Strength of auditing and accounting standards	35	 4.8	Germany	6.3
1.07	Shareholder rights index	25	 2.0	Multiple (8)	5.0
1.08	Ethical behavior of firms			Finland	
1.09	Protection of minority shareholders' interests	33	 4.6	Sweden	6.4
	Legal and regulatory issues				
1.10	Burden of government regulation	33	 2.9	Singapore	5.3
1.11	Centralization of economic policymaking	46	 2.3	Switzerland	5.9
1.12	Regulation of security exchanges	29	 5.2	Sweden	6.3
.13	Property rights			Germany	
1.14	Intellectual property protection			Germany	
1.15	Diversion of public funds			Finland	
1.16	Public trust of politicians	31	 2.8	Singapore	6.4
	Contract enforcement				
1.17	Effectiveness of law-making bodies	21	 4.3	Singapore	6.
1.18	Judicial independence	28	 4.4	Germany	6.5
1.19	Irregular payments in judicial decisions	29	 4.9	Finland	6.8
1.20	Number of procedures to enforce a contract	31	 36.0	Ireland	20.0
1.21	Time to enforce a contract	21	 420.0	Singapore	120.0
1.22	Cost of enforcing contracts	21	 18.8	China	8.8
1.23	Strength of investor protection	30	 5.3	Singapore	9.3
1.24	Time to close a business	36	 3.3	Ireland	0.∠
	Domestic financial sector liberalization				
1.25	Domestic financial sector liberalization	42	 2.0	Multiple (34)	1.0
	0.1.111				
	2nd pillar: Business environment				
	Human capital				
2.01	Quality of management schools			France	
2.02	Quality of math and science education			Singapore	
2.03	Extent of staff training			Switzerland	
2.04	Local availability of research and training services			Switzerland	
2.05	Brain drain and ease of hiring foreign labor			Kuwait	
2.06	Tertiary enrollment	35	 34.6	Finland	93.2
	Taxes				
2.07	Irregular payments in tax collection	28	 5.5	Sweden	
2.08	Distortive effect on competition of taxes and subsidie	s41	 3.9	Singapore	
2.09	Corporate tax rate	11	 20.0	Multiple (4)	0.0
	Infrastructure				
2.10	Quality of overall infrastructure	33	 3.7	Switzerland	6.7
2.11	Quality of telephone/fax infrastructure	30	 6.0	Switzerland	6.9
2.12	Internet users	38	 17.7	Netherlands	85.7
2.13	Broadband Internet subscribers	31	 3.7	Netherlands	31.8
	Telephone lines	31	 25.4	Switzerland	66.9
2.14				Italy	

(Cont'd.)

## Turkey

Financial Development Index in detail (cont'd.)	velopment <b>Advantage 🔳</b> Development <b>Disadvantag</b>
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	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of starting a business	40	20.7	Ireland	0.3
2.17	Cost of dealing with licenses			United Arab Emirates	
2.18	Cost of registering property			Saudi Arabia	
2.19	Cost to export			China	390.0
2.20	Cost to import	29■	1,013.0	Singapore	
2.21	Cost of enforcing contracts	21■	18.8	China	8.8
2.22	Cost of closing a business	26■	15.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	43	6.2	Argentina	8.5
3.02	External vulnerability indicator	46■	149.4	Russian Federation	15.4
3.03	Current account balance to GDP	49	7.9	Kuwait	46.1
3.04	Dollarization vulnerability indicator	n/a	n/a	Multiple (2)	0.0
3.05A	External debt to GDP (developing economies)	25■	52.6	Saudi Arabia	9.6
3.05B	Net int'l investment position to GDP (adv. economies	s)n/a	n/a	Switzerland	121.3
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks	n/a	n/a	Indonesia	16.0
3.07	Entry restrictions for banks			Multiple (24)	
3.08	Capital restrictions for banks			Multiple (3)	
3.09	Official supervisory power			Multiple (3)	
3.10	Private monitoring of the banking industry			South Africa	
3.11	Frequency of banking crises			Multiple (11)	
	Stability Index			India	
3 12	Grapine, magrenini				
3.12	Cumulative real estate appreciation	n/a	n/a	Russian Federation	-68 4
3.12	Cumulative real estate appreciation	n/a	n/a	Russian Federation	68.4
3.13	Risk of sovereign debt crisis				
		46■	9.1	Multiple (15)Multiple (15)	20.0
3.13	Risk of sovereign debt crisis Local currency sovereign rating	46■	9.1	Multiple (15)	20.0
3.13	Risk of sovereign debt crisis Local currency sovereign rating	46■	9.1	Multiple (15)	20.0
3.13	Risk of sovereign debt crisis  Local currency sovereign rating  Foreign currency sovereign rating  4th pillar: Banks  Size index	46 <b>1</b>	9.1 8.1	Multiple (15)	20.0
3.13	Risk of sovereign debt crisis  Local currency sovereign rating  Foreign currency sovereign rating  4th pillar: Banks	46 <b>1</b>	9.1 8.1	Multiple (15)	20.0
3.13 3.14 3.15	Risk of sovereign debt crisis  Local currency sovereign rating  Foreign currency sovereign rating  4th pillar: Banks  Size index	46 <b>1</b>	9.1 8.1	Multiple (15) Multiple (15)	20.0
3.13 3.14 3.15	Risk of sovereign debt crisis Local currency sovereign rating Foreign currency sovereign rating  4th pillar: Banks Size index Size index	46 <b>1</b>	9.1 8.1	Multiple (15) Multiple (15)	20.020.0
3.13 3.14 3.15 4.01	Risk of sovereign debt crisis Local currency sovereign rating Foreign currency sovereign rating  4th pillar: Banks Size index Size index Efficiency index	46 46 44	9.1 8.1	Multiple (15) Multiple (15) Hong Kong SAR	20.020.0
3.13 3.14 3.15 4.01 4.02	Risk of sovereign debt crisis Local currency sovereign rating Foreign currency sovereign rating  4th pillar: Banks Size index Size index Efficiency index Efficiency index Public ownership of banks	46 46 44	9.1 8.1	Multiple (15)  Multiple (15)  Hong Kong SAR  United Arab Emirates	20.020.0
3.13 3.14 3.15 4.01 4.02 4.03	Risk of sovereign debt crisis Local currency sovereign rating Foreign currency sovereign rating  4th pillar: Banks Size index Size index Efficiency index Efficiency index Public ownership of banks Financial information disclosure	46 <b>1</b> 47 <b>1</b>	9.1 8.1	Multiple (15)  Multiple (15)  Hong Kong SAR  United Arab Emirates Multiple (11)	20.0
3.13 3.14 3.15 4.01 4.02 4.03 4.04	Risk of sovereign debt crisis Local currency sovereign rating	46	9.1 8.1 4.4 5.2 n/a	Multiple (15)  Multiple (15)  Hong Kong SAR  United Arab Emirates Multiple (11)	20.0
3.13 3.14 3.15 4.01 4.02 4.03 4.04 4.05	Risk of sovereign debt crisis Local currency sovereign rating Foreign currency sovereign rating  4th pillar: Banks Size index Size index Efficiency index Efficiency index Public ownership of banks Financial information disclosure Public credit registry coverage Private credit bureau coverage.	46	9.1 8.1 4.4 5.2 n/a 10.3 2.7	Multiple (15)	20.020.0
3.13 3.14 3.15 4.01 4.02 4.03 4.04	Risk of sovereign debt crisis Local currency sovereign rating	46	9.1 8.1 4.4 5.2 n/a 10.3 2.7	Multiple (15)  Multiple (15)  Hong Kong SAR  United Arab Emirates Multiple (11)	20.020.010.86.80.057.2100.0
3.13 3.14 3.15 4.01 4.02 4.03 4.04 4.05	Risk of sovereign debt crisis Local currency sovereign rating Foreign currency sovereign rating  4th pillar: Banks Size index Size index Efficiency index Efficiency index Public ownership of banks Financial information disclosure Public credit registry coverage Private credit bureau coverage.	46	9.1 8.1 4.4 5.2 n/a 10.3 2.7	Multiple (15)	20.020.010.86.80.057.2100.0
3.13 3.14 3.15 4.01 4.02 4.03 4.04 4.05	Risk of sovereign debt crisis Local currency sovereign rating Foreign currency sovereign rating  4th pillar: Banks Size index Size index Efficiency index Efficiency index Public ownership of banks Financial information disclosure Public credit registry coverage Private credit bureau coverage. Credit Information Index	46	9.1 8.1 4.4 5.2 n/a 10.3 2.7	Multiple (15)	20.020.010.86.80.057.2100.0
3.13 3.14 3.15 4.01 4.02 4.03 4.04 4.05 4.06	Risk of sovereign debt crisis Local currency sovereign rating Foreign currency sovereign rating  4th pillar: Banks Size index Size index Efficiency index Efficiency index Public ownership of banks Financial information disclosure Public credit registry coverage Private credit bureau coverage Credit Information Index  5th pillar: Non-banks IPO activity	46	9.14.45.2n/a10.32.75.0	Multiple (15)	20.020.0
3.13 3.14 3.15 4.01 4.02 4.03 4.04 4.05 4.06	Risk of sovereign debt crisis Local currency sovereign rating Foreign currency sovereign rating  4th pillar: Banks Size index Size index Efficiency index Efficiency index Public ownership of banks Financial information disclosure Public credit registry coverage Private credit bureau coverage Credit Information Index  5th pillar: Non-banks IPO activity IPO market share	46	9.14.45.2n/a10.32.75.0	Multiple (15)	20.020.0
3.13 3.14 3.15 4.01 4.02 4.03 4.04 4.05 4.06	Risk of sovereign debt crisis Local currency sovereign rating Foreign currency sovereign rating  4th pillar: Banks Size index Size index Efficiency index Efficiency index Public ownership of banks Financial information disclosure Public credit registry coverage Private credit bureau coverage Credit Information Index  5th pillar: Non-banks IPO activity	46	9.14.45.2n/a10.32.75.0	Multiple (15)	20.020.0
3.13 3.14 3.15 4.01 4.02 4.03 4.04 4.05 4.06	Risk of sovereign debt crisis Local currency sovereign rating Foreign currency sovereign rating  4th pillar: Banks  Size index Size index  Efficiency index Efficiency index Public ownership of banks  Financial information disclosure Public credit registry coverage Private credit bureau coverage Credit Information Index  5th pillar: Non-banks  IPO activity IPO market share IPO proceeds amount	46	9.14.45.2n/a10.32.75.0	Multiple (15)	20.020.0
3.13 3.14 3.15 4.01 4.02 4.03 4.04 4.05 4.06	Risk of sovereign debt crisis Local currency sovereign rating Foreign currency sovereign rating  4th pillar: Banks Size index Size index Efficiency index Efficiency index Public ownership of banks  Financial information disclosure Public credit registry coverage Private credit bureau coverage Credit Information Index  5th pillar: Non-banks IPO activity IPO market share IPO proceeds amount Share of world IPOs  M&A activity M&A market share	46	9.14.45.2n/a10.32.75.0	Multiple (15)	
3.13 3.14 3.15 4.01 4.02 4.03 4.04 4.05 4.06	Risk of sovereign debt crisis Local currency sovereign rating Foreign currency sovereign rating  4th pillar: Banks Size index Size index Efficiency index Efficiency index Public ownership of banks  Financial information disclosure Public credit registry coverage Private credit bureau coverage. Credit Information Index  5th pillar: Non-banks IPO activity IPO market share IPO proceeds amount Share of world IPOs  M&A activity	46	9.14.45.2n/a10.32.75.0	Multiple (15)	

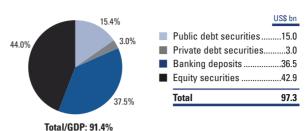
ıanc	cial Development Index in detail (cont'd.	<u>.</u> .)	■ Developmen	t Advantage Development Disadvantage
	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCORE
		nanny 32	SCORE	DEST PENFUNIVEN SCORE
	5th pillar: Non-banks (cont'd.)			
- 07	Insurance	04	0.017.5	11 % 10%
5.07	Insurance premiums, direct			United States1,170,100.6
5.08	Real growth of direct insurance premiums			United Kingdom6,466.7 India52.6
5.10	Insurance penetration			United Kingdom16.5
5.11	Relative value-added of insurance			Switzerland4.8
J. 1 1				5WIZOIIdild
5.12	Securitization Securitization to GDP	10	4.0	United States22.9
5.12	Share of total number of securitization deals			United States
				Cintod Glates
	6th pillar: Financial markets			
	Foreign exchange markets			
6.01	Spot foreign exchange turnover			United Kingdom26.6
6.02	Outright forward foreign exchange turnover			United Kingdom29.9
5.03	Foreign exchange swap turnover	31■.	0.1	United Kingdom42.0
6.04	Derivatives markets Interest rate derivatives turnover:			
J.O-T	Forward rate agreements	28	0.0	United Kingdom45.6
3.05	Interest rate derivatives turnover: Swaps			United Kingdom46.0
.06	Interest rate derivatives turnover: Options			United States42.6
6.07	Foreign exchange derivatives turnover: Currency swa			United Kingdom47.6
8.08	Foreign exchange derivatives turnover: Options			United Kingdom42.6
	Equity market development			
6.09	Equity market turnover			Pakistan374.3
7.05	Stock market capitalization to GDP	35■.	36.5	Hong Kong SAR713.3
	Bond market development			
5.10	Private-sector bonds to GDP	n/a	n/a	United States114.0
5.11	Public-sector bonds to GDP	3■.	6.4	France7.0
5.12	International bonds to GDP	33■.	9.2	Netherlands121.7
	7th pillar: Size, depth, and access			
	Size and depth			
7.01	M2 to GDP			Hong Kong SAR252.3
7.02	Private debt to GDP			Netherlands216.2
7.03	Public debt to GDP			Austria7.0
.04	Bank deposits to GDP			Hong Kong SAR250.4
.05	Stock market capitalization to GDP			Hong Kong SAR713.3
.06	Relative value-added of financial institutions to GDP.			Panama9.2
7.07	Private credit to GDP			United States193.7
7.08	Stock market value traded to GDP	25■.	56.5	Saudi Arabia356.2
υσ	Access Financial market sophistication	20 =	4 Q	Switzerland6.7
.09	Venture capital availability			United States5.3
7.10 7.11	Ease of access to credit			Slovak Republic5.9
7.11 7.12	Ease of access to local equity market			Sweden6.2
7.12	Bank branches			Spain
. 1 . 1				- pa

### Ukraine

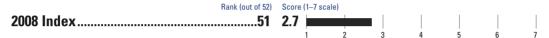
#### **Key indicators**

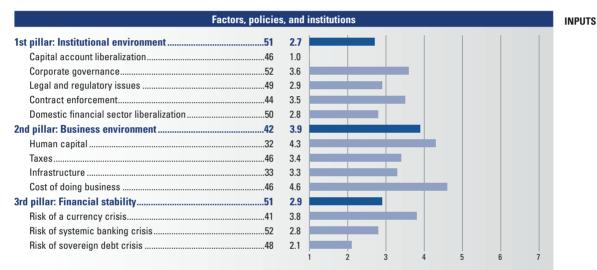
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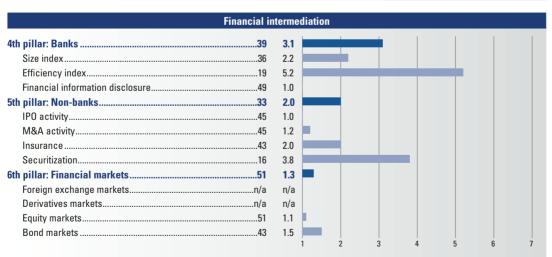
#### Financial assets by major type, 2006



#### **Financial Development Index 2008**











### Ukraine

#### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52		SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment					
	Capital account liberalization					
1.01	Capital account liberalization	46		1.1	Multiple (15)	2.0
	Corporate governance					
1.02	Extent of incentive-based compensation	47		3.9	France	5.
1.03	Efficacy of corporate boards	49		4.2	Sweden	6.
1.04	Reliance on professional management	51		3.9	Sweden	6.
1.05	Willingness to delegate	52		3.2	Sweden	6.
1.06	Strength of auditing and accounting standards	52		3.5	Germany	6.
1.07	Shareholder rights index	n/a		n/a	Multiple (8)	
1.08	Ethical behavior of firms				Finland	
1.09	Protection of minority shareholders' interests	52		3.1	Sweden	6.
	Legal and regulatory issues					
1.10	Burden of government regulation	39		2.7	Singapore	5.3
1.11	Centralization of economic policymaking	31		3.3	Switzerland	5.9
1.12	Regulation of security exchanges				Sweden	
1.13	Property rights				Germany	
1.14	Intellectual property protection				Germany	
1.15	Diversion of public funds				Finland	
1.16	Public trust of politicians	47		1.8	Singapore	6.4
	Contract enforcement					
1.17	Effectiveness of law-making bodies	46		2.5	Singapore	6.
1.18	Judicial independence	48		2.5	Germany	6.!
1.19	Irregular payments in judicial decisions	45		3.6	Finland	
1.20	Number of procedures to enforce a contract				Ireland	
1.21	Time to enforce a contract				Singapore	
1.22	Cost of enforcing contracts				China	
1.23	Strength of investor protection				Singapore	
1.24	Time to close a business	31		2.9	Ireland	0.
	Domestic financial sector liberalization					
1.25	Domestic financial sector liberalization	50		2.0	Multiple (34)	1.0
	2nd pillar: Business environment					
	Human capital					
2.01	Quality of management schools	46		3.7	France	6.0
2.02	Quality of math and science education	25		4.6	Singapore	6.3
2.03	Extent of staff training	51		3.3	Switzerland	5.9
2.04	Local availability of research and training services	49		3.6	Switzerland	6.0
2.05	Brain drain and ease of hiring foreign labor	49		3.4	Kuwait	
2.06	Tertiary enrollment	6		72.8	Finland	93.2
	Taxes					
	Irregular payments in tax collection	46		4.0	Sweden	6.8
2.07				2.8	Singapore	5.
	Distortive effect on competition of taxes and subsidie	s51			N 4 (4)	0.0
2.08	Distortive effect on competition of taxes and subsidie Corporate tax rate			25.0	Multiple (4)	
2.08	Corporate tax rate		■	25.0	iviuitipie (4)	
2.08 2.09	Corporate tax rate	17			Switzerland	6
<ul><li>2.08</li><li>2.09</li><li>2.10</li></ul>	Corporate tax rate	17		3.1	·	
2.07 2.08 2.09 2.10 2.11 2.12	Corporate tax rate	4052		3.1 4.7	SwitzerlandSwitzerland	6.
2.08 2.09 2.10 2.11 2.12	Corporate tax rate	17 40 52 34		3.1 4.7 19.6	Switzerland	6.9
2.08 2.09 2.10 2.11	Corporate tax rate	1740523439		3.1 4.7 19.6	Switzerland Switzerland Netherlands	6.9 85.7 31.8

(Cont'd.)

### Ukraine

#### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage INDICATOR BEST PERFORMER 2nd pillar: Business environment (cont'd.) Cost of doing business 2.16 Ireland......0.3 United Arab Emirates ......1.5 2.17 Saudi Arabia ......0.0 2.18 China ......390.0 Singapore ......367.0 2.20 2.21 Multiple (4) ......1.0 2.22 3rd pillar: Financial stability Risk of a currency crisis 3.01 Argentina .....-8.5 3.02 Russian Federation......15.4 3.03 Current account balance to GDP......34 ....■ .....1.6 Kuwait ......46.1 Multiple (2) ......0.0 Saudi Arabia ......9.6 3.05A 3.05B Net int'l investment position to GDP (adv. economies) ......n/a ......n/a Switzerland......121.3 Risk of systemic banking crisis 3.06 Indonesia......16.0 3.07 Entry restrictions for banks ......n/a Multiple (24) ......8.0 3.08 Multiple (3) ......9.0 Official supervisory power.....n/a .....n/a Multiple (3) .....14.0 Private monitoring of the banking industry ......n/a .....n/a South Africa.....9.0 3.10 3.11 Multiple (11) ......0.0 3.12 Cumulative real estate appreciation ......n/a .....n/a Russian Federation.....-68.4 3 13 Risk of sovereign debt crisis Local currency sovereign rating ......9.0 3.14 Multiple (15) .....20.0 Multiple (15) ......20.0 3.15 4th pillar: Banks Size index 4.01 Hong Kong SAR .....10.8 Size index Efficiency index United Arab Emirates ......6.8 4.02 Public ownership of banks ......n/a Multiple (11) ......0.0 4.03 Financial information disclosure 4.04 Belgium ......57.2 Multiple (7) ......100.0 4.05 Multiple (14) ......6.0 4.06 5th pillar: Non-banks IPO activity 5.01 France 31.0 Kazakhstan ......4.4 Japan .....14.2 M&A activity 5.04 United States ......44.4 5.05 United Kingdom .....14.6 5.06 United States ......33.2

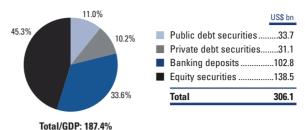
Financial Development Index in detail	(cont'd.)	Development Advantage	■ Development <b>Disadvantage</b>
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nc	cial Development Index in detail (	cont'd.)	Development	t <b>Advantage ■</b> Development <b>Disadvanta</b>
	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCORE
	5th pillar: Non-banks (cont'd.)			
	Insurance			
.07	Insurance premiums, direct		•	United States1,170,100.6
.08	Insurance density			United Kingdom6,466.7
.09	Real growth of direct insurance premiums			India52.6
.10 .11	Insurance penetration			United Kingdom16.5 Switzerland4.8
. 1 1		II/d	II/d	SWILZERIANU4.0
10	Securitization Securitization to GDP	0	4.7	United States22.9
.12 .13	Share of total number of securitization deals			United States64.9
.10	onare of total number of secunitization deals			Officed States
	6th pillar: Financial markets			
	Foreign exchange markets			
.01	Spot foreign exchange turnover			United Kingdom26.6
.02	Outright forward foreign exchange turnover			United Kingdom29.9
.03	Foreign exchange swap turnover  Derivatives markets	n/a	n/a	United Kingdom42.0
04	Interest rate derivatives turnover:			
	Forward rate agreements	n/a	n/a	United Kingdom45.6
05	Interest rate derivatives turnover: Swaps	n/a	n/a	United Kingdom46.0
.06	Interest rate derivatives turnover: Options			United States42.6
.07	Foreign exchange derivatives turnover: Currer			United Kingdom47.6
.08	Foreign exchange derivatives turnover: Option	nsn/a	n/a	United Kingdom42.6
	Equity market development			
.09	Equity market turnover			Pakistan
.05	Stock market capitalization to GDP	n/a	n/a	Hong Kong SAR713.3
	Bond market development	,	,	11 % 10%
.10	Private-sector bonds to GDP  Public-sector bonds to GDP	, .		United States114.0 France
11	International bonds to GDP			Netherlands121.7
	7th pillar: Size, depth, and access			
	Size and depth			
.01	M2 to GDP			Hong Kong SAR252.3
.02	Private debt to GDP			Netherlands216.2
03	Public debt to GDP			Austria
04 05	Bank deposits to GDP  Stock market capitalization to GDP			Hong Kong SAR250.4 Hong Kong SAR713.3
.05	Relative value-added of financial institutions to			Panama9.2
.00	Private credit to GDP		, -	United States193.7
08	Stock market value traded to GDP			Saudi Arabia356.2
	Access			
09	Financial market sophistication	50	3.3	Switzerland6.7
10	Venture capital availability			United States5.3
11	Ease of access to credit			Slovak Republic5.9
12	Ease of access to local equity market			Sweden6.2
.13	Bank branches	n/a	n/a	Spain95.9
14	Ease of access to loans	40■.	3.2	Norway5.5

#### **Key indicators**

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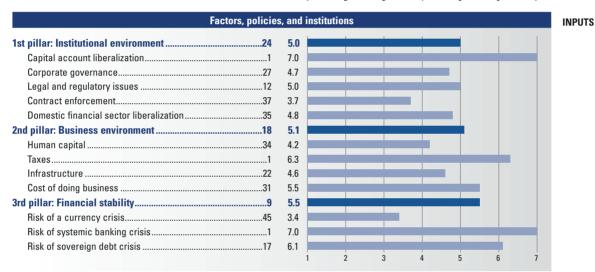
#### Financial assets by major type, 2006

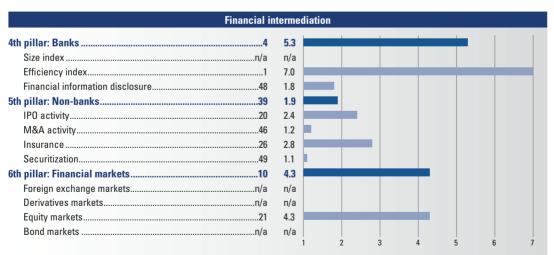


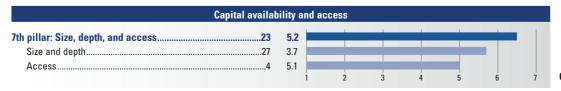
#### **Financial Development Index 2008**

2008 Index Score (1–7 scale)

4.6 4.7 Score (1–7 scale)









	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment				
	Capital account liberalization				
01	Capital account liberalization	1	2.6	Multiple (15)	2.0
	Corporate governance				
02	Extent of incentive-based compensation	38	4.3	France	5.
03	Efficacy of corporate boards	43	4.6	Sweden	6.
04	Reliance on professional management	33	4.8	Sweden	6.4
05	Willingness to delegate	28	4.2	Sweden	6.3
06	Strength of auditing and accounting standards	27	5.2	Germany	
07	Shareholder rights index			Multiple (8)	
80	Ethical behavior of firms			Finland	
09	Protection of minority shareholders' interests	31	4.6	Sweden	6.4
	Legal and regulatory issues				
10	Burden of government regulation	5	4.6	Singapore	
11	Centralization of economic policymaking			Switzerland	
12	Regulation of security exchanges			Sweden	
13	Property rights			Germany	
14	Intellectual property protection			Germany	
15	Diversion of public funds			Finland	
16	Public trust of politicians	5	5.4	Singapore	6.4
	Contract enforcement				
17	Effectiveness of law-making bodies	19	4.3	Singapore	6.
18	Judicial independence	24	<b></b> 5.0	Germany	
19	Irregular payments in judicial decisions			Finland	
20	Number of procedures to enforce a contract			Ireland	
21	Time to enforce a contract			Singapore	
22	Cost of enforcing contracts			China	
23	Strength of investor protection			Singapore	
24	Time to close a business	4/	5. I	Ireland	0.2
25	Domestic financial sector liberalization  Domestic financial sector liberalization	25	2.0	Multiple (24)	1.4
20	Domestic infancial sector fiberalization		Z.U	Multiple (34)	
	2nd pillar: Business environment				
	Human capital			-	
01	Quality of management schools			France	
02	•			Singapore	
03	Extent of staff training  Local availability of research and training services			Switzerland Switzerland	
04	,			Kuwait	
05 06	Brain drain and ease of hiring foreign labor  Tertiary enrollment			Finland	
00	,		=20.2		
07	Taxes Irregular payments in tax collection	7	6.5	Sweden	6.9
08	Distortive effect on competition of taxes and subsidie			Singapore	
09	Corporate tax rate			Multiple (4)	
	Infrastructure				
10	Quality of overall infrastructure	11	6.0	Switzerland	6
11	Quality of telephone/fax infrastructure			Switzerland	
12	Internet users			Netherlands	
13	Broadband Internet subscribers			Netherlands	
14	Telephone lines			Switzerland	
15	Mobile telephone subscribers			Italy	

(Cont'd.)

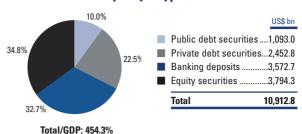
	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
.16	Cost of starting a business	48	36.9	Ireland	0.3
.17	Cost of dealing with licenses			United Arab Emirates	
.18	Cost of registering property			Saudi Arabia	0.0
2.19	Cost to export	5	462.0	China	390.0
2.20	Cost to import	5	462.0	Singapore	367.0
2.21	Cost of enforcing contracts		26.2	China	8.8
2.22	Cost of closing a business	47	30.0	Multiple (4)	1.0
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate	n/a	n/a	Argentina	85
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP			Kuwait	
3.04	Dollarization vulnerability indicator	n/a	n/a	Multiple (2)	0.0
05A	External debt to GDP (developing economies)	26	53.0	Saudi Arabia	9.6
05B	Net int'l investment position to GDP (adv. econom	nies)n/a	n/a	Switzerland	121.3
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks	n/a	n/a	Indonesia	16.0
3.07	Entry restrictions for banks			Multiple (24)	8.0
3.08	Capital restrictions for banks	n/a	n/a	Multiple (3)	9.C
3.09	Official supervisory power	n/a	n/a	Multiple (3)	14.0
3.10	Private monitoring of the banking industry	n/a	n/a	South Africa	9.0
3.11	Frequency of banking crises	1■	0.0	Multiple (11)	0.0
3.12	Stability Index	n/a	n/a	India	
3.13	Cumulative real estate appreciation	n/a	n/a	Russian Federation	68.4
	Risk of sovereign debt crisis				
3.14	Local currency sovereign rating	17■	18.0	Multiple (15)	20.0
3.15	Foreign currency sovereign rating	17■	18.0	Multiple (15)	20.0
	4th pillar: Banks				
	Size index				
1.01	Size index	n/a	n/a	Hong Kong SAR	10.8
r. O 1			γα	Tiong Rong OAT	
4.00	Efficiency index	4 -	0.0		0.0
4.02	Efficiency index			United Arab Emirates	
4.03	Public ownership of banks	n/a	n/a	Multiple (11)	0.0
	Financial information disclosure				
4.04	Public credit registry coverage			Belgium	
4.05	Private credit bureau coverage			Multiple (7)	
1.06	Credit Information Index	48■	2.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	26	0.7	France	31.0
5.02	IPO proceeds amount	8	1.1	Kazakhstan	4.4
5.03	Share of world IPOs			Japan	14.2
	M&A activity				
5.04	M&A market share	44	0.1	United States	44 /
5.05	M&A transaction value to GDP			United States	
		41		United States	

#### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

Insurance Insurance premiums, or Insurance density	TOR	•	SCORE	BEST PERFORMER	SCOR
Insurance premiums, of Insurance density	lar: Non-banks (cont'd.)				
Insurance density Real growth of direct in Insurance penetration. Relative value-added of Securitization Securitization Securitization to GDP. Share of total number  6th pillar: Financial management of the pillar: Financial management of the pillar: Financial management of the pillar: Foreign exchange management of the pillar: Foreign exchange sware perivatives markets Interest rate derivative forward rate agreement of the pillar: Foreign exchange derivatives foreign exchange derivatives foreign exchange derivative foreign exchange f	nnce				
Real growth of direct in Insurance penetration. Relative value-added of Securitization Securitization Securitization Securitization to GDP. Share of total number  6th pillar: Financial management of the pillar: Financial management of the pillar: Foreign exchange management of the pillar: Foreign exchange sware perivatives markets Interest rate derivative forward rate agreement of the pillar: Foreign exchange derivatives are provided to the pillar: Foreign exchange derivative foreign exchange fore	nce premiums, direct	40■	2,726.2	United States	1,170,100.6
Insurance penetration. Relative value-added of Securitization Securitization Securitization to GDP. Share of total number  6th pillar: Financial m Foreign exchange may spot foreign exchange swarp outright forward foreign exchange swarp berivatives markets Interest rate derivative foreign exchange derivatives are derivative interest rate derivative foreign exchange derives foreign exchange foreig	nce density	23■	585.4	United Kingdom	
Securitization Securitization Securitization Securitization to GDP. Share of total number  6th pillar: Financial m Foreign exchange may spot foreign exchange swarp outright forward foreign exchange swarp berivatives markets Interest rate derivative forward rate agreeme Interest rate derivative foreign exchange derives foreign exchange foreign exc	rowth of direct insurance premiums	6■	18.3	India	52.0
Securitization Securitization to GDP. Share of total number  6th pillar: Financial m Foreign exchange may spot foreign exchange outright forward foreign exchange sward perivatives markets Interest rate derivative forward rate agreeme Interest rate derivative foreign exchange foreign	nce penetration	40■	1.7	United Kingdom	
6th pillar: Financial m Foreign exchange ma Spot foreign exchange swa Derivatives markets Interest rate derivative Foreign exchange derivative strate derivative Interest rate derivative Foreign exchange derivative Foreign exchange derivative Foreign exchange derivative Interest rate derivative Foreign exchange swa Foreign exchange market sophion Foreign exchange market derivative Foreign exchange swa Foreign exchange market derivative Foreign exchange swa Foreign exchange market Foreign exchange swa Foreign exchange market Foreign exchange market Foreign exchange market Foreign exchange swa Foreign exchange market Foreign exchange swa For	ve value-added of insurance	n/a	n/a	Switzerland	4.8
6th pillar: Financial m Foreign exchange ma Spot foreign exchange swa Derivatives markets Interest rate derivative Foreign exchange derivative strate derivative Interest rate derivative Foreign exchange derivative Foreign exchange derivative Foreign exchange derivative Interest rate derivative Foreign exchange swa Foreign exchange market sophion Foreign exchange market derivative Foreign exchange swa Foreign exchange market derivative Foreign exchange swa Foreign exchange market Foreign exchange swa Foreign exchange market Foreign exchange market Foreign exchange market Foreign exchange swa Foreign exchange market Foreign exchange swa For	itization				
6th pillar: Financial m Foreign exchange ma Spot foreign exchange swa Derivatives markets Interest rate derivative Forward rate agreeme Interest rate derivative Foreign exchange derivative Equity market develop Equity market turnove Stock market capitalizate Bond market develop Private-sector bonds to International bonds to International bonds to The pillar: Size, depth, Size and depth M2 to GDP Private debt to GDP Bank deposits to GDP. Stock market capitalizate Relative value-added on Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availabilitate Ease of access to local Bank branches	tization to GDP	47	0.3	United States	22.9
Foreign exchange may 20 Spot foreign exchange 20 Outright forward foreign 21 Foreign exchange sward perivatives markets 24 Interest rate derivative Forward rate agreeme 25 Interest rate derivative 26 Interest rate derivative 27 Foreign exchange derivative 28 Foreign exchange derivative 29 Equity market develop 29 Equity market turnove 20 Stock market capitalize 29 Bond market develop 29 Private-sector bonds to 20 International bonds to 20 International bonds to 20 Private debt to GDP	of total number of securitization deals			United States	
Foreign exchange may 20 Spot foreign exchange 20 Outright forward foreign 21 Foreign exchange sward perivatives markets 24 Interest rate derivative Forward rate agreeme 25 Interest rate derivative 26 Interest rate derivative 27 Foreign exchange derivative 28 Foreign exchange derivative 29 Equity market develop 29 Equity market turnove 20 Stock market capitalize 29 Bond market develop 29 Private-sector bonds to 20 International bonds to 20 International bonds to 20 Private debt to GDP					
Derivatives markets Interest rate derivative Forward rate agreeme Interest rate derivative Foreign exchange derivative Interest rate derivative Foreign exchange derivative Interest rate derivative Foreign exchange derivative Foreign exchange derivative Equity market develop Equity market turnove Stock market capitalizate Bond market develop Private-sector bonds to International bonds to  Tth pillar: Size, depth, Size and depth M2 to GDP Public debt to GDP Private debt to GDP Stock market capitalizate Relative value-added on Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availab Ease of access to loca Bank branches	lar: Financial markets				
Outright forward foreign Foreign exchange swar Derivatives markets Interest rate derivative Forward rate agreeme Interest rate derivative Interest rate derivative Foreign exchange derive Foreign exchange derive Equity market develop Equity market turnove Stock market capitalizate Bond market develop Private-sector bonds to International bonds to  7th pillar: Size, depth, Size and depth M2 to GDP Private debt to GDP Bank deposits to GDP Stock market capitalizate Relative value-added on Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availab Ease of access to loca Bank branches	ın exchange markets				
Derivatives markets Interest rate derivative Forward rate agreeme Interest rate derivative Foreign exchange deriv Foreign exchange deriv Equity market develop Equity market turnove Stock market capitaliza Bond market develop Private-sector bonds to International bonds to  7th pillar: Size, depth, Size and depth M2 to GDP Private debt to GDP Private debt to GDP Stock market capitaliza Relative value-added of Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availab Ease of access to loca Bank branches	oreign exchange turnover	n/a	n/a	United Kingdom	26.
Derivatives markets Interest rate derivative Forward rate agreeme Interest rate derivative Foreign exchange deriv Foreign exchange deriv Equity market develop Equity market turnove Stock market capitaliza Bond market develop Private-sector bonds to International bonds to  7th pillar: Size, depth, Size and depth M2 to GDP Private debt to GDP Private debt to GDP Stock market capitaliza Relative value-added of Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availab Ease of access to loca Bank branches	ht forward foreign exchange turnover	n/a	n/a	United Kingdom	29.9
Interest rate derivative Forward rate agreeme Interest rate derivative Interest rate derivative Interest rate derivative Interest rate derivative Foreign exchange deriv Equity market develop Equity market turnove Stock market capitaliza Bond market develop Private-sector bonds to International bonds to International bonds to Tth pillar: Size, depth, Size and depth M2 to GDP Public debt to GDP Public debt to GDP Bank deposits to GDP Stock market capitaliza Relative value-added of Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availab Ease of access to cred Ease of access to loca Bank branches	n exchange swap turnover			United Kingdom	42.0
Interest rate derivative Forward rate agreeme Interest rate derivative Interest rate derivative Interest rate derivative Interest rate derivative Foreign exchange deriv Equity market develop Equity market turnove Stock market capitaliza Bond market develop Private-sector bonds to International bonds to International bonds to Tth pillar: Size, depth, Size and depth M2 to GDP Public debt to GDP Public debt to GDP Bank deposits to GDP Stock market capitaliza Relative value-added of Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availab Ease of access to cred Ease of access to loca Bank branches	ativas markats				
Forward rate agreeme Interest rate derivative Interest rate derivative Interest rate derivative Foreign exchange deriv Equity market develop Equity market turnove Stock market capitaliza Bond market develop Private-sector bonds to International bonds to International bonds to Tth pillar: Size, depth, Size and depth M2 to GDP Public debt to GDP Public debt to GDP Bank deposits to GDP Stock market capitaliza Relative value-added o Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availab Ease of access to cred Ease of access to loca Bank branches	st rate derivatives turnover:				
Interest rate derivative Interest rate derivative Interest rate derivative Foreign exchange derive Foreign exchange derive Equity market develop Equity market turnove Stock market capitalizate Bond market develop Private-sector bonds to International bonds to International bonds to The pillar: Size, depth, Size and depth M2 to GDP Public debt to GDP Public debt to GDP Bank deposits to GDP Stock market capitalizate Relative value-added of Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availabilicates of access to creditate of access to locate Bank branches	rd rate agreements	n/a	n/a	United Kingdom	45 (
Interest rate derivative Foreign exchange derivative Foreign exchange derivative Foreign exchange derivative Equity market develop Stock market capitalizate Bond market develop Private-sector bonds to International bonds to International bonds to Th pillar: Size, depth, Size and depth M2 to GDP Public debt to GDP Public debt to GDP Bank deposits to GDP Stock market capitalizate Relative value-added of Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availabilitate and access to creditate and access to creditate and access to decase and branches	st rate derivatives turnover: Swaps	, -	, -	United Kingdom	
Foreign exchange deriver Foreign Equity market development of Foreign Foreign Foreign exchange for	st rate derivatives turnover: Options			United States	
Equity market development of the provided responsible of t	n exchange derivatives turnover: Currency swa			United Kingdom	
Bond market develop Private-sector bonds to Public-sector bonds to International bonds to Private depth  Tth pillar: Size, depth, Size and depth M2 to GDP Private debt to GDP Bank deposits to GDP.Stock market capitaliza Relative value-added of Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availab Ease of access to loca Bank branches	n exchange derivatives turnover: Options	•		United Kingdom	
Bond market develop Private-sector bonds to Public-sector bonds to International bonds to Private depth  Tth pillar: Size, depth, Size and depth M2 to GDP Private debt to GDP Bank deposits to GDP.Stock market capitaliza Relative value-added of Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availab Ease of access to loca Bank branches	/ market development				
Bond market develop Private-sector bonds to Public-sector bonds to International bonds to International bonds to Tth pillar: Size, depth, Size and depth M2 to GDP Private debt to GDP Bank deposits to GDP Stock market capitaliza Relative value-added of Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availab Ease of access to cred Ease of access to loca Bank branches	market turnover	18■	89.4	Pakistan	374.3
7th pillar: Size, depth, Size and depth M2 to GDP Public debt to GDP Public debt to GDP Stock market capitalize Relative value-added of Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availab Ease of access to loca Bank branches	market capitalization to GDP	n/a	n/a	Hong Kong SAR	
7th pillar: Size, depth, Size and depth M2 to GDP Public debt to GDP Public debt to GDP Stock market capitalize Relative value-added of Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availab Ease of access to loca Bank branches	market development				
7th pillar: Size, depth, Size and depth M2 to GDP 20 Private debt to GDP 30 Public debt to GDP 31 Public debt to GDP 32 Private debt to GDP 33 Public debt to GDP 34 Bank deposits to GDP 35 Stock market capitaliza 36 Relative value-added of Private credit to GDP 37 Private credit to GDP 38 Stock market value tra 39 Financial market sophi 30 Venture capital availab 31 Ease of access to credit capitaliza 32 Ease of access to loca 33 Bank branches	e-sector bonds to GDP	n/a	n/a	United States	11/1/
7th pillar: Size, depth, Size and depth M2 to GDP	-sector bonds to GDP	, -	• •	France	
Size and depth  M2 to GDP	ational bonds to GDP	, -	• •	Netherlands	
Size and depth  M2 to GDP	lar: Size, denth, and access				
M2 to GDP	•				
Public debt to GDP Bank deposits to GDP Stock market capitaliza Relative value-added o Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availab Ease of access to cred Ease of access to loca Bank branches	GDP	n/a	n/a	Hong Kong SAR	252.3
Public debt to GDP Bank deposits to GDP Stock market capitaliza Relative value-added o Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availab Ease of access to cred Ease of access to loca Bank branches	e debt to GDP			Netherlands	
Bank deposits to GDP Stock market capitaliza Relative value-added of Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availab Ease of access to cred Ease of access to loca Bank branches	debt to GDP			Austria	
Stock market capitalize Relative value-added of Private credit to GDP Stock market value tra Access Financial market sophi Venture capital availab Ease of access to cred Ease of access to loca Bank branches	deposits to GDP			Hong Kong SAR	
Relative value-added of Private credit to GDP  Stock market value tra  Access Financial market sophi Venture capital availab Ease of access to cred Ease of access to loca Bank branches	market capitalization to GDP			Hong Kong SAR	
Access Pinancial market sophi Venture capital availab Ease of access to crec Ease of access to loca Bank branches	ve value-added of financial institutions to GDP			Panama	
Access Pinancial market sophi Venture capital availab Ease of access to crec Ease of access to loca Bank branches	e credit to GDP	n/a	n/a	United States	193.
Pinancial market sophi Venture capital availabi Ease of access to crec Ease of access to loca Bank branches	market value traded to GDP	13 <b>=</b>	110.4	Saudi Arabia	356.2
Pinancial market sophi Venture capital availabi Ease of access to crec Ease of access to loca Bank branches	e				
O Venture capital available Ease of access to crec Ease of access to loca Bank branches	ial market sophistication	30	4.8	Switzerland	6.7
Ease of access to cred Ease of access to loca Bank branches	re capital availability			United States	
Ease of access to loca Bank branches	of access to credit			Slovak Republic	
3 Bank branches	of access to local equity market			Sweden	
	pranches			Spain	
	of access to loans	, -		Norway	
				, , , , , , , , , , , , , , , , , , , ,	

#### **Key indicators**

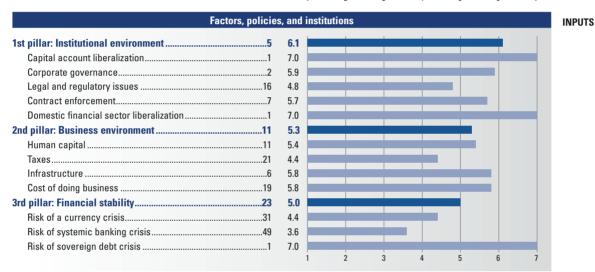
#### Financial assets by major type, 2006

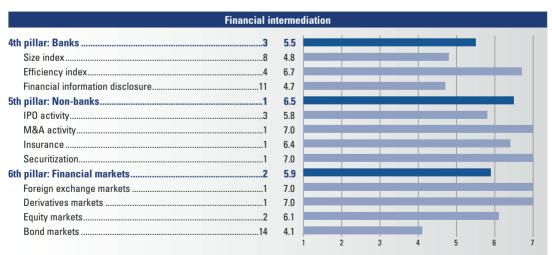


#### **Financial Development Index 2008**

2008 Index Score (1–7 scale)

5.8 5000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8 6000 | 5.8









#### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52		SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment					
	Capital account liberalization					
1.01	Capital account liberalization	1		2.6	Multiple (15)	2.6
	Corporate governance					
1.02	Extent of incentive-based compensation	8		5.4	France	5.
1.03	Efficacy of corporate boards	2		5.9	Sweden	6.
1.04	Reliance on professional management	9		5.9	Sweden	6.
1.05	Willingness to delegate	14		5.1	Sweden	6.
1.06	Strength of auditing and accounting standards	3		6.3	Germany	6.3
1.07	Shareholder rights index	1		5.0	Multiple (8)	
1.08	Ethical behavior of firms				Finland	
1.09	Protection of minority shareholders' interests	3		5.9	Sweden	6.
	Legal and regulatory issues					
1.10	Burden of government regulation	26		3.2	Singapore	
1.11	Centralization of economic policymaking	32		3.1	Switzerland	5.9
1.12	Regulation of security exchanges				Sweden	
1.13	Property rights				Germany	
1.14	Intellectual property protection				Germany	
1.15	Diversion of public funds				Finland	
1.16	Public trust of politicians	15		3.8	Singapore	6.4
	Contract enforcement					
1.17	Effectiveness of law-making bodies				Singapore	
1.18	Judicial independence				Germany	
1.19	Irregular payments in judicial decisions				Finland	
1.20	Number of procedures to enforce a contract				Ireland	
1.21	Time to enforce a contract				Singapore	
1.22	Cost of enforcing contracts				China	
1.23 1.24	Strength of investor protection				Singapore Ireland	
1.24		0		1.0	ireiariu	
4.05	Domestic financial sector liberalization	4	_	4.0	N.A. I.: I. (O.A)	4.4
1.25	Domestic financial sector liberalization			1.0	Multiple (34)	
	2nd pillar: Business environment					
	Human capital					
2.01	Quality of management schools	9		5.6	France	6.0
2.02	Quality of math and science education	27		4.5	Singapore	6.3
2.03	Extent of staff training				Switzerland	
2.04	Local availability of research and training services	5		5.9	Switzerland	
2.05	Brain drain and ease of hiring foreign labor	10		5.2	Kuwait	
2.05	Tertiary enrollment	17		59.3	Finland	93.2
	Taxes		_	0.0	Sweden	6.8
2.06	Taxes  Irregular payments in tax collection	15		6.2		
<ul><li>2.06</li><li>2.07</li></ul>					Singapore	5.7
<ul><li>2.06</li><li>2.07</li><li>2.08</li></ul>	Irregular payments in tax collection	s18		4.6	Singapore	
<ul><li>2.06</li><li>2.07</li><li>2.08</li></ul>	Irregular payments in tax collection	s18		4.6		
2.06 2.07 2.08 2.09	Irregular payments in tax collection	es18 30		4.6 30.0		0.
2.06 2.07 2.08 2.09	Irregular payments in tax collection	es18 30		4.6 30.0	Multiple (4)	6.
2.06 2.07 2.08 2.09 2.10 2.11	Irregular payments in tax collection	es18 30 17 16		4.6 30.0 5.5 6.5	Multiple (4)	6.
2.03 2.06 2.07 2.08 2.09 2.10 2.11 2.12 2.13	Irregular payments in tax collection  Distortive effect on competition of taxes and subsidie Corporate tax rate  Infrastructure  Quality of overall infrastructure  Quality of telephone/fax infrastructure	es18 30 17 16		4.6 30.0 5.5 6.5 63.2	Multiple (4)	6.5 6.5
2.06 2.07 2.08 2.09 2.10 2.11 2.12	Irregular payments in tax collection  Distortive effect on competition of taxes and subsidie Corporate tax rate  Infrastructure Quality of overall infrastructure Quality of telephone/fax infrastructure Internet users	18		4.6 30.0 5.5 6.5 63.2 21.7	Multiple (4)	6.5 6.5 85.7

(Cont'd.)

	INDICATOR R	ANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
2.16	Cost of starting a business	4	8	Ireland	0.3
2.17	Cost of dealing with licenses	20	64.6	United Arab Emirates	1.5
2.18	Cost of registering property	29■	4.1	Saudi Arabia	0.0
2.19	Cost to export			China	390.0
2.20	Cost to import			Singapore	367.0
2.21	Cost of enforcing contracts		,	China	
2.22	Cost of closing a business			Multiple (4)	
	Out will on Fire and in each life.				
	3rd pillar: Financial stability				
	Risk of a currency crisis				
3.01	Change in real effective exchange rate			Argentina	
3.02	External vulnerability indicator			Russian Federation	
3.03	Current account balance to GDP			Kuwait	
3.04	Dollarization vulnerability indicator			Multiple (2)	
8.05A	External debt to GDP (developing economies)			Saudi Arabia	
8.05B	Net int'l investment position to GDP (adv. economies)	12	21.9	Switzerland	121.3
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks	37■	4.0	Indonesia	16.0
3.07	Entry restrictions for banks	1	8.0	Multiple (24)	8.0
3.08	Capital restrictions for banks	13■	6.0	Multiple (3)	
3.09	Official supervisory power			Multiple (3)	
3.10	Private monitoring of the banking industry			South Africa	
3.11	Frequency of banking crises			Multiple (11)	
3.12	Stability Index			India	
3.13	Cumulative real estate appreciation			Russian Federation	
	Risk of sovereign debt crisis				
3.14	Local currency sovereign rating	1■	20.0	Multiple (15)	20.0
3.15	Foreign currency sovereign rating	1■	20.0	Multiple (15)	20.0
	4th pillar: Banks				
	Size index				
4.01	Size index	8■	8.1	Hong Kong SAR	10.8
	Efficiency index				
4.02	Efficiency index	4■	6.2	United Arab Emirates	6.8
4.03	Public ownership of banks			Multiple (11)	
	•	,			
	Financial information disclosure				
4.04	Public credit registry coverage			Belgium	
4.05	Private credit bureau coverage			Multiple (7)	
4.06	Credit Information Index	1■	6.0	Multiple (14)	6.0
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	5■	6.8	France	31.0
5.02	IPO proceeds amount	14	0.8	Kazakhstan	4.4
5.03	Share of world IPOs			Japan	14.2
E 0.4	M&A activity	o <b>-</b>	44.0	United Chart	
5.04	M&A market share			United States	
	M&A transaction value to GDP		14.6	United Kingdom	14.6
5.05 5.06	Share of total number of M&A deals			United States	

■ Development Advantage ■ Development Disadvantage

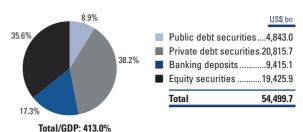
Einonoiol	Development	Indov in	dotoil	/+'-/ I
rillaliciai	Develonment	IIIUEX III	uelan	iconi a i

DICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
h pillar: Non-banks (cont'd.)				
surance				
surance premiums, direct	3■	418,366.4	United States1	,170,100.6
surance density			United Kingdom	
eal growth of direct insurance premiums	3	20.1	India	52.6
surance penetration	1	16.5	United Kingdom	16.5
elative value-added of insurance	6■	2.6	Switzerland	4.8
ecuritization				
ecuritization to GDP	3■	16.3	United States	22.9
nare of total number of securitization deals	3■	3.9	United States	64.9
h willow Financial moulests				
h pillar: Financial markets				
oreign exchange markets	1 -	26.6	United Vincetons	00.0
oot foreign exchange turnover			United Kingdom	
utright forward foreign exchange turnover			United Kingdom	
oreign exchange swap turnover	I	42.0	United Kingdom	42.0
erivatives markets				
terest rate derivatives turnover:	_			
prward rate agreements			United Kingdom	
terest rate derivatives turnover: Swaps			United Kingdom	
terest rate derivatives turnover: Options			United States	
preign exchange derivatives turnover: Currency sw	•		United Kingdom	
oreign exchange derivatives turnover: Options		42.6	United Kingdom	42.6
quity market development				
quity market turnover			Pakistan	
ock market capitalization to GDP	6■	139.2	Hong Kong SAR	713.3
ond market development				
ivate-sector bonds to GDP	22	15.9	United States	114.0
ublic-sector bonds to GDP	24	4.3	France	7.0
ternational bonds to GDP	7■	67.6	Netherlands	121.7
h pillar: Size, depth, and access				
ze and depth				
2 to GDP		124.8	Hong Kong SAR	252.3
ivate debt to GDP	7■	104.6	Netherlands	216.2
ublic debt to GDP	23	5.0	Austria	7.0
ank deposits to GDP	6■	130.6	Hong Kong SAR	250.4
ock market capitalization to GDP	6■	139.2	Hong Kong SAR	713.3
elative value-added of financial institutions to GDP	²12 <b>■</b>	5.0	Panama	9.2
ivate credit to GDP			United States	193.7
ock market value traded to GDP	4■	189.3	Saudi Arabia	356.2
ccess				
nancial market sophistication	2	6.7	Switzerland	6.7
enture capital availability	6	5.1	United States	5.3
· ,			Slovak Republic	5.9
ase of access to local equity market	9	5.7	Sweden	6.2
ank branches	17■	18.3	Spain	95.9
ase of access to loans	3■	5.3	Norway	5.5
nancial menture ca ase of accase of	pital availability cess to credit cess to local equity market ches	pital availability	narket sophistication	pital availability 6 ■ 5.1 United States

#### **Key indicators**

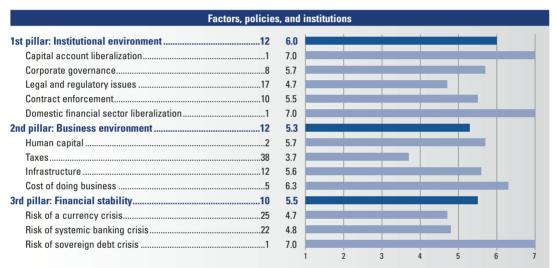
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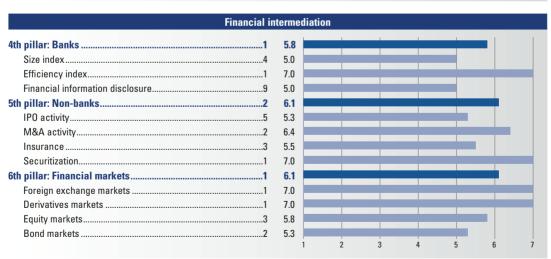
#### Financial assets by major type, 2006

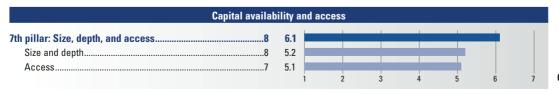


#### **Financial Development Index 2008**











**INPUTS** 

#### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	1st pillar: Institutional environment				
	Capital account liberalization				
.01	Capital account liberalization	11	<b>1</b> 2.6	Multiple (15)	2.6
	Corporate governance				
.02	Extent of incentive-based compensation	5I	<b></b> 5.5	France	5.7
.03	Efficacy of corporate boards			Sweden	6.1
.04	Reliance on professional management			Sweden	6.4
.05	Willingness to delegate	8l	<b></b> 5.3	Sweden	6.3
.06	Strength of auditing and accounting standards	19	<b>1</b> 5.8	Germany	6.3
.07	Shareholder rights index	1	<b></b> 5.0	Multiple (8)	5.0
.08	Ethical behavior of firms	21	<b></b> 5.1	Finland	6.6
.09	Protection of minority shareholders' interests	17	<b></b> 5.5	Sweden	6.4
	Legal and regulatory issues				
.10	Burden of government regulation	19	<b></b> 3.5	Singapore	5.3
.11	Centralization of economic policymaking	8l	<b>1</b> 4.6	Switzerland	5.9
.12	Regulation of security exchanges	24	<b></b> 5.5	Sweden	6.3
.13	Property rights			Germany	6.7
.14	Intellectual property protection			Germany	6.5
.15	Diversion of public funds	18	<b>1</b> 4.9	Finland	6.5
.16	Public trust of politicians	21	<b></b> 3.3	Singapore	6.4
	Contract enforcement				
.17	Effectiveness of law-making bodies	18	4 4	Singapore	6.1
.18	Judicial independence			Germany	
.19	Irregular payments in judicial decisions			Finland	
.20	Number of procedures to enforce a contract			Ireland	
.21	Time to enforce a contract			Singapore	
.22	Cost of enforcing contracts			China	
.23	Strength of investor protection			Singapore	
.24	Time to close a business			Ireland	
.25	Domestic financial sector liberalization  Domestic financial sector liberalization	11	<b>_</b> 1.0	Multiple (34)	1.0
.25		11	<b>_</b> 1.0	Multiple (34)	1.0
.25		11	1.0	Multiple (34)	1.0
.25	Domestic financial sector liberalization	11	1.0		
2.01	2nd pillar: Business environment Human capital Quality of management schools	61	■5.8	France	6.0
.01	2nd pillar: Business environment  Human capital  Quality of management schools  Quality of math and science education	6l	■5.8 ■4.5	France	6.0
.01 .02 .03	2nd pillar: Business environment  Human capital  Quality of management schools  Quality of math and science education.  Extent of staff training.	6 26 101	■5.8 ■4.5	France Singapore Switzerland	6.6 6.3
.01 .02 .03	2nd pillar: Business environment  Human capital  Quality of management schools  Quality of math and science education	6	■5.8 ■4.5 ■5.4 ■6.0	FranceSingaporeSwitzerlandSwitzerland	6.3 5.5
2.01 2.02 2.03 2.04 2.05	2nd pillar: Business environment  Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor	6	5.8 4.5 5.4 6.0 5.6	France	6.0 6.3 5.9 6.0
.01 .02 .03 .04	2nd pillar: Business environment  Human capital  Quality of management schools  Quality of math and science education	6	5.8 4.5 5.4 6.0 5.6	FranceSingaporeSwitzerlandSwitzerland	6.0 6.3 5.9 6.0
2.01 2.02 2.03 2.04 2.05	2nd pillar: Business environment  Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor	6	5.8 4.5 5.4 6.0 5.6	France	6.0 6.3 5.9 6.0
2.01 2.02 2.03 2.04 2.05 2.06	2nd pillar: Business environment  Human capital  Quality of management schools	6102	5.8 4.5 5.4 6.0 5.6	France	6.0 6.3 6.0 5.8 93.2
2.01 2.02 2.03 2.04 2.05 2.06	2nd pillar: Business environment  Human capital  Quality of management schools		5.8 4.5 5.4 6.0 5.6 81.8	France	
01 02 03 04 05 06	2nd pillar: Business environment  Human capital  Quality of management schools		5.8 4.5 5.4 6.0 5.6 81.8	France	
2.01 2.02 2.03 2.04 2.05 2.06	2nd pillar: Business environment  Human capital Quality of management schools		5.8 4.5 5.4 6.0 5.6 81.8	France	
2.01 2.03 2.04 2.05 2.06 2.07 2.08	2nd pillar: Business environment  Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor  Tertiary enrollment  Taxes  Irregular payments in tax collection  Distortive effect on competition of taxes and subsidie Corporate tax rate  Infrastructure	6	5.8 4.5 5.4 6.0 5.6 81.8 5.3 4.0	France	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	2nd pillar: Business environment  Human capital Quality of management schools Quality of math and science education Extent of staff training Local availability of research and training services Brain drain and ease of hiring foreign labor Tertiary enrollment  Taxes Irregular payments in tax collection Distortive effect on competition of taxes and subsidie Corporate tax rate Infrastructure Quality of overall infrastructure		5.8 4.5 5.4 6.0 5.6 81.8 5.3 4.0 35.0	France	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	2nd pillar: Business environment  Human capital Quality of management schools Quality of math and science education Extent of staff training Local availability of research and training services Brain drain and ease of hiring foreign labor Tertiary enrollment  Taxes Irregular payments in tax collection Distortive effect on competition of taxes and subsidie Corporate tax rate Infrastructure Quality of overall infrastructure. Quality of telephone/fax infrastructure.		5.8 4.5 5.4 6.0 5.6 81.8 5.3 4.0 35.0	France	6.6 6.3 5.9 6.0 93.2 6.8 5.7 0.0
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	2nd pillar: Business environment  Human capital Quality of management schools Quality of math and science education Extent of staff training Local availability of research and training services Brain drain and ease of hiring foreign labor Tertiary enrollment  Taxes Irregular payments in tax collection Distortive effect on competition of taxes and subsidie Corporate tax rate Infrastructure Quality of overall infrastructure Quality of telephone/fax infrastructure Internet users		5.8 4.5 5.4 6.0 5.6 81.8 5.3 4.0 35.0	France	6.0 6.3 5.9 6.0 93.2 6.8 5.7 6.8 6.8 85.7
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09 2.11 2.12 2.13	2nd pillar: Business environment  Human capital Quality of management schools Quality of math and science education Extent of staff training Local availability of research and training services Brain drain and ease of hiring foreign labor Tertiary enrollment  Taxes Irregular payments in tax collection Distortive effect on competition of taxes and subsidie Corporate tax rate Infrastructure Quality of overall infrastructure. Quality of telephone/fax infrastructure.		5.8 4.5 5.4 6.0 5.6 81.8 5.3 4.0 35.0 6.1 6.4 69.8	France	

(Cont'd.)

	INDICATOR	RANK/52	SCORE	BEST PERFORMER SCORE
	2nd pillar: Business environment (cont'd.)			
	Cost of doing business			
2.16	Cost of starting a business	3■	0.7	Ireland0.3
2.17	Cost of dealing with licenses			United Arab Emirates1.5
2.18	Cost of registering property			Saudi Arabia0.0
2.19	Cost to export			China390.0
2.20	Cost to import			Singapore367.0
2.21	Cost of enforcing contracts			China8.8
2.22	Cost of closing a business	14■	7.0	Multiple (4)1.0
	3rd pillar: Financial stability			
	Risk of a currency crisis			
3.01	Change in real effective exchange rate		4.6	Argentina8.5
3.02	External vulnerability indicator			Russian Federation15.4
3.03	Current account balance to GDP			Kuwait46.1
3.04	Dollarization vulnerability indicator	1	n/a	Multiple (2)0.0
.05A	External debt to GDP (developing economies)	n/a	n/a	Saudi Arabia9.6
.05B	Net int'l investment position to GDP (adv. economies			Switzerland121.3
	Risk of systemic banking crisis			
3.06	Activity restrictions for banks	8 -	11.0	Indonesia16.0
3.07	Entry restrictions for banks			Multiple (24)8.0
3.08	Capital restrictions for banks			Multiple (3)9.0
3.09	Official supervisory power			Multiple (3)14.0
3.10	Private monitoring of the banking industry			South Africa9.0
3.11	Frequency of banking crises			Multiple (11)0.0
3.12	Stability Index			India7.2
3.13	Cumulative real estate appreciation			Russian Federation68.4
	Risk of sovereign debt crisis			
3.14	Local currency sovereign rating	1	20.0	Multiple (15)20.0
3.15	Foreign currency sovereign rating			Multiple (15)20.0
0.10	Tologi culture, sovelegh runing		20.0	Widitiple (19/20.0
	4th pillar: Banks			
	Size index			
4.01	Size index	4■	8.4	Hong Kong SAR10.8
	Efficiency index			
4.02	Efficiency index	2■	6.7	United Arab Emirates6.8
4.03	Public ownership of banks	1■	0.0	Multiple (11)0.0
	Financial information disclosure			
4.04	Public credit registry coverage	21	0.0	Belgium57.2
4.05	Private credit bureau coverage			Multiple (7)100.0
4.06	Credit Information Index			Multiple (14)6.0
	5th pillar: Non-banks			
	IPO activity			
5.01	IPO market share	3	16.8	France31.0
5.02	IPO proceeds amount			Kazakhstan4.4
5.03	Share of world IPOs			Japan14.2
			*** ***	
F 0 4	M&A activity		44.4	Haite of Charter
5.04	M&A market share			United States
5.05	M&A transaction value to GDP			United Kingdom14.6
5.06	Share of total number of M&A deals		33.2	United States33.2

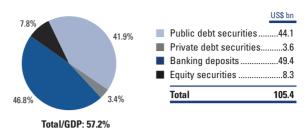
#### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCOR
	5th pillar: Non-banks (cont'd.)				
	Insurance				
.07	Insurance premiums, direct	1	,170,100.6	United States	1,170,100.
.08	Insurance density	5■	3,923.7	United Kingdom	6,466.
09	Real growth of direct insurance premiums	29■	2.1	India	52.
10	Insurance penetration	12	8.8	United Kingdom	16.
11	Relative value-added of insurance	9	2.4	Switzerland	4.
	Securitization				
12	Securitization to GDP	1	22.9	United States	22.
13	Share of total number of securitization deals	1■	64.9	United States	64.
	6th pillar: Financial markets				
	Foreign exchange markets				
01	Spot foreign exchange turnover	2	24.7	United Kingdom	26
02	Outright forward foreign exchange turnover			United Kingdom	
03	Foreign exchange swap turnover			United Kingdom	
	Derivatives markets				
04	Interest rate derivatives turnover:				
٠.	Forward rate agreements	2	27.2	United Kingdom	45.
05	Interest rate derivatives turnover: Swaps			United Kingdom	
06	Interest rate derivatives turnover: Options			United States	
07	Foreign exchange derivatives turnover: Currency swa			United Kingdom	47.
80	Foreign exchange derivatives turnover: Options			United Kingdom	
	Equity market development				
09	Equity market turnover	9	128.0	Pakistan	374.
05	Stock market capitalization to GDP	8■	135.4	Hong Kong SAR	713.
	Bond market development				
10	Private-sector bonds to GDP		114.0	United States	114.
11	Public-sector bonds to GDP		6.1	France	7.
12	International bonds to GDP	21■	27.8	Netherlands	121.
	7th pillar: Size, depth, and access				
	Size and depth				
01	M2 to GDP	13	72.4	Hong Kong SAR	252.
02	Private debt to GDP		157.7	Netherlands	216.
03	Public debt to GDP	31	4.4	Austria	7.
04	Bank deposits to GDP	22	69.1	Hong Kong SAR	250.
05	Stock market capitalization to GDP	8■	135.4	Hong Kong SAR	713.
06	Relative value-added of financial institutions to GDP	11	5.3	Panama	9.
07	Private credit to GDP			United States	
80	Stock market value traded to GDP	5■	173.2	Saudi Arabia	356.
	Access				
	Financial market sophistication	4	6.3	Switzerland	6.
09	Venture capital availability	1	5.3	United States	5.
		21	5.1	Slovak Republic	5.
10	Ease of access to credit				
10 11	Ease of access to credit  Ease of access to local equity market		5.7	Sweden	
09 10 11 12 13		11		Sweden	

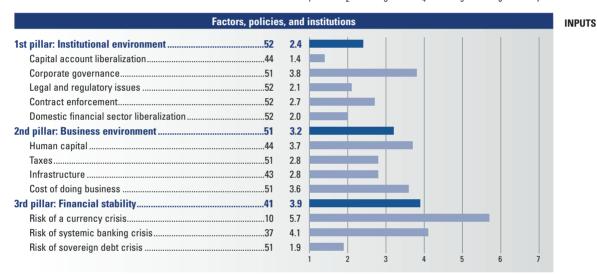
#### **Key indicators**

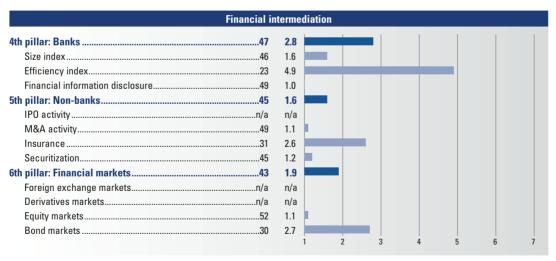
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#### Financial assets by major type, 2006



#### **Financial Development Index 2008**









#### **Financial Development Index in detail**

2.07

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2.14

■ Development Advantage ■ Development Disadvantage INDICATOR BEST PERFORMER 1st pillar: Institutional environment Capital account liberalization 1.01 Multiple (15) ......2.6 Corporate governance France......5.7 1.02 Sweden ......6.1 1.03 1 04 Sweden ......6.3 1.05 Germanv......6.3 1.06 Multiple (8) ......5.0 1.07 1.08 Sweden ......6.4 1.09 Legal and regulatory issues 1 10 Singapore 5.3 1 11 Switzerland......5.9 1.12 Sweden ......6.3 Property rights 52 2.3 Germany......6.7 1.13 Germany......6.5 1.15 Finland......6.5 Singapore ......6.4 1.16 **Contract enforcement** 1 17 Singapore ......6.1 1 18 Germany......6.5 Finland ......6.8 1 19 Ireland......20.0 1.20 Singapore ......120.0 1.21 1.22 China ......8.8 Singapore ......9.3 1.23 Ireland......0.4 1.24 Domestic financial sector liberalization 1.25 Multiple (34) ......1.0 2nd pillar: Business environment Human capital France................6.0 2.01 2.02 Switzerland.....5.9 2.03 2 04 Switzerland......6.0 2.05 Kuwait ......5.8 2.06 Finland......93.2

> Netherlands ......85.7 Netherlands......31.8 Switzerland......66.9

Sweden ......6.8

Singapore ......5.7

Multiple (4) ......0.0

Switzerland......6.7

Switzerland......6.9

Italy.....135.1

(Cont'd.)

Distortive effect on competition of taxes and subsidies .....52 ........................2.2

	INDICATOR F	RANK/52	SCORE	BEST PERFORMER	SCORE
	2nd pillar: Business environment (cont'd.)				
	Cost of doing business				
16	Cost of starting a business	43	28.2	Ireland	0.3
17	Cost of dealing with licenses			United Arab Emirates.	
18	Cost of registering property			Saudi Arabia	
19	Cost to export			China	
.20	Cost to import			Singapore	367.0
.21	Cost of enforcing contracts	48	43.7	China	
22	Cost of closing a business	49■	38.0	Multiple (4)	1.C
	3rd pillar: Financial stability				
	•				
Ω1	Risk of a currency crisis	17	0.0	Argontina	0.5
3.01 3.02	Change in real effective exchange rate  External vulnerability indicator			Argentina Russian Federation	
3.02	Current account balance to GDP			Kuwait	
3.03 3.04	Dollarization vulnerability indicator			Multiple (2)	
3.04 05A	External debt to GDP (developing economies)			Saudi Arabia	
05A 05B	Net int'l investment position to GDP (adv. economies)			Switzerland	
,,,,,		ı/a	ıı,a	SWILZELIGITU	121.3
	Risk of systemic banking crisis				
3.06	Activity restrictions for banks			Indonesia	
3.07	Entry restrictions for banks			Multiple (24)	
3.08	Capital restrictions for banks			Multiple (3)	
3.09	Official supervisory power			Multiple (3)	
3.10	Private monitoring of the banking industry			South Africa	
3.11	Frequency of banking crises			Multiple (11)	
3.12	Stability Index			India	
3.13	Cumulative real estate appreciation	n/a	n/a	Russian Federation	68.4
	Risk of sovereign debt crisis				
3.14	Local currency sovereign rating			Multiple (15)	
3.15	Foreign currency sovereign rating	4/■	8.0	Multiple (15)	20.0
	4th pillar: Banks				
	Size index				
4.01	Size index	46	4.4	Hong Kong SAR	10.8
	Efficiency index				
1.02	Efficiency index	25■	5.1	United Arab Emirates.	6.8
4.03	Public ownership of banks			Multiple (11)	
	Financial information disclosure				
1.04	Public credit registry coverage	21	0.0	Belgium	57.2
4.04 4.05	Private credit bureau coverage			Multiple (7)	
4.05 4.06	Credit Information Index			Multiple (14)	
+.00	Credit information index	40		ividitiple (14)	
	5th pillar: Non-banks				
	IPO activity				
5.01	IPO market share	n/a	n/a	France	31.0
5.02	IPO proceeds amount	n/a	n/a	Kazakhstan	4.4
5.03	Share of world IPOs			Japan	14.2
	M&A activity				
5.04	M&A activity M&A market share	/O =	0.0	United States	11.1
5.05	M&A transaction value to GDP			United States United Kingdom	
J.UO	INION HAIDACHOH VAIUE LO GDF		0.3	Officed Kingdofff	33.2

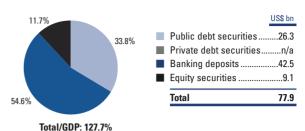
### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCOR	BEST PERFORMER S	SCOR
	5th pillar: Non-banks (cont'd.)				
	Insurance				
07	Insurance premiums, direct	34	4,886.	United States1,170,	100.6
80	Insurance density	31	<b>1</b> 79.	United Kingdom6,2	466.
09	Real growth of direct insurance premiums	2	■31.	India	52.6
10	Insurance penetration	35	2.	United Kingdom	16.
11	Relative value-added of insurance	42	0.	Switzerland	4.8
	Securitization				
12	Securitization to GDP	43	<b></b>	7 United States	22.9
13	Share of total number of securitization deals	44	0.0	United States	64.9
	6th pillar: Financial markets				
	Foreign exchange markets				
01	Spot foreign exchange turnover	n/a	n/	United Kingdom	26
02	Outright forward foreign exchange turnover			_	
03	Foreign exchange swap turnover			•	
		,		2940	
0.4	Derivatives markets				
04	Interest rate derivatives turnover: Forward rate agreements	n/a	n/	United Kingdom	15.0
05	Interest rate derivatives turnover: Swaps			•	
05 06	Interest rate derivatives turnover: Options			o o	
07	Foreign exchange derivatives turnover: Currency swa				
08	Foreign exchange derivatives turnover: Options				
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	omiod imigaom imi	
09	Equity market development  Equity market turnover	47		Pakistan	274
09 05	Stock market capitalization to GDP				
05	•	43		Hong Kong SAN	/ 13.
	Bond market development		_		
10	Private-sector bonds to GDP				
11	Public-sector bonds to GDP				
12	international bonds to GDP	24		Netherlands	121.
	7th pillar: Size, depth, and access				
	Size and depth				
01	M2 to GDP	41	19.	Hong Kong SAR	252.
02	Private debt to GDP	45	2.	Netherlands	216.
03	Public debt to GDP	41	3.		
04	Bank deposits to GDP				
05	Stock market capitalization to GDP				
06	Relative value-added of financial institutions to GDP.				
07	Private credit to GDP				
80	Stock market value traded to GDP	50	0	Saudi Arabia	356.
	Access				
09	Financial market sophistication	45	3.	Switzerland	6.
10	Venture capital availability	51	2.	United States	5.3
	Ease of access to credit	32	4.	Slovak Republic	5.9
11	Ease of access to local equity market				
12		12	4.4	Spain	95.9
	Bank branches  Ease of access to loans			Norway	

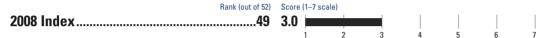
#### **Key indicators**

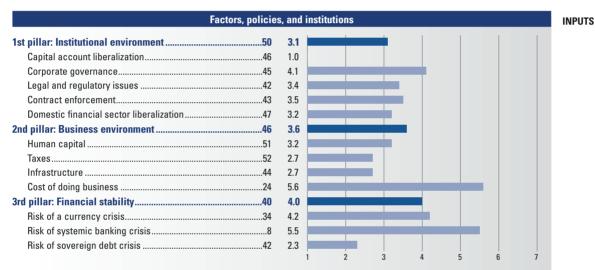
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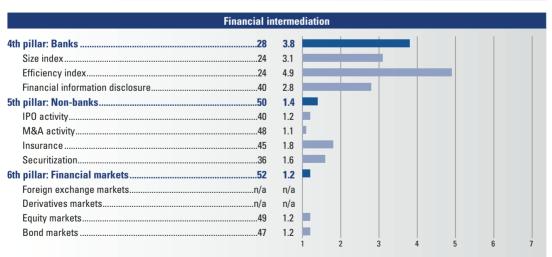
#### Financial assets by major type, 2006



#### **Financial Development Index 2008**











#### **Financial Development Index in detail**

■ Development Advantage ■ Development Disadvantage

	INDICATOR	RANK/52	SCORE	BEST PERFORMER	SCORE
	1st pillar: Institutional environment				
	Capital account liberalization				
.01	Capital account liberalization	46	 1.1	Multiple (15)	2.6
	Corporate governance				
.02	Extent of incentive-based compensation	42	 4.3	France	5.7
.03	Efficacy of corporate boards	44	 4.5	Sweden	6.1
.04	Reliance on professional management	47	 4.2	Sweden	6.4
.05	Willingness to delegate	45	 3.6	Sweden	6.3
.06	Strength of auditing and accounting standards	50	 3.9	Germany	6.3
.07	Shareholder rights index	n/a	 n/a	Multiple (8)	5.C
.08	Ethical behavior of firms	39	 4.0	Finland	6.6
.09	Protection of minority shareholders' interests	36	 4.5	Sweden	6.4
	Legal and regulatory issues				
.10	Burden of government regulation			Singapore	5.3
.11	Centralization of economic policymaking	26	 3.4	Switzerland	5.9
.12	Regulation of security exchanges	45	 4.3	Sweden	6.3
.13	Property rights	42	 4.2	Germany	6.7
.14	Intellectual property protection	48	 2.8	Germany	6.5
.15	Diversion of public funds	42	 3.2	Finland	6.5
.16	Public trust of politicians	29	 2.9	Singapore	6.4
	Contract enforcement				
.17	Effectiveness of law-making bodies	29	 3.8	Singapore	6.1
.18	Judicial independence	37	 3.6	Germany	6.5
.19	Irregular payments in judicial decisions	46	 3.5	Finland	6.8
.20	Number of procedures to enforce a contract	25	 34.0	Ireland	20.0
.21	Time to enforce a contract	8	 295.0	Singapore	120.0
.22	Cost of enforcing contracts	39	 31.0	China	8.
.23	Strength of investor protection	50	 2.7	Singapore	9.3
.24	Time to close a business	46	 5.0	Ireland	0.4
	Domestic financial sector liberalization				
.25	Domestic financial sector liberalization	47	 2.0	Multiple (34)	1.0
	2nd nillar: Rusiness environment				
	2nd pillar: Business environment				
01	Human capital	52	3.0	France	6.0
	Human capital  Quality of management schools				
.02	Human capital  Quality of management schools  Quality of math and science education	38	 3.8	FranceSingaporeSwitzerland	6.3
.02	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training	38	 3.8 3.5	Singapore Switzerland	
.02 .03 .04	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services	38 46 44	 3.8 3.5 3.8	Singapore Switzerland Switzerland	6.3 5.9
.02 .03 .04 .05	Human capital  Quality of management schools  Quality of math and science education  Extent of staff training  Local availability of research and training services  Brain drain and ease of hiring foreign labor	38 46 44 42	 3.8 3.5 3.8 4.0	Singapore Switzerland	6.3 5.9 6.0
.02 .03 .04 .05	Human capital  Quality of management schools	38 46 44 42	 3.8 3.5 3.8 4.0	Singapore Switzerland Switzerland Kuwait	6.3 5.9 6.0
.02 .03 .04 .05	Human capital  Quality of management schools	38 46 44 42 51	 3.8 3.5 3.8 4.0 9.5	Singapore	6.3 5.9 5.8 93.2
.02 .03 .04 .05 .06	Human capital  Quality of management schools	3846444251	3.8 3.5 3.8 4.0 9.5	Singapore	
.02 .03 .04 .05 .06	Human capital  Quality of management schools	3846444251	3.8 3.5 3.8 4.0 9.5	Singapore	
.02 .03 .04 .05 .06	Human capital  Quality of management schools	3846444251	3.8 3.5 3.8 4.0 9.5	Singapore	
.02 .03 .04 .05 .06	Human capital  Quality of management schools	38 46 42 51 51 s38 52	3.8 3.5 4.0 9.5 4.0 4.0	Singapore	
2.01 2.02 2.03 2.04 2.05 2.06 2.07 2.08 2.09	Human capital  Quality of management schools	384642515151524646	3.8 3.5 4.0 9.5 4.0 4.0 40.0	Singapore	
02 03 04 05 06 07 08 09	Human capital  Quality of management schools	3846444251515152	3.8 3.5 4.0 9.5 4.0 4.0 40.0	Singapore	
02 03 04 05 06 07 08 09	Human capital  Quality of management schools	3846444251515152	3.8 3.5 4.0 9.5 4.0 4.0 40.0 40.0	Singapore	
.02 .03 .04 .05 .06 .07 .08 .09	Human capital  Quality of management schools	3846444251515152	3.8 3.5 3.8 4.0 9.5 4.0 40.0 40.0 40.0	Singapore	

(Cont'd.)

	ial Development Index in detail (cont'd.)		Development	Advantage Development Disadvant
	INDICATOR F	RANK/52	SCORE	BEST PERFORMER SCORE
	2nd pillar: Business environment (cont'd.)			
	Cost of doing business			
2.16	Cost of starting a business	39■.	20.0	Ireland0.3
2.17	Cost of dealing with licenses	42	373.6	United Arab Emirates1.5
2.18	Cost of registering property	11■.	1.2	Saudi Arabia0.0
2.19	Cost to export	16■.	669.0	China390.0
2.20	Cost to import			Singapore367.0
2.21	Cost of enforcing contracts			China8.8
2.22	Cost of closing a business	26■.	15.0	Multiple (4)1.0
	3rd pillar: Financial stability			
	Risk of a currency crisis			
3.01	Change in real effective exchange rate	14■.	0.8	Argentina8.5
3.02	External vulnerability indicator	25■.	30.4	Russian Federation15.4
3.03	Current account balance to GDP			Kuwait46.1
.04	Dollarization vulnerability indicator	34■.	70.0	Multiple (2)0.0
05A	External debt to GDP (developing economies)			Saudi Arabia9.6
05B	Net int'l investment position to GDP (adv. economies) .	n/a	n/a	Switzerland121.3
	Risk of systemic banking crisis			
3.06	Activity restrictions for banks			Indonesia16.0
3.07	Entry restrictions for banks			Multiple (24)8.0
3.08	Capital restrictions for banks			Multiple (3)9.0
3.09	Official supervisory power			Multiple (3)14.0
3.10	Private monitoring of the banking industry			South Africa9.0
3.11 3.12	Frequency of banking crises			Multiple (11)
3.12 3.13	Cumulative real estate appreciation			Russian Federation68.4
J. 10	•••	II/a		nussian rederation00.4
	Risk of sovereign debt crisis	45 =	0.5	14 til 1 (45)
3.14 3.15	Local currency sovereign rating  Foreign currency sovereign rating			Multiple (15)20.0 Multiple (15)20.0
	4th pillar: Banks			
	Size index			
4.01	Size index	24	6.2	Hong Kong SAR10.8
	Efficiency index			
1.02	Efficiency index	21■.	5.2	United Arab Emirates6.8
4.03	Public ownership of banks	n/a	n/a	Multiple (11)0.0
	Financial information disclosure			
4.04	Public credit registry coverage	13■.	9.2	Belgium57.2
4.05	Private credit bureau coverage			Multiple (7)100.0
4.06	Credit Information Index			Multiple (14)6.0
	5th pillar: Non-banks			
	IPO activity			
5.01	IPO market share	43■.	0.0	France31.0
5.02	IPO proceeds amount	39■.	0.2	Kazakhstan4.4
	Share of world IPOs	39■.	0.1	Japan14.2
5.03	880 A (1.14			
5.03	M&A activity			
	M&A market share	49■.	0.0	United States44.4
5.03 5.04 5.05	•			United States44.4 United Kingdom14.6

### Financial Development Index in detail (cont'd.) ■ Development Advantage ■ Development Disadvantage

	INDICATOR		SCORE	BEST PERFORMER SCOR
	5th pillar: Non-banks (cont'd.)			
	Insurance			
)7	Insurance premiums, direct	46	937.3	United States1,170,100.
8(	Insurance density	48	11.0	United Kingdom6,466.
9	Real growth of direct insurance premiums	28■.	2.4	India52.
0	Insurance penetration	42	1.5	United Kingdom16.
1	Relative value-added of insurance	39■.	0.5	Switzerland4.
	Securitization			
2	Securitization to GDP	32	1.6	United States22.
3	Share of total number of securitization deals	35■.	0.1	United States64.
	6th pillar: Financial markets			
	Foreign exchange markets			
)1	Spot foreign exchange turnover	n/a	n/a	United Kingdom26.
)2	Outright forward foreign exchange turnover			United Kingdom29.
)3	Foreign exchange swap turnover			United Kingdom42.
J		ıya	II/a	Office Kinguoff42.
	Derivatives markets			
4	Interest rate derivatives turnover:			
	Forward rate agreements			United Kingdom45.
5	Interest rate derivatives turnover: Swaps			United Kingdom46.
6	Interest rate derivatives turnover: Options			United States42.
7	Foreign exchange derivatives turnover: Currency swap			United Kingdom47.
8	Foreign exchange derivatives turnover: Options	n/a	n/a	United Kingdom42.
	Equity market development			
9	Equity market turnover			Pakistan374.
5	Stock market capitalization to GDP	48	7.2	Hong Kong SAR713.
	Bond market development			
0	Private-sector bonds to GDP	n/a	n/a	United States114.
1	Public-sector bonds to GDP	n/a	n/a	France7.
2	International bonds to GDP	44	2.7	Netherlands121.
	7th pillar: Size, depth, and access			
11	7th pillar: Size, depth, and access Size and depth M2 to GDP	16■.	68.7	Hong Kong SAR252.
	Size and depth			Hong Kong SAR252. Netherlands216.
2	Size and depth M2 to GDP	n/a	n/a	0 0
12	Size and depth M2 to GDP	n/a 22■.	n/a 5.0	Netherlands216.
12 13 14	Size and depth M2 to GDP	n/a 22■. 24■.	n/a 5.0 61.9	Netherlands216. Austria7.
12 13 14 15	Size and depth  M2 to GDP  Private debt to GDP  Public debt to GDP  Bank deposits to GDP	n/a 22■. 24■. 48■.	n/a 5.0 61.9 7.2	Netherlands         216.           Austria         7.           Hong Kong SAR         250.
2 3 4 5 6	Size and depth  M2 to GDP	n/a	n/a 5.0 61.9 7.2	Netherlands       216.         Austria       7.         Hong Kong SAR       250.         Hong Kong SAR       713.
2 3 4 5 6 7	Size and depth  M2 to GDP  Private debt to GDP  Public debt to GDP  Bank deposits to GDP  Stock market capitalization to GDP  Relative value-added of financial institutions to GDP	n/a		Netherlands       216.         Austria       7.         Hong Kong SAR       250.         Hong Kong SAR       713.         Panama       9.
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12 13 14 15 16 17 18	Size and depth  M2 to GDP	n/a		Netherlands       .216.         Austria       .7         Hong Kong SAR       .250.         Hong Kong SAR       .713.         Panama       .9         United States       .193.         Saudi Arabia       .356.         Switzerland       .6.
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01 02 03 04 05 06 07 08 09 0 1 2 3	Size and depth  M2 to GDP			Netherlands       .216.         Austria       .7         Hong Kong SAR       .250.         Hong Kong SAR       .713.         Panama       .9         United States       .193.         Saudi Arabia       .356.         Switzerland       .6.         United States       .5.
12 13 14 15 16 17 18 19 0 1	Size and depth  M2 to GDP			Netherlands       216.         Austria       7.         Hong Kong SAR       250.         Hong Kong SAR       713.         Panama       9.         United States       193.         Saudi Arabia       356.         Switzerland       6.         United States       5.         Slovak Republic       5.         Sweden       6.



# Part 3 Data Tables



#### **How to Read the Data Tables**

The following pages provide detailed data for all 52 economies included in *The Financial Development Report* 2008. The data tables are organized into seven sections:

- I. Institutional environment
- II. Business environment
- III. Financial stability
- IV. Banks
- V. Non-banks
- VI. Financial markets
- VII. Size, depth, and access

The seven sections correspond to the seven pillars of the Financial Development Index.



Two types of data are presented in the tables:

- Survey data: These data are the results drawn from the World Economic Forum's Executive Opinion Survey.
- **Hard data:** These data are indicators obtained from a variety of sources.

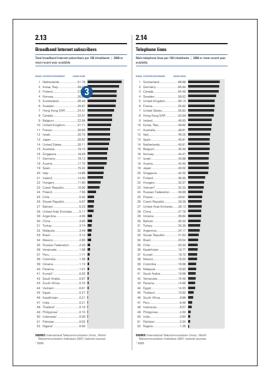
#### Survey data

① Data yielded from the World Economic Forum's Executive Opinion Survey are presented in blue-colored bar graphs. Survey questions asked for responses on a scale of 1 to 7, where an answer of 1 corresponds to the lowest possible score and an answer of 7 corresponds to the highest possible score. For each Survey question, individual responses are aggregated at the country level in order to produce country scores. For more information on the Executive Opinion Survey and a detailed explanation of how country scores are computed, please refer to Chapter 1.1.

For each Survey variable, the corresponding Survey question and the two extreme answers are shown. Scores are reported with a precision of two decimal points, although exact figures are used to determine rankings. For example, in the case of the variable 1.10 on the burden of government regulation, Finland's score is 4.62354 and Malaysia's score is 4.61590. These countries rank 3 and 4 respectively, although they are listed with the same rounded score of 4.62.

**2** A dotted line on the graph indicates the mean score across the 52 economies.

Standard deviations, which give an indication of how closely or widely the individual responses are spread around the mean country score, can be provided upon request to the Global Competitiveness Network at the World Economic Forum.



#### Hard data

**3** While Survey data provide qualitative information, hard data provide an objective measure of a quantity (for example, gross domestic product, IPO market share, insurance direct premiums, and so on). We use the latest data available from international organizations (such as the International Monetary Fund, the World Bank, various United Nations agencies, the Bank of International Settlements, and the International Telecommunication Union), the research of respected academics in the field, and firms of international stature who engage in professional research on the topics related to the Index. In the following pages, hard data variables are presented in black-shaded bar graphs. For each indicator, a short description appears at the top of the page. The base year (i.e., the year when the majority of the data were collected) follows the description. When the year differs from the base year for a particular country, this is indicated in a footnote. A more detailed description and the full source for each variable can be found in the Technical Notes and Sources section at the end of this Report. When data are not available or are too outdated, "n/a" is used in lieu of the rank and the value.

In the case of hard data, true ties between two or more countries are possible. In such cases, shared rankings are indicated accordingly. For example, the time it takes to close a business is 4.20 years in both Egypt and Kuwait. They share the rank of 44 for that variable in Table 1.24.

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### Section I Institutional environment

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### 1.01

#### **Capital account liberalization**

This index measures the degree of capital account liberalization within a country, standardized on a 1-to-7 scale  $\mid$  2005

RANK	COUNTRY/ECONOMY	HARD DATA	
1	Austria		
1	Belgium	7.00	
1	Canada	7.00	
1	Finland	7.00	
1	France	7.00	
1	Germany	7.00	
1	Hong Kong SAR	7.00	
1	Ireland	7.00	
1	Israel	7.00	
1	Japan	7.00	
1	Netherlands	7.00	
1	Norway	7.00	
1	Singapore	7.00	
1	Spain	7.00	
1	Sweden	7.00	
1	Switzerland	7.00	
1	United Arab Emirates	s7.00	
1	United Kingdom	7.00	
1	United States	7.00	
20	Bahrain	6.83	
21	Panama	6.29	
22	Italy	6.11	
23	Hungary	6.02	
24	Australia	5.98	
25	Chile	5.95	
26	Egypt	5.89	
27	Czech Republic	5.61	
28	Peru	5.18	
29	Saudi Arabia	4.63	
30	Indonesia	4.38	
31	Kuwait	4.28	
32	Mexico	4.00	
33	Korea, Rep	3.24	
34	Malaysia	3.18	
35	Slovak Republic	3.18	
36	Poland	2.61	
37	Thailand	2.55	
38	Philippines	2.29	
39	Brazil	2.28	
40	Colombia	2.22	
41	Russian Federation	1.84	
42	Argentina	1.70	
43	Nigeria	1.67	
44	Venezuela	1.38	
45	South Africa		
46	China	1.00	
46	India	1.00	
46	Kazakhstan	1.00	
46	Pakistan		
46	Turkey		
46	Ukraine		
46	Vietnam		

**SOURCE**: Menzie Chinn and Hiro Ito. 2007. "A New Measure of Financial Openness." *Journal of Comparative Policy Analysis* (forthcoming). Data set available at http://www.ssc.wisc.edu/~mchinn/research.html. Interaction results from World Economic Forum analysis.

#### 1.02

#### **Extent of incentive-based compensation**

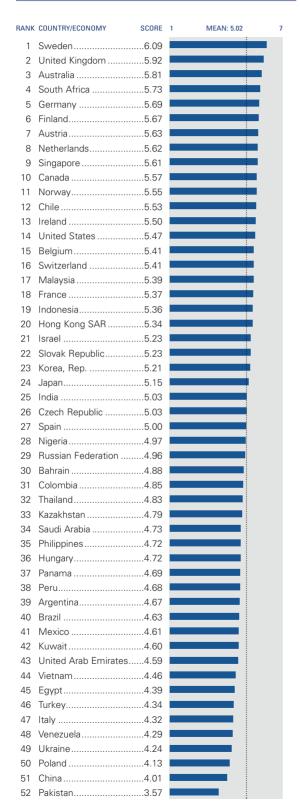
Cash compensation of management (1 = is based exclusively on salary, 7 = is made up in large part of performance-based benefits [bonus, stock options, etc.])

RANK	COUNTRY/ECONOMY	SCORE	1 MEAN: 4.70 7
1	France	5.72	
2	South Africa	5.67	
3	Switzerland	5.61	
4	Germany	5.60	
5	United States	5.51	
6	Korea, Rep	5.41	
7	Canada		
8	United Kingdom		
9	Netherlands		
10	Indonesia		
11	Hong Kong SAR		
12	Singapore		
13	Sweden		
14	Malaysia		
15	Israel		
16	Finland		
17	Austria		
18	Australia		
19			
	Chile		
20	,		
21	Belgium		
22	Ireland		
23	Spain		
24	Panama		
25	Mexico		
26	Argentina		
27	Norway		
28	Kuwait		
29	China		
30	Russian Federation		
31	Hungary		
32	India		
33	Venezuela		
34	Slovak Republic		
35	Thailand		
36	Brazil		
37	Bahrain		
38	United Arab Emirates.		
39	Philippines	4.33	
40	Saudi Arabia	4.33	
41	Japan	4.32	
42	Vietnam	4.30	
43	Czech Republic	4.27	
44	Poland	4.15	
45	Kazakhstan	3.96	
46	Peru	3.94	
47	Ukraine	3.92	
48	Colombia	3.86	
49	Egypt	3.79	
50	Turkey	3.62	
51	Nigeria	3.58	
52	Pakistan	3.55	
			•

SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

#### **Efficacy of corporate boards**

Corporate governance by investors and boards of directors in your country is characterized by (1 = management has little accountability, 7 = investors and boards exert strong supervision of management decisions)



SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

#### **Reliance on professional management**

1.04

Senior management positions in your country are (1 = usually held by relatives, 7 = held by professional managers chosen for their superior qualification)

RANK	COUNTRY/ECONOMY	SCORE	1	MEAN: 5.14	7
1	Sweden	6.42			
2	Germany	6.19			
3	Norway	6.17			
4	Australia				
5	Ireland	6.07			
6	Netherlands				
7	Finland				
8	Canada				
9	United Kingdom				
10	Singapore				
11	Switzerland				
12	Austria				
13	South Africa				
14	Japan				
15	United States				
16	France				
17	Malaysia				
18	Belgium				
19	Israel				
20	Chile				
21	India				
22	Indonesia				
23					
23	Hong Kong SAR  Czech Republic				
	'				
25	Korea, Rep				
26	Spain				
27	Slovak Republic				
28	Philippines				
29	Brazil				
30	Thailand				
31	Argentina				
32	Bahrain				
33	United Arab Emirates				
34	Nigeria				
35	Colombia				
36	Hungary				
37	Mexico				
38	China				
39	Venezuela				
40	Turkey				
41	Russian Federation				
42	Panama				
43	Peru				
44	Poland				
45	Saudi Arabia				
46	Kazakhstan				
47	Vietnam				
48	Egypt				
49	Kuwait				
50	Pakistan				
51	Ukraine				
52	Italy	3.61			

SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

### 1.05

#### Willingness to delegate

Willingness to delegate authority to subordinates is (1 = low—top management controls all important decisions, 7 = high—authority is mostly delegated to business unit heads and other lower-level managers)

RANK	COUNTRY/ECONOMY	SCORE	1	MEAN: 4.48	7
1	Sweden	6.34			
2	Norway				
3	Netherlands				
4	Switzerland				
5	Austria				
6	Finland				
7	Germany				
8	United States				
9	Canada				
10	Belgium				
11	Australia				
12	Japan				
13	Hong Kong SAR				
14	United Kingdom				
15	Malaysia				
16	Ireland				
17	Korea, Rep				
18	Israel				
19	Indonesia				
20	Singapore				
21	France				
22	South Africa				
23	India				
24	Thailand				
25	Philippines				
26	Slovak Republic				
27	Chile				
28	United Arab Emirates				
29	Brazil				
30	Czech Republic				
31	Spain				
32	Mexico				
33	Saudi Arabia				
34	Panama				
35	Argentina				
36	Kuwait				
37	Poland				
38	Peru				
39	Bahrain				
40	Colombia				
41	Turkey				
42	China				
43	Nigeria				
44	Pakistan				
45	Vietnam				
46	Russian Federation				
47	Egypt				
48	Hungary				
49	Italy				
50	Venezuela				
51	Kazakhstan				
52	Ukraine				
52	a			_	

**SOURCE:** World Economic Forum, Executive Opinion Survey 2006, 2007

#### 1.06

#### Strength of auditing and accounting standards

Financial auditing and reporting standards regarding company financial performance in your country are (1 = extremely weak, 7 = extremely strong—the best in the world)

RANK	COUNTRY/ECONOMY	SCORE	1	MEAN: 5.24	
1	Germany	6.34			
2	Sweden	6.32			
3	United Kingdom	6.29			
4	Australia	6.24			
5	Austria	6.23			
6	South Africa	6.22			
7	Finland	6.22			
8	Ireland	6.21			
9	Hong Kong SAR				
10	Switzerland				
11	France	6.11			
12	Singapore				
13	Canada				
14	Norway				
15	Netherlands				
16	Belgium				
17	Bahrain				
18	Israel				
	United States				
19					
20	Malaysia				
21	India				
22	Chile				
23	Korea, Rep				
24	Kuwait				
25	Spain				
26	Japan				
27	United Arab Emirates				
28	Panama				
29	Hungary				
30	Thailand				
31	Slovak Republic				
32	Philippines	4.96			
33	Czech Republic	4.93			
34	Pakistan	4.92			
35	Turkey	4.82			
36	Brazil	4.79			
37	Peru	4.77			
38	Saudi Arabia	4.72			
39	Mexico	4.63			
40	Egypt	4.62			
41	Indonesia	4.52			
42	Colombia	4.50			
43	Italy	4.46			
44	Poland	4.38			
45	Kazakhstan	4.18			
46	Nigeria	4.14			
47	Venezuela				
48	Argentina				
49	Russian Federation				
50	Vietnam				
51	China				
<b>-</b> 1					

SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

#### Shareholder rights index

This variable is an aggregation of numerous measures of shareholder rights  $\mid$  2005

ВУИЬ	COUNTRY/ECONOMY HARD DATA	
1	Canada5.00	
1	Canada5.00	
1	Hong Kong SAR5.00	
1	India5.00	
1	Pakistan5.00	
1	South Africa5.00	
1	United Kingdom5.00	
1	United States5.00	
9		
9	Argentina	
9	Ireland4.00	
9	Japan4.00	
9	Malaysia4.00	
9	Norway4.00	
9	Singapore4.00	
9	Spain4.00	
17	Brazil3.00	
17	Colombia3.00	
17	Finland	
17	France3.00	
17	Israel3.00	
17	Nigeria3.00	
17	Philippines3.00	
17	Sweden3.00	
25	Austria2.00	
25	Egypt2.00	
25	Indonesia2.00	
25	Korea, Rep2.00	
25	Netherlands2.00	
25	Switzerland2.00	
25	Thailand2.00	
25	Turkey2.00	
33	Germany1.00	
33	Italy1.00	
33	Mexico1.00	
33	Venezuela1.00	
37	Belgium0.00	I
n/a	Bahrainn/a	
n/a	Chinan/a	
n/a	Czech Republicn/a	
n/a	Hungaryn/a	
n/a	Kazakhstann/a	
n/a	Kuwaitn/a	
n/a	Panaman/a	
n/a	Perun/a	
n/a	Polandn/a	
n/a	Russian Federationn/a	
n/a	Saudi Arabian/a	
n/a	Slovak Republicn/a	
n/a	Ukrainen/a	
n/a	United Arab Emiratesn/a	
n/a	Vietnamn/a	
11/4	victiaiiiII/d	

**SOURCE**: Sergio Schmukler (personal communication)

#### **Ethical behavior of firms**

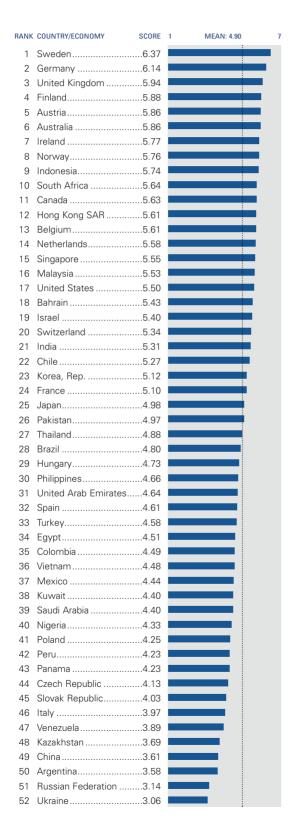
1.08

The corporate ethics (ethical behavior in interactions with public officials, politicians, and other enterprises) of firms in your country are (1 = among the world's worst, 7 = among the best in the world)

	COUNTRY/ECONOMY	SCORE 1	MEAN: 4.78	7
1	Finland	6.63		
2	Sweden	6.45		
3	Singapore	6.30		
4	Norway	6.18		
5	Switzerland	6.17		
6	Netherlands	6.15		
7	Germany	6.15		
8	Austria	6.09		
9	Australia	6.08		
10	Canada	5.86		
11	United Kingdom	5.83		
12	Hong Kong SAR	5.82		
13	Ireland			
14	Chile			
15	France			
16	Japan			
17	Belgium			
18	United Arab Emirate			
19	Malaysia			
20	•			
21	Korea, Rep United States			
				•
22	Israel			
23	Spain			
24	Kuwait			
25	Bahrain			
26	South Africa			
27	Turkey			
28	Saudi Arabia			
29	Colombia			
30	Panama			
31	Mexico			
32	Pakistan	4.35		
33	Egypt	4.34		
34	India	4.19		
35	Poland	4.17		
36	Thailand	4.14		
37	Italy	4.08		
38	Slovak Republic	4.06		
39	Vietnam	4.03		
40	Peru	3.99		
41	Czech Republic	3.95		
42	Hungary	3.91		
43	Nigeria	3.79		
44	Indonesia	3.77		
45	Brazil	3.77		
46	China	3.71		
47	Kazakhstan	3.70		
48	Philippines			
49	Argentina			
50	Venezuela			
51	Russian Federation			

#### Protection of minority shareholders' interests

Interests of minority shareholders in your country are (1 = not protected by law, 7 = protected by law and actively enforced)



SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

#### 1.10

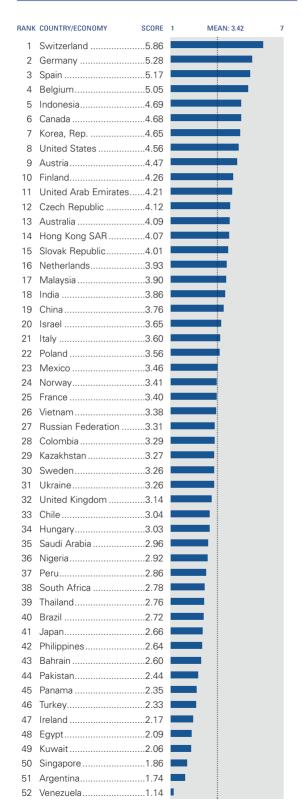
#### **Burden of government regulation**

Complying with administrative requirements for businesses (permits, regulations, reporting) issued by the government in your country is (1 = burdensome, 7 = not burdensome)

RANK	COUNTRY/ECONOMY	SCORE	1 M	EAN: 3.25	7
1	Singapore	5.30			
2	Hong Kong SAR				
3	Finland				
4	Malaysia				
5	United Arab Emirates.				
6	Korea, Rep				
7	Switzerland				
8	Japan				
9	Bahrain				
10	Saudi Arabia				
11	Indonesia				
12	Chile				
13	Thailand				
14	Austria				
15					
16	Norway				
17	Israel				
17	China				
	United States				
19 20	Canada				
21					
22	Nigeria Panama				
23	Sweden				
23	Netherlands				
25					
26	Egypt				
27	United Kingdom Kazakhstan				
28	Spain				
29	Germany				
30	Australia				
31	Pakistan				
32	India				
33					
34	TurkeySlovak Republic				
35	Kuwait				
36	Belgium				
37	Poland				
38	South Africa				
39	Ukraine				
40	Vietnam				
41	Hungary				
42	Colombia				
43	Mexico				
44	France				
45	Argentina				
46	Philippines				
47	Russian Federation				
48	Czech Republic				
49	Peru				
50	Italy				
51	Brazil				
52	Venezuela				
52	. 5.1024014		_		

#### Centralization of economic policymaking

Economic policymaking in your country is (1 = centralizednational government controls almost all important decisions, 7 = decentralized—states and cities have important decision rights affecting economic development)



SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

#### **Regulation of security exchanges**

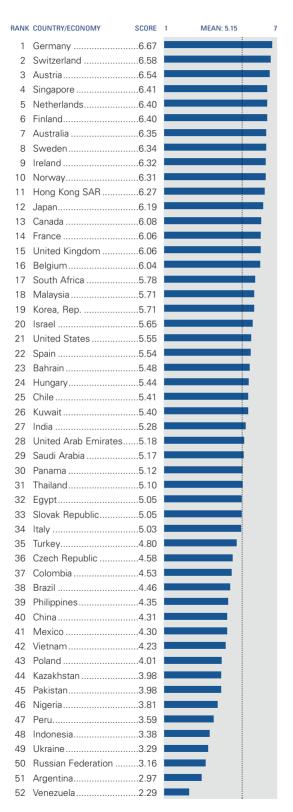
1.12

Regulation of securities exchanges in your country is (1 = not transparent, ineffective, and subject to undue influence from industry and government, 7 = transparent, effective, and independent from undue influence from industry and government)

RANK	COUNTRY/ECONOMY	SCORE	1 MEAN: 5.16	
1	Sweden	6.26		
2	Australia	6.22		
3	Hong Kong SAR	6.19		
4	South Africa	6.02		
5	Singapore	5.99		
6	Chile	5.98		
7	Germany	5.95		
8	Ireland	5.95		
9	France	5.94		
10	Korea, Rep	5.92		
11	Switzerland			
12	Belgium			
13	Finland			
14	Norway			
15	Austria			
16	United Kingdom			
17	Panama			
18	Bahrain			
19	Netherlands			
20	Canada			
21	Indonesia			
22	Israel			
23	India			
24	United States			
25	Malaysia			
26	Peru			
27	Thailand	5.26		
28	Japan	5.24		
29	Turkey	5.23		
30	Brazil	5.14		
31	Mexico	5.10		
32	Nigeria	5.05		
33	Hungary	5.00		•
34	Poland	4.95		I I
35	Colombia	4.94		ı
36	Spain	4.93		ı
37	Czech Republic	4.90		l
38	Philippines	4.81		
39	United Arab Emirate	es4.80		
40	Venezuela	4.49		
41	Slovak Republic	4.48		
42	Italy			
43	Kuwait			
44	Argentina			
45	Vietnam			
46	Pakistan			
47	Egypt			
48	Saudi Arabia Russian Federation			
49				
50	China			
51	Kazakhstan			
52	Ukraine	3.18		

#### **Property rights**

Property rights, including over financial assets (1 = are poorly defined and not protected by law, 7 = are clearly defined and well protected by law)



SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

#### 1.14

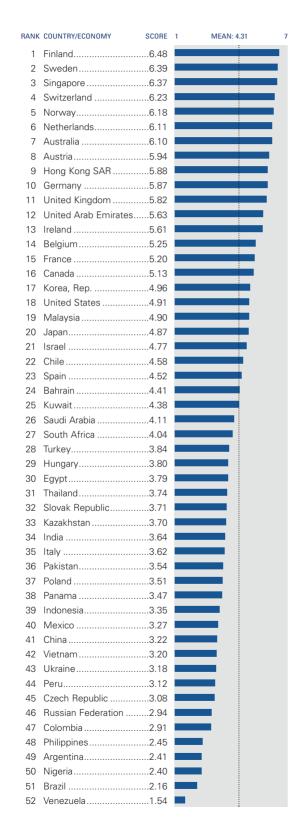
#### Intellectual property protection

Intellectual property protection in your country (1 = is weak and not enforced, 7 = is strong and enforced)

RANK	COUNTRY/ECONOMY	SCORE	1 MEAN: 4.45 7
1	Germany	6.48	
2	Finland		
3	Switzerland	6.31	
4	Singapore		
5	Netherlands		
6	Sweden		
7	United Kingdom		
8	France		
9	Australia		
10	Austria		
11	Belgium		
12	Canada		
13	Norway		
14	Japan		
15	Ireland		
16	Hong Kong SAR		
17	United States		
18	Korea, Rep		
19	South Africa		
20	Malaysia		
21	Israel		
22	Spain		
23	United Arab Emirates		
	Bahrain		
24 25			
	Hungary		
26	Italy		
27	Thailand		
28	Panama		
29	India		
30	Chile		
31	Czech Republic		
32	Saudi Arabia		
33	Slovak Republic		
34	Kuwait		
35	Pakistan		
36	Colombia		
37	Egypt		
38	Mexico		
39	Poland		
40	Turkey		
41	China		
42	Brazil		
43	Kazakhstan		
44	Indonesia		
45	Philippines		
46	Nigeria		
47	Argentina		
48	Vietnam		
49	Ukraine		
50	Peru		
51	Russian Federation		
52	Venezuela	2.06	

#### **Diversion of public funds**

In your country, diversion of public funds to companies, individuals or groups due to corruption (1 = is common, 7 = never occurs)



SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

#### 1.16

#### **Public trust of politicians**

Public trust in the financial honesty of politicians is (1 = very low, 7 = very high)

	COUNTRY/ECONOMY	SCORE		
1	Singapore	6.35		
2	Finland	5.71		
3	Switzerland	5.51		ı
4	Norway	5.45		
5	United Arab Emirates	5.41		
6	Netherlands	5.37		
7	Hong Kong SAR	5.23		
8	Sweden	5.08		
9	Australia	4.68		
10	Austria	4.67		
11	Malaysia	4.58		
12	Germany	4.55		
13	Saudi Arabia	4.17		
14	Korea, Rep	4.02		
15	United Kingdom	3.82		
16	Canada	3.69		
17	Chile	3.66		
18	Belgium	3.63		
19	France	3.45		
20	Japan	3.40		
21	United States			
22	Kuwait	3.28		
23	Ireland	3.25		
24	Bahrain			
25	Israel			
26	China			
27	Spain			
28	South Africa			
29	Vietnam			
30	Egypt			
31	Turkey			
32	Thailand			
33	Indonesia			
34	Kazakhstan			
35	Hungary			
36	Pakistan			
37	Poland			
38	India			
39	Italy			
40	Colombia			
40				
	Slovak Republic			
42	Mexico			
43	Panama			
44	Nigeria			
45	Czech Republic			
46	Russian Federation			
47	Ukraine			
48	Peru			
49	Philippines			
50	Argentina			
51	Brazil			
52	Venezuela	1.35		

#### **Effectiveness of law-making bodies**

How effective is your national parliament/congress as a law-making institution? (1 = very ineffective, 7 = very effective—among the best in the world)



SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

#### 1.18

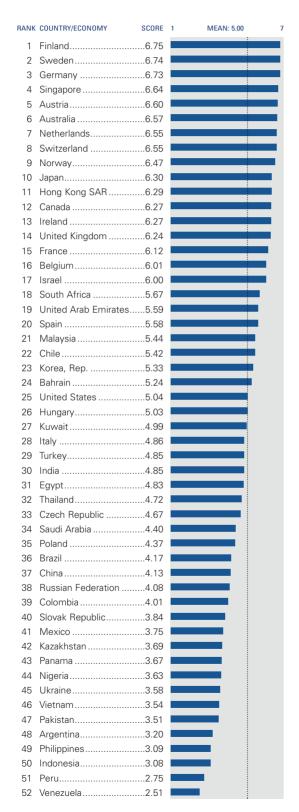
#### Judicial independence

Is the judiciary in your country independent from influences of members of government, citizens, or firms? (1 = no—heavily influenced, 7 = yes—entirely independent)

RANK	COUNTRY/ECONOMY	SCORE	1 MEAN: 4.53 7
1	Germany	6 53	
2	Finland		
3	Netherlands		
4	Australia		
5	Switzerland		
6	Sweden		
7	Norway		
8	Austria		
9	United Kingdom		
10	Israel		
11	Canada		
12	Ireland	6.01	
13	Hong Kong SAR	5.94	
14	Singapore		
15	Japan		
16	South Africa		
17	Belgium	5.37	
18	India	5.30	
19	France	5.26	
20	Malaysia	5.24	
21	Kuwait	5.23	
22	Korea, Rep	5.13	
23	United States	5.06	
24	United Arab Emirates	4.98	
25	Egypt	4.86	
26	Thailand	4.72	
27	Hungary	4.41	
28	Turkey	4.40	
29	Saudi Arabia	4.39	
30	Chile	4.25	
31	Czech Republic	4.10	
32	Bahrain	4.09	
33	Colombia	3.81	
34	Italy	3.79	
35	Spain		
36	Slovak Republic		
37	Vietnam		
38	Mexico		
39	Poland		
40	Nigeria		
41	Pakistan		
42	China		
43	Philippines		
44	Brazil		
45 46	Indonesia Kazakhstan		
	Russian Federation		
47	Ukraine		
48 49	Panama		
49 50	Peru		
50	Argentina		
52	Venezuela		
JZ	v01/02u0lu	1.13	-

#### Irregular payments in judicial decisions

In your industry, how frequently would you estimate that firms make undocumented extra payments or bribes connected with getting favorable judicial decisions (1 = common, 7 = never occurs)



SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

#### 1.20

#### Number of procedures to enforce a contract

Number of procedures from the moment the plaintiff files a lawsuit in court until the moment of payment  $\mid 2007$ 

RANK	COUNTRY/ECONOMY	HARD DATA	
1	Ireland	20.00	
2	Singapore	22.00	
3	Hong Kong SAR	24.00	
4	Netherlands	25.00	
5	Austria	26.00	
6	Belgium	27.00	
6	Czech Republic		
8	Australia		
9	Venezuela		
10	France	30.00	
10	Japan	30.00	
10	Malaysia		
10	Slovak Republic		
10	South Africa		
10	Sweden		
10	Ukraine		
10	United Kingdom		
18	Panama		
19	Switzerland		
19	United States		
21	Finland		
21	Germany	33.00	
21	Hungary		
21	Norway		
25	Colombia		
25	Vietnam	34.00	
27	China		
27	Israel	35.00	
27	Korea, Rep	35.00	
27	Thailand	35.00	
31	Argentina	36.00	
31	Canada	36.00	
31	Chile	36.00	
31	Turkey	36.00	
35	Philippines	37.00	
35	Russian Federation	37.00	
37	Kazakhstan	38.00	
37	Mexico	38.00	
37	Poland	38.00	
40	Indonesia	39.00	
40	Nigeria	39.00	
40	Spain	39.00	
43	Italy	41.00	
43	Peru	41.00	
45	Egypt	42.00	
46	Saudi Arabia	44.00	
47	Brazil	45.00	
48	India	46.00	
49	Pakistan	47.00	
50	Kuwait	50.00	
50	United Arab Emirate	s50.00	
n/a	Bahrain	n/a	

# Time to enforce a contract

Number of days required to resolve a dispute | 2007

	COUNTRY/ECONOMY HARD DATA	_
1	Singapore120	
3	Hong Kong SAR211	
3	Kazakhstan230	
	Korea, Rep230	
5	Finland	
6	Australia262 Russian Federation281	
7		
8	Vietnam295 United States300	
9 10		
11	Norway310	
12	Japan	
13	Hungary335	
14	Ukraine354	
15	Germany394	
16	Austria397	
17	United Kingdom404	
18	China406	
19	Mexico415	
20	Switzerland417	
21	Turkey420	
22	Nigeria457	
23	Peru468	
24	Thailand479	
25	Chile480	
26	Belgium505	
27	Sweden508	
28	Venezuela510	
29	Netherlands514	
30	Ireland515	
30	Spain515	
32	Slovak Republic565	
33	Kuwait566	
34	Canada570	
34	Indonesia570	
36	Argentina590	
37	Malaysia600	
37	South Africa600	
39	United Arab Emirates607	
40	Brazil616	
41	Saudi Arabia635	
42	Panama686	
43	Czech Republic820	
44	Poland830	
45	Philippines842	
46	Pakistan880	
47	Israel	
48	Egypt	
49 50	Italy	
50 51	Colombia	
	India1,420 Bahrainn/a	
n/a	Damaii	

SOURCE: The World Bank, Doing Business 2008

#### 1.22

#### **Cost of enforcing contracts**

Cost of enforcing contracts as a percentage of debt | 2007

RANK	COUNTRY/ECONOMY HARD DATA	
1	China8.80	
2	United States9.40	
3	Norway9.90	
4	Poland10.00	
5	Korea, Rep10.30	
6	Finland	
7	Germany11.80	
8	Austria	
9	Hungary13.00	
10	Kuwait13.30	
11	Russian Federation13.40	
12	Thailand14.30	
13	Hong Kong SAR14.50	
14	Canada16.20	
15	Argentina	
15	Brazil	
17	Belgium16.60	
18	Spain	
19	France	
20	Singapore17.80	
21	Turkey18.80	
22	Australia20.70	
23	Switzerland21.20	
24	Kazakhstan22.00	
25	Japan22.70	
26	United Kingdom23.40	
27	Pakistan23.80	
28	Netherlands24.40	
29	Egypt25.30	
29	Israel25.30	
31	Slovak Republic25.70	
32	Philippines26.00	
33	United Arab Emirates26.20	
34	Ireland26.90	
35	Malaysia27.50	
35	Saudi Arabia27.50	
37	Chile28.60	
38	Italy29.90	
39	Vietnam31.00	
40	Sweden31.30	
41	Mexico32.00	
41	Nigeria32.00	
43	Czech Republic33.00	
44	South Africa33.20	
45	Peru35.70	
46	India39.60	
47	Ukraine41.50	
48	Venezuela43.70	
49	Panama50.00	
50	Colombia52.60	
51	Indonesia122.70	
n/a	Bahrainn/a	

## Strength of investor protection

This index assesses the strength of investor protection on a 0-to-10 (best) scale  $\mid$  2007

RANK	COUNTRY/ECONOMY HARI	DATA	
1	Singapore	.9.30	
2	Hong Kong SAR		
3	Malaysia		
4	Canada		
4	Ireland		
4	Israel		
4	United States		
8	South Africa		
8	United Kingdom		
10	Belgium		
10	Japan		
12	Norway		
12	Peru		
14	Colombia		
14	Kuwait		
14	Pakistan		
17	Chile		
17	India		
17	Mexico		
17	Poland		
17	Thailand		
22	Australia		
22	Finland		
22	Indonesia		
22	Italy		
22	Kazakhstan		
22	Nigeria		
22	Saudi Arabia		
22	Sweden		
30	Brazil		
30	France		
30	Korea, Rep		
30	Turkey		
34	China		
34	Czech Republic		
34	Egypt		
34	Germany		
34	Russian Federation		
34	Spain	.5.00	
40	Argentina		
40	Netherlands		
40	Panama	.4.70	
40	Slovak Republic	.4.70	
44	Hungary		
44	United Arab Emirates		
46	Austria		
47	Philippines		
47	Ukraine		
49	Switzerland	.3.00	
50	Venezuela		
50	Vietnam	.2.70	
n/a	Bahrain	n/a	

**SOURCE:** The World Bank, *Doing Business 2008* 

#### Time to close a business

1.24

Time in years to close a business | 2007

RANK COUNTRY/ECONOMY HARD DATA	
1 Bahrainn/a	
2 Ireland	
3 Japan0.60	
4 Canada0.80	
4 Singapore	
_	
6 Belgium	
6 Norway	
9 Australia	
9 Spain	
9 United Kingdom1.00	
12 Austria1.10	
12 Hong Kong SAR1.10	
12 Netherlands	
15 Germany1.20	
16 Korea, Rep1.50	
16 United States1.50	
18 China1.70	
19 Italy1.80	
19 Mexico1.80	
21 France1.90	
22 Hungary2.00	
22 Nigeria2.00	
22 South Africa2.00	
22 Sweden2.00	
26 Malaysia2.30	
27 Panama2.50	
28 Thailand2.70	
29 Argentina2.80	
29 Pakistan2.80	
29 Saudi Arabia2.80	
32 Ukraine2.90	
33 Colombia3.00	
33 Poland3.00	
33 Switzerland3.00	
36 Peru3.10	
37 Kazakhstan3.30	
37 Turkey3.30	
39 Russian Federation3.80	
40 Brazil4.00	
40 Israel4.00	
40 Slovak Republic4.00	
40 Venezuela4.00	
44 Egypt4.20	
44 Kuwait4.20	
46 Chile4.50	
47 Vietnam5.00	
48 United Arab Emirates5.10	
49 Indonesia5.50	
50 Philippines5.70	
51 Czech Republic6.50	
52 India10.00	

#### **Domestic financial sector liberalization**

This index measures the degree of domestic financial sector liberalization within a country, standardized on a 1-to-7 scale | 2005

	COUNTRY/ECONOMY	HARD DATA	
1	Australia		
1	Austria		
1	Bahrain		
1	Belgium		
1	Canada		
1	Chile		
1	Finland		
1	France		
1	Germany	7.00	
1	Hong Kong SAR		
1	Ireland		
1	Israel		
1	Japan	7.00	
1	Korea, Rep	7.00	
1	Malaysia	7.00	
1	Netherlands	7.00	
1	Norway	7.00	
1	Singapore	7.00	
1	South Africa	7.00	
1	Spain	7.00	
1	Sweden	7.00	
1	United Kingdom	7.00	
1	United States	7.00	
24	Thailand	6.63	
25	Indonesia	6.42	
26	Panama	6.29	
27	Italy	6.11	
28	Mexico	5.87	
29	Colombia	5.77	
30	Switzerland	5.60	
31	Nigeria	5.42	
32	Philippines	5.19	
33	Peru	5.18	
34	Brazil	5.09	
35	United Arab Emirates	4.78	
36	Argentina	4.43	
37	Saudi Arabia	3.88	
38	India	3.79	
39	Hungary	3.67	
40	Slovak Republic		
41	Kuwait		
42	Turkey		
43	China		
44	Czech Republic		
45	Poland		
46	Egypt		
47	Vietnam		
48	Kazakhstan		
49	Pakistan		
50	Ukraine		
51	Russian Federation		
52	Venezuela		
JZ	voi 162u6ia	1.33	

**SOURCE:** Graciela Kaminsky and Sergio Schmukler, 2003. "Short-Run Pain, Long-Run Gain: The Effects of Financial Liberalization." IMF Working Paper 03/34. Washington, DC: International Monetary Fund

Data Tables

# Section II Business environment

281

#### **Quality of management schools**

Management or business schools in your country are (1 = limited or of poor quality, 7 = among the best in the world)



SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

#### 2.02

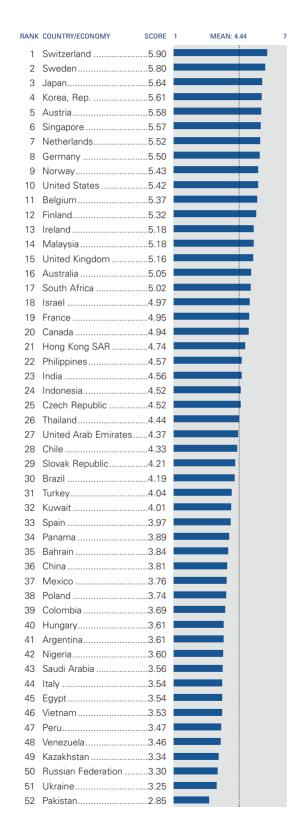
#### Quality of math and science education

Math and science education in your country's schools (1 = lag far behind most other countries, 7 = are among the best in the world)

RANK	COUNTRY/ECONOMY	SCORE	1 MEAN: 4.41 7
1	Singapore	6.34	
2	Belgium		
3	Finland		
4	Hong Kong SAR		
5	Switzerland		
6	France		
7	Czech Republic		
8	Korea, Rep		
9	India		
10	Malaysia		
11	Netherlands		
12	Canada		
13	Ireland	5.16	
14	Hungary	5.12	
15	Australia	5.11	
16	Austria	5.06	
17	Slovak Republic	5.05	
18	Japan	5.03	
19	Israel	4.94	
20	Indonesia	4.94	
21	Sweden	4.81	
22	Germany	4.79	
23	Russian Federation	4.72	
24	Thailand	4.63	
25	Ukraine	4.59	
26	United States	4.54	
27	United Kingdom	4.54	
28	Poland	4.52	
29	United Arab Emirates	4.52	
30	Norway	4.44	
31	China	4.38	
32	Italy	4.27	
33	Turkey	4.26	
34	Saudi Arabia	3.94	
35	Spain	3.93	
36	Kazakhstan	3.92	
37	Kuwait	3.85	
38	Vietnam	3.83	
39	Bahrain	3.78	
40	Colombia	3.78	
41	Argentina	3.32	
42	Nigeria		
43	Pakistan		
44	Egypt	3.06	
45	Chile		
46	Philippines		
47	Panama		
48	Venezuela		
49	Mexico		
50	Brazil		
51	South Africa		
52	Peru	2.06	

#### **Extent of staff training**

The general approach of companies in your country to human resources is (1 = to invest little in training and employee development, 7 = to invest heavily to attract, train, and retain employees)



SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

# Local availability of specialized research and training services

2.04

In your country, specialized research and training services are (1 = not available, 7 = available from world-class local institutions)

KANK	COUNTRY/ECONOMY	SCORE 1	MEAN: 4.65	7
1	Switzerland	5.99		
2	United States	5.99		
3	Germany	5.98		
4	Sweden	5.89		
5	United Kingdom	5.87		
6	Japan	5.82		
7	Netherlands	5.81		
8	Belgium	5.73		
9	Finland	5.71		
10	Canada	5.68		
11	France	5.59		1
12	Israel	5.51		
13	Korea, Rep	5.33		
14	Austria	5.32		
15	Australia	5.20		
16	Singapore	5.16		
17	Norway			
18	Hong Kong SAR	5.08		
19	Malaysia	4.99		
20	Ireland	4.96		
21	Czech Republic	4.82		
22	Italy	4.78		
23	Indonesia			
24	India	4.71		
25	Brazil	4.67		
26	South Africa	4.64		
27	Chile			
28	China	4.38		
29	Spain	4.38		
30	Poland			
31	Turkey	4.34		
32	Argentina			
33	Slovak Republic			
34	United Arab Emirat			
35	Kuwait	4.14		
36	Mexico	4.13		
37	Nigeria	4.05		
38	Hungary			
39	Thailand			
40	Philippines			
41	Saudi Arabia			
42	Panama			
43	Colombia			
44	Vietnam			
45	Peru			
46	Russian Federation			
47	Kazakhstan			
48	Egypt			
49	Ukraine			
50	Bahrain			
	Pakistan			
51				

#### Brain drain and ease of hiring foreign labor

This variable is the average of the results to two Survey questions in the Survey: Your country's talented people (1 = normally leave to pursue opportunities in other countries, 7 = almost always remain in the country); and Labor regulation in your country (1 = prevents your company from employing foreign labor, 7 = does not prevent your company from employing foreign labor)

				_
RANK	COUNTRY/ECONOMY	SCORE	1 MEAN: 4.49 7	
1	Kuwait	5.80		
2	United Arab Emirates	5.68		
3	Ireland	5.67		
4	United States	5.59		
5	Singapore	5.42		
6	Finland	5.39		
7	Norway	5.37		
8	Switzerland	5.35		
9	Chile	5.34		
10	United Kingdom	5.23		
11	Indonesia	5.22		
12	Hong Kong SAR	5.18		
13	Malaysia	4.90		
14	Netherlands	4.86		
15	Korea, Rep	4.82		
16	Germany	4.76		
17	Japan	4.76		
18	Spain	4.75		
19	Sweden	4.65		
20	Bahrain	4.63		
21	Thailand	4.60		
22	Canada	4.58		
23	Saudi Arabia	4.53		
24	Belgium	4.52		
25	Czech Republic	4.46		
26	Panama	4.41		
27	China	4.40		
28	Austria	4.40		
29	Brazil	4.32		
30	Slovak Republic	4.31		
31	Argentina	4.29		
32	Italy	4.28		
33	Australia	4.27		
34	Colombia	4.24		
35	France	4.23		
36	Mexico	4.19		
37	India	4.13		
38	Israel	4.11		
39	Hungary	4.03		
40	Peru	4.03		
41	Turkey	4.02		
42	Vietnam	4.00		
43	Pakistan			
44	Nigeria	3.81		
45	Egypt			
46	Russian Federation	3.71		
47	Kazakhstan			
48	Poland			
49	Ukraine			
50	South Africa	3.33		
51	Venezuela			
52	Philippines	3.17		

**SOURCE:** World Economic Forum, Executive Opinion Survey 2006, 2007

#### 2.06

#### **Tertiary enrollment**

Gross tertiary enrollment rate | 2006 or most recent year available

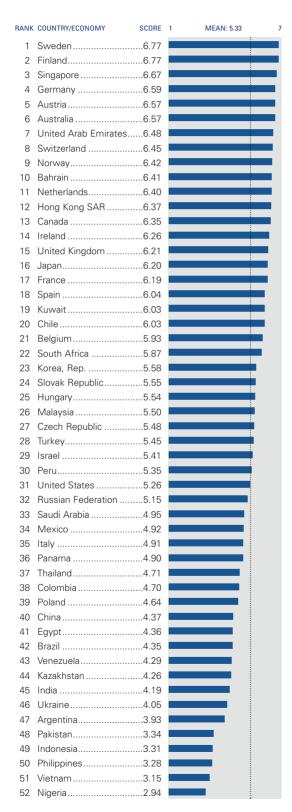
RANK	COUNTRY/ECONOMY	HARD DATA	
1	Finland	93.22	
2	Korea, Rep.5	92.60	
3	United States	81.77	
4	Sweden	78.99	
5	Norway	77.51	
6	Ukraine	72.78	
7	Australia	72.70	
8	Russian Federation	72.28	
9	Hungary	68.60	
10	Spain	67.36	
11	Italy	66.99	
12	Poland	65.58	
13	Argentina <sup>4</sup>	63.77	
14	Belgium	62.84	
15	Canada <sup>3</sup>	62.36	
16	Netherlands	59.81	
17	United Kingdom	59.34	
18	Ireland	58.77	
19	Singapore <sup>5</sup>	58.60	
20	Israel	57.57	
21	Japan	57.31	
22	France	56.16	
23	Venezuela		
24	Kazakhstan <sup>5</sup>	51.18	
25	Austria	49.89	
26	Czech Republic	49.85	
27	Chile	46.57	
28	Germany	46.34	
29	Thailand		
30	Switzerland		
31	Panama		
32	Slovak Republic		
33	Peru		
34	Egypt <sup>4</sup>		
35	Turkey		
36	Hong Kong SAR		
37	Bahrain		
38	Colombia		
39	Saudi Arabia		
40	Malaysia <sup>4</sup>		
41	Philippines		
42	Mexico		
43	Brazil <sup>4</sup>		
44	United Arab Emirates		
45	China		
46 47	Kuwait		
47	Indonesia		
48 40	South Africa		
49 50	India Nigeria <sup>4</sup>		-
50 51	Vietnam <sup>1</sup>		_
51 52	Pakistan		
52	r aki5ldii	4.52	_

**SOURCE:** UNESCO Institute for Statistics (June 2008); World Bank, *World Development Indicators 2008* (published version); national sources

1 2000 2 2003 3 2004 4 2005 5 2007

#### Irregular payments in tax collection

In your industry, how frequently would you estimate that firms make undocumented extra payments or bribes connected with annual tax payments? (1 = common, 7 = never occurs)



SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

# Distortive effect on competition of taxes and subsidies

2.08

In your country, government subsidies and tax breaks seriously distort competition (1 = strongly agree, 7 = strongly disagree)

HAIVIN	COUNTRY/ECONOMY	SCORE 1	MEAN: 4.27	7
1	Singapore	5.67		
2	Hong Kong SAR	5.60		
3	United Arab Emirate	es5.47		
4	Chile	5.39		
5	Bahrain	5.26		
6	Netherlands	5.14		
7	South Africa	5.05		
8	Saudi Arabia	4.95		
9	Finland	4.92		
10	Malaysia	4.82		
11	Switzerland	4.79		
12	Korea, Rep	4.76		
13	Israel	4.75		
14	Norway	4.74		
15	Australia	4.72		
16	Ireland	4.70		
17	Sweden	4.66		
18	United Kingdom	4.61		
19	Austria	4.56		
20	France	4.53		
21	Germany	4.44		
22	Indonesia	4.44		
23	Italy	4.34		
24	Thailand	4.34		
25	Japan	4.32		
26	Colombia	4.26		
27	Pakistan	4.26		
28	China	4.17		
29	Brazil	4.16		
30	Belgium	4.10		
31	Canada	4.10		
32	Kuwait	4.06		
33	Slovak Republic	4.06		
34	Mexico			
35	Nigeria	3.98		
36	United States	3.98		
37	Philippines	3.97		
38	Vietnam	3.97		
39	India	3.97		
40	Spain	3.90		
41	Turkey			
42	Poland	3.71		
43	Egypt	3.70		
44	Czech Republic			
45	Peru			
46	Hungary			
47	Kazakhstan			
48	Panama			
49	Russian Federation			
50	Argentina			
51	Ukraine			
0 1	u			

#### **Corporate tax rate**

The top tax rate on corporate income | 2006

RANK	COUNTRY/ECONOMY HARD DA	TA .
1	Bahrain0.00	
1	Kuwait0.00	
1	Saudi Arabia0.00	
1	United Arab Emirates0.00	
5	Ireland12.50	
6	Hungary16.00	
7	Chile17.00	
8	Hong Kong SAR17.50	
9	Poland19.00	
9	Slovak Republic19.00	
11	Egypt20.00	
11	Singapore20.00	
11	Turkey20.00	
14	Canada22.10	
15	Czech Republic24.00	
15	Russian Federation24.00	
17	Austria25.00	
17	Switzerland25.00	
17	Ukraine	
20	Finland26.00	
20	Netherlands26.00	
22	Germany26.40	
23	Malaysia27.00	
24	Korea, Rep27.50	
25	Mexico28.00	
25	Norway28.00	
25	Sweden28.00	
28	Israel29.00	
28	South Africa29.00	
30	Australia	
30	Indonesia30.00	
30	Japan30.00	
30	Kazakhstan30.00	
30	Nigeria30.00	
30	Panama30.00	
30	Peru30.00	
30	Thailand30.00	
30	United Kingdom30.00	
39	Belgium33.00	
39	China33.00	
39	India33.00	
39	Italy33.00	
43	France	
44	Brazil34.00	
44	Colombia34.00	
44	Venezuela34.00	
47	Argentina35.00	
47	Philippines35.00	
47	Spain35.00	
47	United States35.00	
51	Pakistan37.00	
52	Vietnam40.00	

**SOURCE:** Heritage Foundation, 2008 Index of Economic Freedom

#### 2.10

#### **Quality of overall infrastructure**

General infrastructure in your country is (1 = underdeveloped, 7 = extensive and efficient by international standards

RANK	COUNTRY/ECONOMY	SCORE	1	MEAN: 4.5	2	7
1	Switzerland	6.71				
2	Germany	6.62				
3	Singapore	6.62				
4	France	6.48				
5	Finland	6.42				
6	Austria	6.27				
7	Hong Kong SAR	6.23				
8	United States	6.06				
9	Sweden	6.03				
10	Canada	5.97				
11	United Arab Emirates	5.96				
12	Belgium	5.94				
13	Japan					
14	Netherlands					
15	Malaysia					
16	Korea, Rep					
17	United Kingdom					
18	Australia					
19	Spain					
20	Norway					
21	Thailand					
22	Israel					
23	Chile					
24	Bahrain					
25	Kuwait					
26	South Africa				_	
27	Czech Republic					
28	Saudi Arabia					
29	Panama					
30	Hungary					
31	Ireland					
32	Slovak Republic					
33	Turkey					
34	Egypt					
35	China					
36	Italy					
37	Mexico					
38	Pakistan					
39	Kazakhstan					
40	Ukraine					
41	India					
42	Argentina					
43	Russian Federation					
44	Poland					
45	Colombia					
46	Vietnam					
47	Brazil					
48	Philippines					
49	Indonesia					
50	Peru					
51	Venezuela					
52	Nigeria					
		2.00		i		

#### Quality of telephone/fax infrastructure

New telephone lines for your business are (1 = scarce and difficult to obtain, 7 = widely available and highly reliable)

	COUNTRY/ECONOMY	SCORE	1	MEAN: 6.05	7
1	Switzerland				
2	Finland				
3	Germany				
4	Singapore				
5	Sweden	6.80			
6	Japan				
7	Hong Kong SAR				
8	France				
9	Austria				
10	Norway				
11	Netherlands				
12	Israel				
13	Canada				
14	Belgium				
15	United Arab Emirates				
16	United Kingdom				
17	Chile				
18	Slovak Republic				
19	United States				
20	Hungary				
21 22	Korea, Rep				
23	Czech Republic India				
23	Egypt				
25	Australia				
26	Bahrain				
27	Malaysia				
28	Thailand				
29	Spain				
30	Turkey				
31	Colombia				
32	Brazil	5.98			
33	Kuwait	5.97			
34	Panama	5.91			
35	Peru	5.89			
36	Saudi Arabia	5.76			
37	Mexico	5.70			1
38	Vietnam	5.57			
39	Italy	5.50			
40	China	5.49			
41	Argentina	5.48			
42	Ireland	5.47			
43	Philippines	5.45			
44	Pakistan	5.31			
45	Venezuela				
46	Nigeria				
47	Indonesia	5.03			
48	Kazakhstan				
49	Russian Federation				
50	South Africa				
51	Poland				
52	Ukraine	4.65			

**SOURCE:** World Economic Forum, Executive Opinion Survey 2006, 2007

#### **Internet users**

2.12

Internet users per 100 inhabitants | 2006

RANK	COUNTRY/ECONOMY HARD DATA	
1	Netherlands85.71	
2	Norway81.68	
3	Sweden	
4	Canada76.77	
5	Korea, Rep71.11	
6	United States69.83	
7	Japan68.27	
8	United Kingdom63.16	
9	Singapore59.36	
10	Switzerland58.07	
11	Finland55.60	
12	Malaysia54.23	
13	Hong Kong SAR52.97	
14	Italy52.91	
15	Australia52.05	_
16	Austria51.31	
17		
	France	
18	Belgium46.95	
19	Germany46.67	
20	Spain	
21	Slovak Republic	
22	United Arab Emirates36.69	
23	Poland36.58	
24	Hungary34.75	
25	Czech Republic34.69	
26	Ireland34.23	
27	Kuwait28.93	
28	Bahrain28.44	
29	Israel27.74	
30	Chile25.24	
31	Peru22.89	
32	Brazil22.55	
33	Argentina20.91	
34	Ukraine	
35	Mexico18.98	
36	Saudi Arabia18.66	
37	Russian Federation18.02	
38	Turkey17.73	
39	Vietnam17.21	
40	Panama15.29	
41	Venezuela14.52	
42	Colombia	
43	Thailand	_
44	India10.72	
45	China10.35	
46	Kazakhstan8.71	
47	Egypt7.95	-
48	South Africa7.77	-
49	Pakistan	-
50	Nigeria5.95	_
51	Philippines5.92	-
52	Indonesia4.69	

**SOURCE:** International Telecommunication Union, *World Telecommunication Indicators 2007*; national sources

#### **Broadband Internet subscribers**

Total broadband Internet subscribers per 100 inhabitants | 2006 or most recent year available

RANK	COUNTRY/ECONOMY HARD DA	ATA
1	Netherlands31.	.79
2	Korea, Rep29.	.27
3	Finland27.	.14
4	Norway26.	.81
5	Switzerland26.	.48
6	Sweden25.	.87
7	Hong Kong SAR24.	.51
8	Canada22.	.91
9	Belgium22.	.58
10	United Kingdom21.	.71
11	France20.	.93
12	Israel20.	.75
13	Japan20.	.62
14	United States20.	.11
15	Australia19.	.15
16	Singapore18.	.26
17	Germany18.	.13
18	Austria17.	.70
19	Spain15.	.42
20	Italy14.	.86
21	Ireland14.	.30
22	Hungary11.	.90
23	Czech Republic10.	.90
24	Poland7.	
25	Chile5.	.92
26	Slovak Republic5.	.87
27	Bahrain5.	
28	United Arab Emirates5.	.17
29	Argentina4.	.05
30	China3.	.85
31	Turkey3.	.74
32	Malaysia3.	.49
33	Brazil3.	.14
34	Mexico2.	.85
35	Russian Federation2.	.03
36	Venezuela1.	.98
37	Peru1.	.71
38	Colombia1.	.36
39	Ukraine1.	.13
40	Panama1.	.01
41	Kuwait <sup>1</sup> 0.	.93
42	Saudi Arabia0.	.87
43	South Africa0.	.70
44	Vietnam0.	.61
45	Egypt0.	
46	Kazakhstan0.	
47	India0.	
48	Thailand <sup>1</sup> 0.	
49	Philippines <sup>1</sup> 0.	
50	Indonesia <sup>1</sup> 0.	
51	Pakistan0.	
52	Nigeria <sup>1</sup> 0.	

**SOURCE**: International Telecommunication Union, *World Telecommunication Indicators 2007*; national sources <sup>1</sup> 2005

#### 2.14

#### **Telephone lines**

Main telephone lines per 100 inhabitants  $\mid$  2006 or most recent year available

RANK	COUNTRY/ECONOMY	HARD DATA	
1	Switzerland	66.89	
2	Germany	65.94	
3	Canada	64.49	
4	Sweden	59.52	
5	United Kingdom	56.15	
6	France		
7	United States		
8	Hong Kong SAR	53.89	
9	Ireland		
10	Korea, Rep	49.82	
11	Australia	48.81	
12	Italy	46.25	
13	Spain	45.81	
14	Netherlands		
15	Belgium	45.30	
16	Norway	44.27	
17	Israel		
18	Austria	43.40	
19	Japan	43.02	
20	Singapore	42.32	
21	Finland	36.30	
22	Hungary	33.37	
23	Vietnam <sup>1</sup>	32.23	
24	Russian Federation	30.80	
25	Poland	29.81	
26	Czech Republic	28.28	
27	United Arab Emirates	28.12	
28	China	27.79	
29	Ukraine	26.84	
30	Bahrain	26.30	
31	Turkey		
32	Argentina	24.17	
33	Slovak Republic		
34	Brazil		
35	Chile		
36	Kazakhstan	19.77	
37	Kuwait		
38	Mexico		
39	Colombia		
40	Malaysia		
41	Saudi Arabia		
42	Venezuela		
43	Panama		
44	Egypt		
45	Thailand		
46	South Africa		
47	Peru		
48	Indonesia		
49	Philippines		
50	India		
51	Pakistan		
52	Nigeria	1.26	

**SOURCE:** International Telecommunication Union, *World Telecommunication Indicators 2007*; national sources <sup>1</sup> 2005

#### Mobile telephone subscribers

Mobile cellular telephone subscribers per 100 inhabitants | 2006

RANK	COUNTRY/ECONOMY	HARD DATA	
1	Italy		
2	Hong Kong SAR		
3	Bahrain		
4	Israel		
5	Czech Republic		
6	United Arab Emirates		
7	United Kingdom		
8	Austria		
9	Ireland		
10	Singapore		
11	Norway		
12 13	Finland		
14			
15	SpainSweden		
16	Netherlands		
17	Russian Federation		
18	Germany		_
19	Switzerland		
20	Hungary		
21	Australia		
22	Poland		
23	Belgium		
24	Kuwait		
25	Slovak Republic		
26	France		
27	Korea, Rep		
28	South Africa		
29	Argentina		
30	United States	80.32	
31	Japan	79.32	
32	Saudi Arabia	78.05	
33	Chile	75.62	
34	Malaysia	75.45	
35	Turkey	71.00	
36	Venezuela	69.04	
37	Panama	66.14	
38	Colombia	64.31	
39	Thailand	62.88	
40	Canada	57.57	
41	Brazil	52.90	
42	Kazakhstan	52.86	
43	Mexico	52.63	
44	Philippines	50.75	
45	China		
46	Peru		
47	Indonesia		
48	Nigeria		
49	Egypt		
50	Pakistan		
51	Vietnam		
52	India	14.83	

**SOURCE:** International Telecommunication Union, *World Telecommunication Indicators 2007*; national sources

#### Cost of starting a business

2.16

Cost of starting a business as a percentage of income per capita  $\,\mid\,$  2007

RANK	COUNTRY/ECONOMY HARD DATA	
1	Ireland	
2	Sweden0.60	1
3	United States0.70	I
4	Australia0.80	ı
4	Singapore0.80	ı
4	United Kingdom0.80	1
7	Canada0.90	ı
8	Finland	
9	France1.10	
10	Kuwait1.60	·
11	Switzerland2.10	ì
12		i
	Norway	
13	Hong Kong SAR3.10	
14	Russian Federation3.70	_
15	Slovak Republic4.20	
16	Israel4.40	
17	Belgium5.30	
18	Austria5.40	
19	Thailand5.60	
20	Germany5.70	
21	Netherlands6.00	
22	South Africa7.10	-
23	Japan7.50	
24	Kazakhstan7.60	
25	Ukraine7.80	
26	China8.40	
27	Chile8.60	_
28	Argentina9.70	
29	Brazil10.40	
30	Czech Republic10.60	
31	Mexico13.30	
32	Pakistan14.00	
33	Spain15.10	
34	Korea, Rep16.90	
35	Hungary17.70	
36	Malaysia18.10	
37	Italy18.70	
38	Colombia19.30	
39	Vietnam20.00	
40	Turkey20.70	
41	Poland21.20	
42	Panama22.00	
43	Venezuela28.20	
	Egypt	
44		
45	Peru	
46	Saudi Arabia32.30	
47	Philippines32.60	
48	United Arab Emirates36.90	
49	Nigeria56.60	
50	India74.60	
51	Indonesia80.00	
n/a	Bahrainn/a	

#### **Cost of dealing with licenses**

Cost of dealing with licenses as a percentage of income per capita

RANK	COUNTRY/ECONOMY HARD DATA	
1	United Arab Emirates1.50	l
2	Malaysia10.00	i
3	Hungary10.40	
4	Thailand10.70	
5	Australia13.20	
6	United States13.40	
7	Slovak Republic14.90	
8	Japan17.80	
9	Czech Republic18.50	
10	Ireland19.80	
11	Hong Kong SAR21.30	
12	Singapore22.90	
13	France	
14	South Africa30.40	
15	Norway46.20	
16	Switzerland52.70	
17	Brazil	
18	Germany63.10	
19	Belgium63.70	
	=	
20 21	United Kingdom64.60 Spain64.90	
22	Austria	
23	Netherlands76.00	
24	Saudi Arabia94.50	
25	Philippines102.40	
26	Mexico103.50	
27	Sweden106.40	-
28	Israel115.50	
29	Finland	_
30	Canada125.40	
31	Chile128.10	
32	Italy138.20	
33	Panama143.90	_
34	Poland159.80	
35	Peru165.00	
36	Korea, Rep170.20	
37	Kuwait209.40	
38	Argentina234.10	
39	Indonesia286.80	
40	Venezuela326.00	
41	Turkey369.90	
42	Vietnam373.60	
43	Egypt474.90	
44	India519.40	
45	Colombia602.80	
46	Ukraine668.50	
47	China840.20	
48	Pakistan869.50	
49	Nigeria1,016.00	
50	Kazakhstan2,129.90	
51	Russian Federation3,788.40	
n/a	Bahrainn/a	

SOURCE: The World Bank, Doing Business 2008

#### 2.18

#### **Cost of registering property**

Cost of registering property as a percentage of income per capita

RANK	COUNTRY/ECONOMY HARD DATA	
1	Saudi Arabia0.00	
2	Slovak Republic0.10	L
3	Russian Federation0.30	l
4	Switzerland0.40	ı
5	Kuwait0.50	ı
5	Poland0.50	ı
5	United States0.50	ı
8	Italy	ı
9	Kazakhstan0.90	
10	Egypt1.00	
11	Vietnam1.20	
12	Chile1.30	
13	Canada1.80	
14	United Arab Emirates2.00	
15	Venezuela2.20	
16	Malaysia2.40	
16	Panama2.40	
18	Colombia2.50	
18	Norway2.50	
20	Brazil2.80	
20	Singapore2.80	
22	Czech Republic3.00	
22	Sweden3.00	
24	Turkey3.10	
25	Peru3.30	
25	Ukraine3.30	
27	China3.60	
28	Finland4.00	
29	United Kingdom4.10	
30	Philippines4.20	
31	Austria4.50	
32	Mexico4.70	
33	Australia4.90	
34	Hong Kong SAR5.00	
34	Japan5.00	
36	Germany5.20	
37	Pakistan5.30	
38	France6.10	
39	Netherlands6.20	
40	Korea, Rep6.30	
40	Thailand6.30	
42	Spain7.10	
43	Israel7.50	
44	Argentina7.60	
45	India7.70	
46	South Africa8.80	
47	Ireland10.20	
48	Indonesia10.50	
49	Hungary11.00	
50	Belgium12.70	
51	Nigeria22.20	
n/a	Bahrainn/a	

#### **Cost to export**

Total official cost in US dollars associated with exporting a container, excluding tariffs and trade taxes  $\mid$  2007

RANK	COUNTRY/ECONOMY HARD DA	TA
1	China390.0	00
2	Singapore416.0	
3	Finland420.0	
4	Malaysia432.0	
5	United Arab Emirates462.0	
6	Pakistan515.0	
7	Norway518.0	
8	Hong Kong SAR525.0	
9	Israel560.0	
10	Sweden561.0	
11	Peru590.0	
12	Thailand615.0	
13	Chile	
14	Panama650.0	
15	Indonesia667.0	
16	Vietnam669.0	
17	Egypt	
18	Germany740.0	
19	Korea, Rep745.0	
20	Czech Republic775.0	
21	Philippines800.0	
22	India820.0	00
23	Poland834.0	00
24	Austria843.0	00
25	Turkey865.0	00
26	Netherlands880.0	00
27	Australia930.0	00
28	Kuwait935.0	00
29	United Kingdom940.0	00
30	United States960.0	00
31	Hungary975.0	00
32	Japan989.0	00
33	Spain1,000.0	00
34	Saudi Arabia1,008.0	
35	Slovak Republic1,015.0	00
36	Nigeria1,026.0	00
37	France1,028.0	00
38	Ukraine1,045.0	
39	South Africa1,087.0	
40	Brazil1,090.0	
40	Ireland1,090.0	
42	Switzerland1,238.0	
43	Italy1,291.0	
44	Mexico1,302.0	
45	Argentina	
46	Calambia 1,440.	
47	Colombia	
48	Belgium1,600.0 Russian Federation2,050.0	
49 50	Venezuela2,400.0	
50 51	Kazakhstan2,730.0	
n/a	Bahrainn	
11/0	Daniali	/ u

SOURCE: The World Bank, Doing Business 2008

#### **Cost to import**

2.20

Total official cost in US dollars associated with importing a container, excluding tariffs and trade taxes  $\mid$  2007

RANK	COUNTRY/ECONOMY	HARD DATA	
1	Singapore	367.00	
2	Malaysia		
3	Finland		
4	China		
5	United Arab Emirate		
6	Norway		
7	Hong Kong SAR		_
8	Israel		_
9	Sweden		
10	Indonesia		
11	Peru		
12	Chile		
13	Egypt		
14	Korea, Rep		
15	Saudi Arabia		
16	Germany		
17	Thailand		
18	Philippines		
19	Poland		
20	Austria		
21	Panama		
22	Czech Republic		
23	Vietnam		
23	India		
25	Kuwait		
26			
27	Hungary		
28	Netherlands		
29	Turkey		
30	Japan		
30	Nigeria		
32	Slovak Republic		
33	Ukraine		
34	Australia		
35	Ireland		
36	France		
37	United States		
38	South Africa		
39	Brazil		
40	United Kingdom		
41	Italy		
42	Switzerland	,	
43	Pakistan		
44	Canada		
45	Colombia		
46	Belgium		
47	Argentina		
48	Russian Federation.		
49	Venezuela		
50	Mexico	,	
51	Kazakhstan	,	
n/a	Bahrain		
11/0	201110111	ıı,a	

# Cost of enforcing contracts

Cost of enforcing contracts as a percentage of claim | 2007

RANK	COUNTRY/ECONOMY	HARD DATA	
1	China		
2	United States		
3	Norway		
4	Poland		
5	Korea, Rep		
6	Finland		
7	Germany		
8	Austria		
9	Hungary		
10	Kuwait		
11	Russian Federation		
12	Thailand	14.30	
13	Hong Kong SAR		
14	Canada		
15	Argentina		
15	Brazil		
17	Belgium		
18	Spain		
19	France	17.40	
20	Singapore	17.80	
21	Turkey	18.80	
22	Australia	20.70	
23	Switzerland	21.20	
24	Kazakhstan	22.00	
25	Japan	22.70	
26	United Kingdom	23.40	
27	Pakistan	23.80	
28	Netherlands	24.40	
29	Egypt	25.30	
29	Israel	25.30	
31	Slovak Republic	25.70	
32	Philippines	26.00	
33	United Arab Emirates	26.20	
34	Ireland	26.90	
35	Malaysia	27.50	
35	Saudi Arabia		
37	Chile		
38	Italy		
39	Vietnam		
40	Sweden		
41	Mexico		
41	Nigeria		
43	Czech Republic		
44	South Africa		
45	Peru		
46	India		
47	Ukraine		
48	Venezuela		
49	Panama		
50	Colombia		
51	Indonesia		
n/a	Bahrain	n/a	

SOURCE: The World Bank, Doing Business 2008

#### 2.22

#### Cost of closing a business

Cost of closing a business as a percentage of the estate | 2007

RANK	COUNTRY/ECONOMY HARD DATA	
1	Colombia1.00	l
1	Kuwait1.00	ı
1	Norway1.00	ı
1		
5	Belgium4.00	
5	Canada4.00	
5	Finland4.00	
5	Japan4.00	
5	Korea, Rep4.00	
5	Netherlands4.00	
5	Pakistan	
5	Switzerland4.00	
13	United Kingdom6.00	
14	Peru	
14	United States7.00	
16	Australia8.00	
16	Germany8.00	
18	France9.00	
18	Hong Kong SAR9.00	
18	India9.00	
18	Ireland9.00	
18	Russian Federation9.00	
18	Sweden9.00	
24	Argentina12.00	
24	Brazil12.00	
26	Chile15.00	
26	Czech Republic15.00	
26	Hungary15.00	
26	Malaysia15.00	
26	Spain15.00	
26	Turkey15.00	
26	Vietnam15.00	
33	Austria18.00	
33	Indonesia18.00	
33	Kazakhstan18.00	
33	Mexico18.00	
33	Panama18.00	
33	Slovak Republic18.00	
33	South Africa18.00	
40	China22.00	
40	Egypt22.00	
40	Italy22.00	
40	Nigeria22.00	
40	Poland22.00	
40	Saudi Arabia22.00	
46	Israel23.00	
47	United Arab Emirates30.00	
48	Thailand36.00	
49	Philippines38.00	
49	Venezuela38.00	
51	Ukraine42.00	
n/a	Bahrainn/a	

# Section III Financial stability

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#### Change in real effective exchange rate

Average percentage change in real effective exchange rate from year to year over the period 2002–06  $\,$ 

RANK	COUNTRY/ECONOMY HARD DATA	
1	Argentina8.48	
2	South Africa4.68	
3	United States4.58	
4	Bahrain4.24	
5	Hong Kong SAR4.10	
6	Saudi Arabia4.04	
7	Japan3.92	
8	Egypt3.44	
9	Israel2.62	
10	Malaysia2.12	
11	China1.94	_
12	Peru0.92	
13	Germany0.82	
14	Vietnam0.78	
15	India0.56	
16	United Kingdom0.02	
17	Venezuela0.04	
18	Mexico0.14	
18	Ukraine0.14	
20	Pakistan0.24	l l
21	Austria0.38	1
22	Poland0.62	
23	Colombia0.72	
24	Sweden0.78	
25	France0.86	
26	Finland1.48	
27	Hungary1.58	-
28	Netherlands1.92	
28	Switzerland1.92	
30	Belgium2.50	
31	Singapore2.74	
32	Thailand2.96	
33	Canada2.98	
34	Spain3.78	
35	Norway3.94	
36	Ireland4.00	
37	Philippines4.14	
38	Chile4.24	
39	Italy4.46	
40	Korea, Rep4.48	
41	Czech Republic4.64	
42	Australia4.80	
43	Turkey6.22	
44	Russian Federation6.36	
45	Slovak Republic6.98	
46	Indonesia7.78	
47	Brazil9.02	
n/a	Kazakhstann/a	
n/a	Kuwaitn/a	
n/a	Nigerian/a	
n/a	Panaman/a	
n/a	United Arab Emiratesn/a	

**SOURCE**: Moody's *Statistical Handbook* (May 2007)

#### 3.02

#### **External vulnerability indicator**

The external vulnerability indicator is the sum of several measures of external exposure as a percentage of foreign exchange reserves | 2006

1 Australia	RANK	COUNTRY/ECONOMY	HARD DATA	
1 Belgium	1	Australia	n/a	
1 Canada	1	Austria	n/a	
1 Finland	1	Belgium	n/a	
1 France	1	Canada	n/a	
1 Germany	1	Finland	n/a	
1 Hong Kong SAR	1	France	n/a	
1 Ireland	1	Germany	n/a	
1 Italy	1	Hong Kong SAR	n/a	
1 Japan	1	Ireland	n/a	
1 Netherlands	1	Italy	n/a	
1 Norway	1	Japan	n/a	
1 Singapore	1	Netherlands	n/a	
1 Spain	1	Norway	n/a	
1 Sweden	1	Singapore	n/a	
1 Switzerland	1	Spain	n/a	
1 United Kingdom	1	Sweden	n/a	
1 United States	1	Switzerland	n/a	
1 Russian Federation	1	United Kingdom	n/a	
21 Malaysia	1	United States	n/a	
21 Pakistan	1	Russian Federation	15.40	
23 China	21	Malaysia	21.10	
24       Peru       27.70         25       Vietnam       30.40         26       India       33.30         27       Thailand       44.60         28       Indonesia       45.20         29       Egypt       48.90         30       Mexico       50.20         31       Venezuela       51.20         32       Saudi Arabia       55.90         33       Korea, Rep       56.50         34       South Africa       61.80         35       Czech Republic       65.50         36       Brazil       69.20         37       Ukraine       70.70         38       Philippines       84.70         39       Chile       85.90         40       Colombia       90.20         41       Kuwait       90.40         42       Slovak Republic       93.10         43       Kazakhstan       98.00         44       Israel       126.20         45       Argentina       145.10         46       Turkey       149.40         47       Poland       167.20         48       United Arab Emirates<	21	Pakistan	21.10	
25 Vietnam	23	China	21.40	
26 India	24	Peru	27.70	
27 Thailand       .44.60         28 Indonesia       .45.20         29 Egypt       .48.90         30 Mexico       .50.20         31 Venezuela       .51.20         32 Saudi Arabia       .55.90         33 Korea, Rep       .56.50         34 South Africa       .61.80         35 Czech Republic       .65.50         36 Brazil       .69.20         37 Ukraine       .70.70         38 Philippines       .84.70         39 Chile       .85.90         40 Colombia       .90.20         41 Kuwait       .90.40         42 Slovak Republic       .93.10         43 Kazakhstan       .98.00         44 Israel       .126.20         45 Argentina       .145.10         46 Turkey       .149.40         47 Poland       .167.20         48 United Arab Emirates       .208.90         48 Bahrain       .263.30         48 Panama       .265.80	25	Vietnam	30.40	
28 Indonesia	26	India	33.30	
29 Egypt				
30 Mexico				
31 Venezuela		071		
32 Saudi Arabia				
33 Korea, Rep				
34 South Africa				
35 Czech Republic		•		
36 Brazil				
37 Ukraine		•		
38 Philippines				
39 Chile				
40 Colombia 90.20 41 Kuwait 90.40 42 Slovak Republic 93.10 43 Kazakhstan 98.00 44 Israel 126.20 45 Argentina 145.10 46 Turkey 149.40 47 Poland 167.20 48 United Arab Emirates 208.90 48 Hungary 259.90 48 Bahrain 263.30 48 Panama 265.80				
41 Kuwait				
42 Slovak Republic				
43 Kazakhstan				
44 Israel				
45 Argentina				
46 Turkey				
47 Poland		•		
48 United Arab Emirates 208.90 48 Hungary 259.90 48 Bahrain 263.30 48 Panama 265.80				
48       Hungary       259.90         48       Bahrain       263.30         48       Panama       265.80				
48 Bahrain				
48 Panama265.80				

**SOURCE**: Moody's *Statistical Handbook* (May 2007)

#### **Current account balance to GDP**

Current account balance to GDP provides an indicator of the difficulty a country might have in mobilizing the foreign exchange necessary for debt service  $\mid$  2006

RANK	COUNTRY/ECONOMY HARD DATA	
1	Kuwait46.10	
2	Saudi Arabia33.10	
3	Singapore26.50	
4	United Arab Emirates22.60	
5	Malaysia17.10	
6	Norway16.70	
7	Switzerland	
8	Venezuela14.90	
9	Bahrain12.80	
10	Netherlands	
11	China	
12	Hong Kong SAR9.30	
12	Russian Federation9.30	
14	Sweden7.40	
15	Finland5.80	-
16	Israel4.90	
17	Germany4.70	
18	Philippines4.30	
19	Argentina3.80	
19	Japan3.80	
21	Austria3.70	
22	Chile3.60	
23	Indonesia2.90	
24	Peru2.60	
25	Belgium2.30	
26	Canada1.70	
27	Egypt1.60	
27	Thailand1.60	
29	Brazil1.30	
30	Vietnam0.70	Í
31		
	Korea, Rep0.60	
32	Kazakhstan	
33	Mexico0.20	
34	Ukraine1.60	
35	France2.00	
35	Italy2.00	
37	Colombia2.10	
38	Poland2.30	
39	Ireland2.60	
40	India2.90	
41	United Kingdom3.40	
42	Pakistan3.90	
43	Czech Republic4.20	
44	Panama4.60	
45	Australia5.40	
46	Hungary5.80	
47	South Africa6.40	
48	United States6.50	
49	Turkey7.90	
50	Slovak Republic8.30	
51	Spain8.50	
n/a	•	
II/d	Nigerian/a	

**SOURCE:** Moody's *Statistical Handbook* (May 2007)

#### **Dollarization vulnerability indicator**

3.04

This variable measures the risk of payment crisis and default originating from the presence of a large amount of dollarization in the domestic banking system  $\mid$  2006

RANK	COUNTRY/ECONOMY HARD DATA	
1	Australian/a	
1	Austrian/a	
1	Belgiumn/a	
1	Brazil0.00	
1	Canadan/a	
1	Colombia0.00	
1	Finlandn/a	
1	Francen/a	
1	Germanyn/a	
1	Hong Kong SARn/a	
1	Irelandn/a	
1	Italyn/a	
1	Japann/a	
1	Netherlandsn/a	
1	Norwayn/a	
1	Singaporen/a	
1	Spainn/a	
1	Swedenn/a	
1	Switzerlandn/a	
1	United Kingdomn/a	
1	United Statesn/a	
22	Venezuela1.30	I
23	South Africa5.20	
24	India7.10	
25	Mexico7.90	
26	Russian Federation12.30	
27	Argentina17.00	
28	Pakistan23.40	
29	Kazakhstan24.80	
30	Indonesia34.10	
31	Philippines46.00	
32	Ukraine53.60	
33	Peru60.50	
34	Vietnam70.00	
35	Egypt79.20	
n/a	Bahrainn/a	
n/a	Chilen/a	
n/a	Chinan/a	
n/a	Czech Republicn/a	
n/a	Hungaryn/a	
n/a	Israel	
n/a	Korea, Repn/a	
n/a	Kuwaitn/a	
n/a	Malaysian/a	
n/a n/a	Nigerian/a Panaman/a	
n/a n/a	Polandn/a	
n/a	Saudi Arabian/a	
n/a n/a	Slovak Republicn/a	
n/a n/a	Thailandn/a	
n/a	Turkevn/a	
n/a	United Arab Emiratesn/a	
11/4	5d / 11db Emmates	

**SOURCE:** Moody's *Statistical Handbook* (May 2007)

### 3.05A

#### **External debt to GDP (developing economies)**

External debt as a percentage of GDP | 2006

RANK	COUNTRY/ECONOMY HARD DATA	
1	Saudi Arabia9.60	
2	China12.80	
3	India16.30	
4	Kuwait17.70	
5	Brazil18.00	
6	Mexico19.00	
7	South Africa22.40	
8	Venezuela24.30	
9	Egypt27.50	
10	Pakistan27.70	
11	Korea, Rep28.30	
12	Colombia29.40	
13	Thailand29.60	
14	Peru30.30	
15	Russian Federation31.40	
16	Chile32.70	
17	Malaysia34.10	
18	Vietnam34.60	
19	Indonesia37.90	
20	Czech Republic41.10	
21	Ukraine46.40	
22	Poland49.20	
23	Philippines50.30	
24	Argentina51.00	
25	Turkey52.60	
26	United Arab Emirates53.00	
27	Slovak Republic53.20	
28	Panama54.30	
29	Israel60.30	
30	Kazakhstan66.00	
31	Bahrain74.50	
32	Hungary98.60	
n/a	Nigerian/a	

SOURCE: Moody's Statistical Handbook (May 2007)

#### 3.05B

#### Net international investment position to GDP (advanced economies)

Net international investment position as a percentage of GDP | 2006

RANK	COUNTRY/ECONOMY HARD DATA	
1	Switzerland121.30	
2	Singapore109.50	
3	Norway63.90	
4	Japan42.50	
5	Germany25.50	-
6	Netherlands13.80	
7	France4.80	
8	Finland12.20	
9	Canada12.60	
10	Sweden18.50	
11	United States19.24	-
12	United Kingdom21.90	
13	Australia60.60	
14	Spain60.80	
n/a	Austrian/a	
n/a	Belgiumn/a	
n/a	Hong Kong SARn/a	
n/a	Irelandn/a	
n/a	Italyn/a	

SOURCE: Moody's Statistical Handbook (May 2007)

#### **Activity restrictions for banks**

This index measures the degree to which banks are allowed to engage in fee-based activities rather than more traditional interest spread-based activities | 2006

RANK	COUNTRY/ECONOMY HARD DATA	
1	Indonesia16.00	
2	Chile14.00	
3	Thailand13.00	
4	Czech Republic12.00	
4	Italy12.00	
4	Peru12.00	
4	Saudi Arabia12.00	
8	Argentina11.00	
8	Hungary11.00	
8	India11.00	
8	Japan11.00	
8	'	
	Korea, Rep11.00	
8	Malaysia11.00	
8	Panama11.00	
8	United States11.00	
16	Australia10.00	
16	Bahrain	
16	Kuwait10.00	
16	Singapore10.00	
16	South Africa10.00	
16	Sweden10.00	
22	Brazil9.00	
22	Finland9.00	
22	France9.00	
25	Canada8.00	
25	Poland8.00	
25	Russian Federation8.00	
25	Switzerland8.00	
29	Austria7.00	
29	Belgium7.00	
29	Germany7.00	
29	Ireland7.00	
29	Philippines7.00	
29	Spain7.00	
35	Netherlands6.00	
36	Mexico5.00	
37	United Kingdom4.00	
n/a	Chinan/a	
n/a	Colombian/a	
n/a	Egyptn/a	
n/a	Hong Kong SARn/a	
n/a	Israeln/a	
n/a	Kazakhstann/a	
n/a	Nigerian/a	
n/a	Norwayn/a	
n/a	Pakistann/a	
n/a	Slovak Republicn/a	
n/a	Turkeyn/a	
n/a	Ukrainen/a	
n/a	United Arab Emiratesn/a	
n/a	Venezuelan/a	
n/a	Vietnamn/a	
	, -	

**SOURCE**: James Barth, Gerard Caprio, and Ross Levine. 2007. "Bank Regulations Are Changing: But for Better or Worse?" World Bank Discussion Paper, Washington, DC

#### **Entry restrictions for banks**

3.07

This index measures the extent of procedures required for opening a bank and maintaining a banking license  $\,\mid\,$  2006

RANK	COUNTRY/ECONOMY	HARD DATA	
1	Austria	8.00	
1	Bahrain		
1	Belgium		
1	Brazil		
1	Canada		
1	Czech Republic		
1	Hungary		
1	Indonesia		
1	Ireland		
1	Italy		
1	Kuwait		
1	Malaysia		
1	Mexico		
1	Panama		
1	Philippines		
1	Poland		
1	Russian Federation		
1	Saudi Arabia		
1			
1	Singapore South Africa		
1	Switzerland		
1	Thailand		
1	United Kingdom		
1	· ·		
25	United States		
	Argentina		
25 25	Australia		
25 25	France		
25	Japan		
25	Netherlands		
25	Spain		
25	Venezuela		
33	Germany		
33	India		
33	Korea. Rep		
33	Peru		
33	Sweden		
38	Chile		
n/a	China		
n/a	Colombia		
n/a			
n/a	Egypt Hong Kong SAR		
n/a	Israel		
n/a	Kazakhstan		
n/a	Nigeria		
n/a	Norway		
n/a	Pakistan		
, .			
n/a n/a	Slovak Republic		
n/a n/a	Turkey Ukraine		
n/a n/a	United Arab Emirates .		
, .	Vietnam	, .	
n/a	victiaiii	II/d	

**SOURCE**: James Barth, Gerard Caprio, and Ross Levine. 2007. "Bank Regulations Are Changing: But for Better or Worse?" World Bank Discussion Paper, Washington, DC

#### **Capital restrictions for banks**

This index is based on different measures of capital regulatory stringency  $\mid$  2006

	COUNTRY/ECONOMY HARD DATA	
1	Kuwait9.00	
1	South Africa9.00	
1	Spain9.00	
4	Bahrain8.00	
4	France8.00	
4	Hungary8.00	
4	India8.00	
8	Germany7.00 Indonesia7.00	
8	Russian Federation7.00	
8	Singapore7.00	
8	Thailand7.00	
13	Chile6.00	
13	Japan6.00	
13	Philippines6.00	
13	United Kingdom6.00	
13	United States6.00	
18	Argentina5.00	
18	Austria5.00	
18	Brazil5.00	
18	Czech Republic5.00	
18	Netherlands5.00	
18	Panama5.00	
18	Saudi Arabia5.00	
25	Canada4.00	
25	Finland4.00	
25	Korea, Rep4.00	
28	Belgium3.00	
28	Poland3.00	
28	Venezuela3.00	
31	Ireland2.00	
31	Peru2.00	
n/a	Australian/a	
n/a	Chinan/a	
n/a	Colombian/a	
n/a	Egyptn/a	
n/a	Hong Kong SARn/a	
n/a	Israeln/a	
n/a	Italyn/a	
n/a	Kazakhstann/a	
n/a	Malaysian/a	
n/a	Mexicon/a	
n/a	Nigerian/a	
n/a	Norwayn/a	
n/a	Pakistann/a	
n/a	Slovak Republicn/a	
n/a	Swedenn/a	
n/a	Switzerlandn/a	
n/a	Turkeyn/a	
n/a	Ukrainen/a	
n/a	United Arab Emiratesn/a	
n/a	Vietnamn/a	

**SOURCE**: James Barth, Gerard Caprio, and Ross Levine. 2007. "Bank Regulations Are Changing: But for Better or Worse?" World Bank Discussion Paper, Washington, DC

#### 3.09

#### Official supervisory power

This index measures the extent to which official supervisory authorities have the authority to take specific actions to prevent and correct problems  $\mid$  2006

RANK	COUNTRY/ECONOMY	HARD DATA	
1	Brazil	14.00	
1	Hungary	14.00	
1	Switzerland	14.00	
4	Singapore	13.50	
5	Australia	13.00	
5	Ireland	13.00	
5	Malaysia	13.00	
5	Saudi Arabia	13.00	
5	United States	13.00	
5	Venezuela	13.00	
11	Belgium	12.50	
11	Korea, Rep	12.50	
13	Bahrain		
13	Japan	12.00	
13	Panama		
13	Peru		
13	Thailand		
18	Mexico	11.50	
18	Spain	11.50	
20	Argentina	11.00	
20	Chile	11.00	
22	Austria	10.50	
22	South Africa	10.50	
24	Czech Republic	10.00	
24	India	10.00	
26	Poland	9.50	
27	Finland	9.00	
27	France	9.00	
27	Germany	9.00	
27	United Kingdom	9.00	
31	Russian Federation	8.50	
32	Italy	7.50	
33	Canada	7.00	
n/a	China	n/a	
n/a	Colombia	n/a	
n/a	Egypt	n/a	
n/a	Hong Kong SAR	n/a	
n/a	Indonesia	n/a	
n/a	Israel	n/a	
n/a	Kazakhstan	n/a	
n/a	Kuwait	n/a	
n/a	Netherlands	n/a	
n/a	Nigeria		
n/a	Norway	n/a	
n/a	Pakistan		
n/a	Philippines	n/a	
n/a	Slovak Republic	n/a	
n/a	Sweden		
n/a	Turkey	, -	
n/a	Ukraine		
n/a	United Arab Emirate		
n/a	Vietnam	n/a	

**SOURCE**: James Barth, Gerard Caprio, and Ross Levine. 2007. "Bank Regulations Are Changing: But for Better or Worse?" World Bank Discussion Paper, Washington, DC

#### Private monitoring of the banking industry

This index measures the degree to which the private sector monitors the banking industry (higher percentage values indicate greater transparency)  $\mid$  2006

RANK	COUNTRY/ECONOMY	HARD DATA
1	South Africa	9.00
2	Australia	8.00
2	Bahrain	8.00
2	Japan	8.00
2	Mexico	8.00
2	Netherlands	8.00
2	Singapore	
2	Spain	
2	Thailand	
10	Argentina	
10	Brazil	
10	France	
10	Germany	
10	Hungary	
10	Indonesia	
10	Ireland	
10	Italy	
10	Korea, Rep	7.00
10	Malaysia	7.00
10	Panama	7.00
10	United Kingdom	7.00
10	United States	7.00
23	Belgium	6.00
23	Chile	6.00
23	Czech Republic	
23	Finland	6.00
23	Russian Federation	
23	Sweden	
23	Switzerland	
30	Peru	
n/a	Austria	
n/a	Canada	
n/a	China	
n/a	Colombia	
n/a	Egypt	
n/a	Hong Kong SAR	
n/a	India	
n/a	Israel	, -
n/a	Kazakhstan	n/a
n/a	Kuwait	n/a
n/a	Nigeria	n/a
n/a	Norway	n/a
n/a	Pakistan	n/a
n/a	Philippines	n/a
n/a	Poland	
n/a	Saudi Arabia	
n/a	Slovak Republic	
n/a	Turkey	
n/a	Ukraine	
n/a n/a	United Arab Emirat	
, -		
n/a	Venezuela	, -
n/a	Vietnam	n/a

**SOURCE**: James Barth, Gerard Caprio, and Ross Levine. 2007. "Bank Regulations Are Changing: But for Better or Worse?" World Bank Discussion Paper, Washington, DC

#### Frequency of banking crises

3.11

This variable is calculated based on the number of banking crises that countries experienced from  $1974\ to\ 2003$ 

RANK	COUNTRY/ECONOMY HARD DATA	
1	Austria0.00	
1	Bahrain0.00	
1	Belgium0.00	
1	Ireland0.00	
1	Kazakhstan0.00	
1	Netherlands0.00	
1	Pakistan	
1	Poland0.00	
1	Saudi Arabia0.00	
1	Switzerland0.00	
1	United Arab Emirates0.00	
12	Australia1.00	
12	Canada1.00	
12	China1.00	
12	Colombia1.00	
12	Czech Republic1.00	
12	Finland1.00	
12	France1.00	
12	Germany1.00	
12	Hungary1.00	
12	India1.00	
12	Israel1.00	
12	Italy1.00	
12	Japan1.00	
12	Korea, Rep1.00	
12	Kuwait1.00	
12	Nigeria1.00	
12	Norway1.00	
12	Panama1.00	
12	Peru1.00	
12	Singapore1.00	
12	Slovak Republic1.00	
12	Spain1.00	
12	Sweden1.00	
12	Ukraine1.00	
12	United States1.00	
12	Vietnam1.00	
38	Brazil2.00	
38	Chile2.00	
38	Egypt2.00	
38	Indonesia2.00	
38	Malaysia2.00	
38	Mexico2.00	
38	Philippines2.00	
38	Russian Federation2.00	
38	South Africa2.00	
38	Thailand2.00	
38	United Kingdom2.00	
38	Venezuela2.00	
50	Hong Kong SAR3.00	
50	Turkey3.00	
52	Argentina4.00	
02	J 1100	

**SOURCE:** Gerard Caprio and Daniela Klingebiel. 2003. "Episodes of Systemic and Borderline Financial Crises." Washington, DC: World Bank

#### **Stability Index**

This variable measures the asset quality, capital adequacy, liquidity and sensitivity to market risk in a banking system  $\mid 2005$ 

	COUNTRY/ECONOMY HARD DATA	
1	India7.21	
2	Nigeria	
3	Finland	
4	United States5.76	
5	Mexico5.73	
6	Switzerland5.60	
7	South Africa5.59	
8	Japan	
9 10	Ireland5.46 Slovak Republic5.45	
11	Hong Kong SAR5.45	
12		
13	Turkey	
14	Sweden	
15	Pakistan	
16	United Kingdom5.30	
17	Singapore5.27	
18	Canada5.24	
19	Netherlands5.21	
20	Australia5.20	
21	Panama5.18	
22	Germany5.12	
23	Austria5.10	
24	Spain5.04	
25	Colombia4.94	
26	Chile4.92	
27	France4.71	
28	Argentina4.71	
29	Malaysia4.64	
30	Hungary4.63	
31	Venezuela4.62	
32	Kuwait4.61	
33	Peru4.54	
34	Thailand4.48	
35	Norway4.47	
36	Czech Republic4.43	
37	Russian Federation4.38	
38	Italy4.31	
39	Egypt4.30	
40	Indonesia	
41	Belgium4.19	
42	China4.16	
43	Korea, Rep4.15	
44	Israel	
45	Brazil3.74	
46 47	Philippines3.44	
47	Kazakhstan       2.89         Ukraine       2.34	
48 n/a	Bahrainn/a	
n/a n/a	Saudi Arabian/a	
n/a	United Arab Emiratesn/a	
n/a	Vietnamn/a	
1 1/ U		

**SOURCE:** World Bank, Financial Indicators website www.financial-indicators.org

#### 3.13

#### **Cumulative real estate appreciation**

Percentage average annual appreciation of national real estate prices deflated with the local GDP deflator for the period 2001–05  $\,$ 

RANK	COUNTRY/ECONOMY HARD DATA	
1	Russian Federation68.40	
2	Japan26.30	
3	China13.10	
4	Indonesia10.90	
5	Germany4.60	
6	Malaysia4.30	
7	Israel2.40	
8	Philippines3.90	
9	Colombia	
10	Thailand6.10	
11	Switzerland	
12	Singapore8.50	
13	Norway8.70	
14	Czech Republic9.50	
15	Netherlands10.60	
16	Austria	
17	Canada19.60	
18	Korea, Rep25.90	
19	Italy26.80	
20	United States31.30	
21	Finland32.90	
22	Hungary35.90	
23	Sweden36.30	
23	Australia37.30	
25	Hong Kong SAR38.00	
26	Ireland38.10	
27	Belgium42.90	
28	Spain49.00	
29	United Kingdom49.60	
30	France	
31	South Africa74.20	
n/a	Argentinan/a	
n/a	Bahrainn/a	
n/a	Braziln/a	
n/a	Chilen/a	
n/a	Egyptn/a	
n/a	Indian/a	
n/a	Kazakhstann/a	
n/a	Kuwaitn/a	
n/a	Mexicon/a	
n/a	Nigerian/a	
n/a	Pakistann/a	
n/a	Panaman/a	
n/a	Perun/a	
n/a	Polandn/a	
n/a	Saudi Arabian/a	
n/a	Slovak Republicn/a	
n/a	Turkeyn/a	
n/a	Ukrainen/a	
n/a	United Arab Emiratesn/a	
n/a	Venezuelan/a	
n/a	Vietnamn/a	
11/0	*10t11a111	

**SOURCE:** Joshua Aizenman and Yothin Jinjarak. 2008. "Current Account Patterns and National Real Estate Markets." NBER Working Paper No. 13921. Cambridge, MA: NBER

#### **Local currency sovereign rating**

This variable measures the probability that a country will pay its local currency borrowing in a full and timely manner | 2006

RANK	COUNTRY/ECONOMY HARD DATA	
1	Australia20.00	
1	Austria20.00	
1	Canada20.00	
1	Finland20.00	
1	France20.00	
1	Germany20.00	
1	Ireland20.00	
1	Netherlands20.00	
1	Norway20.00	
1	Singapore20.00	
1	Spain20.00	
1	Sweden20.00	
1	Switzerland20.00	
1	United Kingdom20.00	
1	United States20.00	
16	Belgium19.00	
17	Chile18.00	
17	United Arab Emirates18.00	
19	Hong Kong SAR17.50	
20	Japan17.18	
21	Italy16.56	
22	Israel16.00	
22	Korea, Rep16.00	
22	Kuwait	
22	Malaysia16.00	
22	Saudi Arabia16.00	
22	South Africa16.00	
28	Czech Republic15.30	
29	Bahrain15.00	
29	Mexico15.00	
29	Slovak Republic15.00	
29	Thailand15.00	
33	China14.59	
34	Poland14.10	
35	Russian Federation13.32	
36	Hungary13.23	
37	Kazakhstan12.28	
38	Colombia12.25	
39	Peru11.22	
40	Egypt11.00	
41	India10.71	
42	Philippines9.97	
43	Brazil9.91	
44	Indonesia9.56	
45	Vietnam9.52	
46	Turkey	
47	Pakistan9.01	
48	Nigeria9.00	
48	Panama9.00	
48	Ukraine9.00	
51	Venezuela	
52	Argentina	
JZ	Argeriura0.00	

**SOURCE:** Standard and Poor's, "Sovereign Ratings History Since 1975" (January, 2007)

#### Foreign currency sovereign rating

3.15

This variable measures the probability that a country will pay its foreign currency borrowing in a full and timely manner | 2006

RANK	COUNTRY/ECONOMY	HARD DATA	
1	Australia	20.00	
1	Austria	20.00	
1	Canada	20.00	
1	Finland	20.00	
1	France	20.00	
1	Germany		
1	Ireland	20.00	
1	Netherlands	20.00	
1	Norway	20.00	
1	Singapore		
1	Spain	20.00	
1	Sweden	20.00	
1	Switzerland	20.00	
1	United Kingdom	20.00	
1	United States	20.00	
16	Belgium	19.00	
17	United Arab Emirates	18.00	
18	Hong Kong SAR	17.50	
19	Japan	17.18	
20	Italy	16.56	
21	Kuwait	16.00	
22	Saudi Arabia	15.81	
23	Chile	15.03	
24	Bahrain	15.00	
24	Korea, Rep	15.00	
24	Slovak Republic	15.00	
27	China	14.59	
28	Czech Republic	14.30	
29	Israel	14.00	
29	Malaysia	14.00	
31	Hungary	13.23	
32	Poland	13.10	
33	South Africa	13.00	
33	Thailand		
35	Russian Federation	12.32	
36	Mexico	12.00	
37	Kazakhstan		
38	India		
39	Peru	9.38	
40	Colombia		
41	Panama		
42	Brazil		
43	Vietnam		
44	Turkey		
45	Nigeria		
45	Ukraine		
47	Venezuela		
48	Philippines		
49	Indonesia		
50 E1	Pakistan		
51 52	Egypt		
52	Argentina	0.00	

**SOURCE**: Standard and Poor's, "Sovereign Ratings History Since 1975" (January, 2007)



# Data Tables

# Section IV Banks

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304

#### 4.01

#### Size index

This index is an average of scaled indicators measuring the size of the banking sector  $\mid$  2005

RANK	COUNTRY/ECONOMY	HARD DATA	
1	Hong Kong SAR	10.77	
2	Canada		
3	Switzerland		
4	United States		
5	Netherlands		
6	China		
7	Malaysia		
8	United Kingdom		
9	Spain		
10	Korea, Rep		
11	Norway		
12	Singapore		
13	Thailand		
14	Israel		
15	Australia		
16	Germany		
17	Ireland		
18	Japan		
19	Austria		
20	Sweden		
21	Italy		
22	France		
23	Saudi Arabia		
24	Vietnam		
25	South Africa	6.10	
26	Belgium	6.07	
27	Kuwait	6.04	
28	Finland	5.98	
29	Chile	5.74	
30	Panama	5.60	
31	Indonesia	5.52	
32	Hungary	5.42	
33	Czech Republic	5.28	
34	Bahrain	5.10	
35	Slovak Republic	5.09	
36	Ukraine	5.03	
37	Poland	4.97	
38	Kazakhstan	4.91	
39	Philippines	4.89	
40	Russian Federation	4.85	
41	Nigeria	4.84	
42	Pakistan	4.79	
43	Peru	4.78	
44	Colombia		
45	Egypt		
46	Venezuela		
47	Turkey		
48	India		
49	Mexico		
50	Brazil		
51	Argentina		
n/a	United Arab Emirates	sn/a	

**SOURCE:** World Bank, Financial Indicators website www.financial-indicators.org

#### 4.02

#### **Efficiency index**

Average of the subdimension indexes measuring profitability, efficiency, and competitiveness | 2005

RANK	COUNTRY/ECONOMY	HARD DATA	
1	United Arab Emirates	s6.84	
2	United States	6.65	
3	Indonesia	6.35	
4	United Kingdom	6.16	
5	Pakistan		
6	Japan		
7	Germany		
8	Malaysia		
9	France		
10	Ireland		
11	Kuwait		
12	Belgium		
13	Korea, Rep		
14	China		
15	Thailand		
16	Egypt		
17	Saudi Arabia		
18	Ukraine		
19	Italy		
20	South Africa		
21	Vietnam		
22	Turkey		
23	Austria		
24	Spain		
25	Venezuela		
26	Panama		
27	Colombia		
28	Nigeria		
29	Hungary		
30	Kazakhstan		
31	Canada		
32	Slovak Republic		
33	Philippines		
34	Poland		
35	Hong Kong SAR		
36	India		
37	Norway		
38	Russian Federation		
39	Australia	4.54	
40	Chile	4.53	
41	Israel	4.40	
42	Bahrain	4.33	
43	Netherlands	4.31	
44	Mexico	4.19	
45	Sweden	4.15	
46	Singapore		
47	Finland		
48	Argentina	3.91	
49	Czech Republic		
50	Switzerland		
51	Brazil	3.69	
52	Peru	3.09	

**SOURCE:** World Bank Financial Indicators, available at www.financial-indicators.org; James Barth, Gerard Caprio, and Ross Levine. 2007. "Bank Regulations Are Changing: But for Better or Worse?" World Bank Discussion Paper, Washington, DC

#### **Public ownership of banks**

Percentage of the banking system's assets that is in banks that are 50 percent or more government owned  $\mid$  2005

	,	ARD DATA	
1	Australia		
1	Belgium		
1	Canada		
1	Finland		
1	Hungary		
1	Malaysia		
1	Singapore		
1	South Africa		
1	Spain		
1	Sweden		
1	United States		
12	Austria		
13	France		
14	Bahrain		
15	Czech Republic		
16	Netherlands		_
17	Italy		
18	Venezuela		
19	Switzerland		
20	Philippines		
21	Panama		
22	Peru		
23	Thailand		
24	Chile		
25	Slovak Republic		
26	Korea, Rep		_
27	Saudi Arabia		
28 29	Poland Russian Federation		
30	Germany		
31	Argentina		
32	Brazil		
33	India		
n/a	China		
n/a	Colombia		
n/a	Egypt		
n/a	Hong Kong SAR		
n/a	Indonesia		
n/a	Ireland		
n/a	Israel	n/a	
n/a	Japan		
n/a	Kazakhstan	n/a	
n/a	Kuwait	n/a	
n/a	Mexico	n/a	
n/a	Nigeria	n/a	
n/a	Norway	n/a	
n/a	Pakistan	n/a	
n/a	Turkey	n/a	
n/a	Ukraine	n/a	
n/a	United Arab Emirates	n/a	
n/a	United Kingdom	n/a	
n/a	Vietnam	n/a	

**SOURCE**: James Barth, Gerard Caprio, and Ross Levine. 2007. "Bank Regulations Are Changing: But for Better or Worse?" World Bank Discussion Paper, Washington, DC; associated World Bank Survey III database, available at http://go.worldbank.org/SNUSW978P0

#### Public credit registry coverage

4.04

Percentage of adults covered by a public credit registry | 2007

RANK	COUNTRY/ECONOMY HARD D	ATA
1	Belgium57	20
2	China49	
3	Spain44	
4	Malaysia44	
5	Chile26	
6	Argentina25	
7	France24	
8	Peru20	
9	Indonesia20	
10	Brazil17	
11	Italy11	
	,	
12	Turkey10	
13	Vietnam9	
14	Pakistan4	<u></u>
15	Czech Republic4	
16	Egypt1	
17	United Arab Emirates1	
18	Austria1	
19	Slovak Republic1	.20
20	Germany0	.70 <b>I</b>
21	Australia0	.00
21	Canada0	.00
21	Colombia0	.00
21	Finland0	.00
21	Hong Kong SAR0	.00
21	Hungary0	.00
21	India0	.00
21	Ireland0	.00
21	Israel0	.00
21	Japan0	.00
21	Kazakhstan0	.00
21	Korea, Rep0	.00
21	Kuwait0	.00
21	Mexico0	.00
21	Netherlands0	
21	Nigeria0	
21	Norway0	
21	Panama0	
21	Philippines0	
21	Poland0	
21	Russian Federation0	
21	Saudi Arabia0	
21	Singapore0	
21	South Africa0	
21	Sweden0	
21	Switzerland0	
21	Thailand0	
21	Ukraine0	
21	United Kingdom0	
21	United States0	
	Venezuela0	
21		
n/a	Bahrain	nya

306

4.05

#### Private credit bureau coverage

Percentage of adults covered by a private credit registry | 2007

RANK	COUNTRY/ECONOMY	HARD DATA	
1	Argentina		
1	Australia		
1			
1	Canada		
1	Norway		
1	Sweden		
1	United States		
8	Germany		
9	Israel		
10	United Kingdom		
11	Netherlands		
12	Korea, Rep		
13	Italy		
14	Japan		
15	Hong Kong SAR		
16	Mexico		
17	Slovak Republic		
18	Czech Republic		
19	South Africa		
20	Poland		
21	Brazil		
22	Singapore		
23	Panama		
24	Austria		
25	Colombia		
26	Chile		
27	Peru		
28	Thailand		
29	Switzerland		
30	Saudi Arabia		
31	Finland		
32	Kuwait		
33	Kazakhstan		
34	India		
35	Spain		
36	Hungary		
37	Philippines		
38	Russian Federation		
39	Turkey		
40	Pakistan		
41	Indonesia		
42	Belgium		
42	China		
42	France		
42	Nigeria		
42	Ukraine		
42	United Arab Emira		
42	Venezuela		
42	Vietnam		
n/a	Bahrain	, -	
n/a	Egypt		
n/a	Malaysia	n/a	

SOURCE: The World Bank, Doing Business 2008

#### 4.06

#### **Credit Information Index**

Indexed value for the amount of credit information available from either a public registry or a private bureau | 2007

RANK	COUNTRY/ECONOMY	HARD DATA	
1	Argentina	6.00	
1	Austria		
1	Canada		
1	Germany		
1	Japan		
1	Malaysia		
1	Mexico		
1	Panama		
1	Peru		
1	Saudi Arabia		
1	South Africa		
1	Spain		
1	•		
1	United Kingdom United States		
15	Australia		
15	Brazil		
15 15	Chile		
15	Czech Republic		
15	Finland		
15	Hong Kong SAR		
15	Hungary		
15	Ireland		
15	Israel		
15	Italy		
15	Korea, Rep		
15	Netherlands		
15	Switzerland		
15	Thailand		
15	Turkey		
31 31	Belgium		
	China		
31	Egypt		
31	FranceIndia		
31			
31	Kazakhstan		
31	Kuwait		
31	Norway		
31	Pakistan		
31			
31	Russian Federation		
31	Singapore		
31	Slovak Republic		
31	Sweden		
45 45	Indonesia		
45 45	Philippines		
45	Vietnam		
48	United Arab Emirates		
49	Nigeria		
49	Ukraine		
49	Venezuela		
n/a	Bahrain	n/a	

## Data Tables

# Section V Non-banks

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#### **IPO** market share

Percentage of world IPOs (initial public offerings) issued in a given country as measured by US dollars  $\mid$  2006

BANK	COUNTRY/ECONOMY HARD DA	та
1	France31.	
2	China18.	
3	United States16.	
4	Japan6.	
5	United Kingdom6.	
6	Russian Federation6.3	
7	Germany3.	
8	Brazil	
9	Italy2.	
10	Hong Kong SAR2.	
11	Korea, Rep2.:	
12	Australia2.	
13	India1.	
14	Netherlands1.	74 ■
15	Spain1.4	43 ■
16	Switzerland1.3	36 ■
17	Canada1.	27
18	Kazakhstan1.	16 ■
19	Norway1.	11 🛮
20	Austria1.	05 ■
21	Saudi Arabia0.	99 ■
22	Singapore0.	37 ■
23	Thailand0.	78 ■
24	Mexico0.	68 <b>I</b>
25	Ireland0.	66 <b>I</b>
26	United Arab Emirates0.	66 <b>I</b>
27	Sweden0.	59 <b>I</b>
28	Belgium0.	40 <b>I</b>
29	South Africa0.3	32 <b>I</b>
30	Finland0.3	
31	Poland0.3	
32	Turkey0.3	
33	Argentina0.3	
34	Philippines0.	
35	Nigeria0.	
36	Bahrain0.	
37	Czech Republic0.	
38	Indonesia0.	
39	Malaysia0.	
40	Egypt0.	
41 42	Chile0.	
42	Vietnam0.	
44	Ukraine0.	
44	Slovak Republic0.	
n/a	Colombiar	
n/a	Hungaryr	
n/a	Kuwaitr	
n/a	Pakistanr	
n/a	Panamar	
n/a	Perur	
n/a	Venezuelar	
,		

SOURCE: Thomson Financial SDC Platinum, retrieved December 2007

## 5.02

## **IPO** proceeds amount

Total IPO (initial public offering) proceeds as a percentage of GDP  $\,\mid\,$  2006

RANK	COUNTRY/ECONOMY	HARD DATA	
1	Kazakhstan	4.41	
2	France		
3	Hong Kong SAR		
4	Bahrain		
5	China		
6	Singapore		
7	Russian Federation		
8	United Arab Emirates		
9	Thailand		
10	Norway		
11	Switzerland		
12	Austria		
13	Ireland		
14	United Kingdom		
15	Saudi Arabia		
16	Australia		
17	Netherlands		
18	Brazil		
19	Korea, Rep		
20	Philippines		
21	India		
22	Japan		
23	Finland	0.42	
24	Sweden	0.41	
25	Italy	0.39	
26	Argentina	0.37	
27	Nigeria	0.37	
28	Germany	0.34	
29	South Africa	0.34	
30	United States	0.34	
31	Spain	0.31	
32	Canada	0.27	
33	Belgium	0.27	
34	Poland	0.25	
35	Mexico	0.22	
36	Egypt	0.21	
37	Turkey		
38	Czech Republic		
39	Vietnam		
40	Malaysia		
41	Chile		
42	Israel		
43	Indonesia		
44	Slovak Republic		
45	Ukraine		
n/a	Colombia	, -	
n/a	Hungary		
n/a	Kuwait		
n/a	Pakistan		
n/a	Panama		
n/a	Peru		
n/a	Venezuela	n/a	

**SOURCE:** IPO information from Thomson Financial SDC Platinum, retrieved December 2007, GDP data from Moody's Investors Service

#### **Share of world IPOs**

Number of IPO (initial public offering) issues as a percentage of total global number of issues  $\mid 2006$ 

		RD DATA
1	Japan	
2	United States	
3	United Kingdom	.10.44
4	China	9.38
5	Australia	8.03
6	India	5.11
7	France	4.97
8	Canada	3.55
9	Germany	3.05
10	Malaysia	2.77
11	Hong Kong SAR	2.56
12	Singapore	2.13
13	Brazil	
14	Italy	1.78
14	Korea, Rep	
16	Poland	
17	Norway	
18	Russian Federation	
19	Netherlands	
20	Sweden	
21	Belgium	
22	Spain	
23	Saudi Arabia	0.64
24	Austria	
24	Switzerland	0.57
26	Ireland	0.43
26	Israel	0.43
26	United Arab Emirates	0.43
29	Philippines	0.36
29	Thailand	0.36
29	Turkey	0.36
32	Finland	
32	Indonesia	
34	Argentina	
34	Kazakhstan	
34	Mexico	
34	South Africa	
38	Czech Republic	
39	Bahrain	0.07
39	Chile	
39	Egypt	0.07
39	Nigeria	0.07
39	Slovak Republic	0.07
39	Ukraine	0.07
39	Vietnam	0.07
n/a	Colombia	n/a
n/a	Hungary	
n/a	Kuwait	
n/a	Pakistan	
n/a n/a	Panama	
, -		, -
n/a	Peru	
n/a	Venezuela	n/a

**SOURCE:** Thomson Financial SDC Platinum, retrieved December 2007

## M&A market share

5.04

Dollar value of M&A (mergers and acquisitions) occurring in a given country as a percentage of total global value | 2006

RANK	COUNTRY/ECONOMY HARD DATA	
1	United States44.40	
2	United Kingdom11.33	
3	Canada4.77	
4	France4.38	
5	Germany4.10	
6	Japan3.60	
7	Spain2.84	
8	Italy1.98	
9	Australia1.97	
10	Sweden1.61	
11	Netherlands1.61	
12	Russian Federation1.14	
13	India1.07	
14	China	
15	Korea, Rep0.82	
16		_
17	Turkey0.81	
	Hong Kong SAR0.73 Brazil	
18		
19	Switzerland0.69	
20	Norway	
21	South Africa0.49	
22	Singapore0.46	
23	Israel0.37	
24	Ireland0.32	
25	Malaysia0.30	_
26	Finland	
27	Belgium0.23	
28	Mexico	
29	Thailand	
30	Nigeria	
31	Austria0.18	
32	Poland0.18	
33	Chile0.17	
34	Hungary0.17	
35	Colombia	
36	Argentina0.13	
37	Egypt0.13	
38	Peru	
39	Panama0.07	
40	Philippines0.07	
41	Indonesia	
42	Kazakhstan	
43	Czech Republic0.06	
44	United Arab Emirates0.05	
45 46	Slovak Republic	
46 47	Bahrain	
	Venezuela0.03	
48 49	Vietnam0.02	
	Saudi Arabia0.00	
50 51	Kuwait	
51 n/a	Pakistann/a	
II/d	1 anistati	

SOURCE: Thomson Financial SDC Platinum, retrieved December 2007

#### **M&A** transaction value to GDP

This variable is the rank value of the transaction in US dollars (including the net debt of the target) as a percentage of GDP  $\mid$  2006

DANIK	COUNTRY/FOOMONAY HARR DATA	
	COUNTRY/ECONOMY HARD DATA	
1	United Kingdom14.64	
2	Sweden12.72	
3	Panama12.66	
4	Hong Kong SAR11.73	
5	Canada11.56	
6	Singapore10.45	
7	United States10.19	
8	Australia7.77	
9	Israel7.53	
10	Netherlands7.41	
11	Spain7.04	
12	Malaysia6.11	
13	Turkey6.06	
14	France5.95	
15	South Africa5.82	
16	Bahrain	
17	Switzerland5.47	
18	Norway5.29	
19	Nigeria5.15	
20	Hungary4.48	
21	Ireland4.41	
22	Germany4.27	_
23	Finland	
24 25	Egypt	
26		
27	Chile3.51 Russian Federation3.49	
28	Thailand	
29	Italy3.26	
30	Colombia3.18	
31	Peru3.08	
32	Kazakhstan2.91	
33	Korea, Rep2.66	
34	Japan2.52	
35	Slovak Republic2.39	
36	Brazil2.03	
37	Argentina1.91	
38	Philippines1.85	
39	Belgium1.76	
40	Austria1.72	
41	Poland1.61	
42	Czech Republic1.31	
43	Ukraine1.03	
44	China1.01	
45	United Arab Emirates0.96	
46	Mexico0.80	
47	Indonesia0.57	
48	Vietnam0.37	I
49	Venezuela0.27	I
50	Kuwait0.03	
51	Saudi Arabia0.01	
n/a	Pakistann/a	

**SOURCE:** Thomson Financial SDC Platinum, retrieved December 2007

## 5.06

#### Share of total number of M&A deals

Percentage of world M&A (mergers and acquisitions) deals occurring in a given country as measured by the share of total number of global M&A deals  $\mid$  2006

1 United States	RANK	COUNTRY/ECONOMY	HARD DATA	
2 United Kingdom	1	United States	33.15	
3 Japan	2			
4 Australia	3	•		
6 Germany	4	•		
6 Germany	5			
7 France				
8 Spain		,		
9 India	8			
10 China		•		
11 Malaysia				
12 Italy				
13 Sweden		*		
14 Hong Kong SAR				
15 Korea, Rep				
16 Netherlands				
17 Russian Federation				
18 Singapore				
19 Switzerland				
20 Norway		= :		
21 Brazil	20			
22 Finland		,		
24 Thailand				
24 Thailand	23	Belaium	0.77	
25 Ireland	24	•		
27 South Africa	25	Ireland	0.56	
28 Poland	26	Austria	0.51	
28 Poland	27	South Africa	0.48	
30 Czech Republic	28	Poland	0.45	
31 Israel	29	Mexico	0.43	
31 Turkey	30	Czech Republic	0.39	
33 Argentina 0.29   34 Hungary 0.28   35 Indonesia 0.23   36 Philippines 0.23   37 Ukraine 0.20   38 Chile 0.19   39 Colombia 0.13   40 Egypt 0.11   41 United Arab Emirates 0.10   42 Peru 0.09   42 Slovak Republic 0.09   44 Nigeria 0.08   45 Vietnam 0.06   46 Kazakhstan 0.05   47 Venezuela 0.05   48 Saudi Arabia 0.05   49 Panama 0.04   50 Bahrain 0.03   51 Kuwait 0.01	31	Israel	0.33	
34 Hungary	31	Turkey	0.33	
35 Indonesia	33	Argentina	0.29	I
35 Philippines	34	Hungary	0.28	
37 Ukraine	35	Indonesia	0.23	I
38 Chile	35	Philippines	0.23	l
39 Colombia	37	Ukraine	0.20	I
40 Egypt	38	Chile	0.19	I
41       United Arab Emirates       0.10 I         42       Peru       0.09 I         42       Slovak Republic       0.09 I         44       Nigeria       0.08 I         45       Vietnam       0.06 I         46       Kazakhstan       0.05 I         46       Venezuela       0.05 I         48       Saudi Arabia       0.05 I         49       Panama       0.04 I         50       Bahrain       0.03 I         51       Kuwait       0.01 I	39	Colombia	0.13	I
41       United Arab Emirates       0.10 I         42       Peru       0.09 I         42       Slovak Republic       0.09 I         44       Nigeria       0.08 I         45       Vietnam       0.06 I         46       Kazakhstan       0.05 I         46       Venezuela       0.05 I         48       Saudi Arabia       0.05 I         49       Panama       0.04 I         50       Bahrain       0.03 I         51       Kuwait       0.01 I	40	Egypt	0.11	I
42       Slovak Republic       .0.09 I         44       Nigeria       .0.08 I         45       Vietnam       .0.06 I         46       Kazakhstan       .0.05 I         46       Venezuela       .0.05 I         48       Saudi Arabia       .0.05 I         49       Panama       .0.04 I         50       Bahrain       .0.03 I         51       Kuwait       .0.01 I	41			
42       Slovak Republic       .0.09 I         44       Nigeria       .0.08 I         45       Vietnam       .0.06 I         46       Kazakhstan       .0.05 I         46       Venezuela       .0.05 I         48       Saudi Arabia       .0.05 I         49       Panama       .0.04 I         50       Bahrain       .0.03 I         51       Kuwait       .0.01 I	42			l
44 Nigeria     0.08 I       45 Vietnam     0.06 I       46 Kazakhstan     0.05 I       46 Venezuela     0.05 I       48 Saudi Arabia     0.05 I       49 Panama     0.04 I       50 Bahrain     0.03 I       51 Kuwait     0.01 I	42	Slovak Republic	0.09	
45 Vietnam	44			
46 Venezuela	45	-		l
48 Saudi Arabia	46	Kazakhstan	0.05	
49 Panama	46	Venezuela	0.05	
50 Bahrain	48	Saudi Arabia	0.05	J
51 Kuwait0.01	49	Panama	0.04	
	50	Bahrain	0.03	
n/a Pakistann/a	51	Kuwait	0.01	
	n/a	Pakistan	n/a	

SOURCE: Thomson Financial SDC Platinum, retrieved December 2007

## Insurance premiums, direct

Direct insurance premiums (life and non-life), including commissions and other charges, prior to cession to a reinsurance company (US\$ millions) | 2006

	· ·	
RANK	COUNTRY/ECONOMY HARD DATA	
1	United States1,170,100.63	
2	Japan460,261.25	
3	United Kingdom418,366.44	
4	France251,163.81	
5	Germany204,543.92	
6	Italy138,679.22	
7	Korea, Rep101,179.38	
8	Canada88,199.97	
9	China70,805.49	
10	Spain65,813.39	
11	Netherlands62,669.10	
12	Australia52,561.14	
13	Ireland47,281.32	
14	India43,032.01	
15	Switzerland41,757.58	
16	South Africa40,730.65	
17	Belgium37,888.61	
18	Brazil30,389.67	•
19	Sweden29,182.20	
20	Russian Federation21,503.57	
21	Hong Kong SAR19,842.33	
22	Austria19,567.62	
23	Finland19,308.18	
24	Norway16,248.82	
25	Mexico15,072.21	1
26	Poland11,946.51	ı
27	Singapore10,775.51	ı
28	Israel7,754.16	I
29	Malaysia7,536.73	I
30	Thailand7,127.87	I
31	Turkey6,617.53	I
32	Argentina5,631.55	l
33	Czech Republic5,304.46	l
34	Venezuela4,886.13	l
35	Indonesia4,848.55	l
36	Chile4,704.08	l
37	Hungary3,789.03	I
38	Colombia3,199.74	I
39	Ukraine2,738.61	
40	United Arab Emirates .2,726.19	
41	Slovak Republic1,819.58	
42	Philippines1,750.96	
43	Saudi Arabia1,590.09	
44	Peru1,082.66	
45	Pakistan949.04	
46	Vietnam937.32	
47	Egypt843.12	
48	Nigeria716.43	
49	Kuwait628.20	
50	Panama474.39	
n/a	Bahrainn/a	
n/a	Kazakhstann/a	

**SOURCE:** Swiss Re, *World Insurance in 2006: Premiums Came Back to "Life"* 

**Insurance density** 

5.08

Direct life insurance premiums (life and non-life) per capita from domestic sources (US dollars) | 2006

ANK	COUNTRY/ECONOMY	HARD DATA	
1	United Kingdom		
2	Ireland		
3	Switzerland		
4	France	•	
5	United States		
6	Netherlands		
7	Finland		
8	Japan		
9	•		
10	Belgium Norway		
11	Sweden		
		•	
12	Hong Kong SAR		
13	Canada		
14	Australia		
15	Germany		
16	Austria		
17	Italy	,	
18	Korea, Rep		
19	Singapore		
20	Spain	•	
21	Israel	•	
22	South Africa		
23	United Arab Emira		
24	Czech Republic		
25	Hungary		
26	Slovak Republic		
27	Poland		
28	Malaysia		
29	Chile		
30	Kuwait		
31	Venezuela		
32	Brazil		
33	Russian Federation	n150.86	
34	Panama		
35	Argentina		
36	Mexico		
37	Thailand	110.06	
38	Turkey		
39	Colombia		
40	Saudi Arabia		
41	Ukraine		
42	China	53.49	
43	India	38.44	
44	Peru	38.15	
45	Indonesia	21.50	
46	Philippines	20.73	
47	Egypt	11.18	
48	Vietnam	10.98	
49	Pakistan	5.89	
50	Nigeria	5.33	
n/a	Bahrain	n/a	
ı ı/a	Daa	, 0	

**SOURCE:** Swiss Re, World Insurance in 2006: Premiums Came Back to "Life"

## Real growth of direct insurance premiums

Annual real rate of growth (%) of direct premiums (life and non-life) based on local currency prices  $\mid$  2006

RANK	COUNTRY/ECONOMY HARD DATA	
1	India52.55	
2	Venezuela31.80	
3	United Kingdom20.09	
4	South Africa19.06	
5	Poland18.98	
6	United Arab Emirates18.33	
7	Argentina15.63	
8	Hungary14.75	
9	Pakistan14.54	
10	Hong Kong SAR14.40	
11	Mexico13.06	
12	Colombia12.86	
13	China12.79	
14	Turkey12.60	
15	Russian Federation11.57	
16	France10.61	
17	Brazil8.85	
18	Korea, Rep8.73	
19	Philippines8.55	
20	Peru8.09	
21	Chile5.36	
22	Finland4.81	
23	Netherlands4.80	
24	Spain4.11	
25	Canada3.72	
26	Israel2.85	
27	Sweden2.50	
28	Vietnam2.40	
29	United States2.13	
30	Australia2.07	
31	Singapore1.40	
32	Malaysia0.92	
33	Germany0.55	
34	Thailand0.54	
35	Austria0.41	
36	Indonesia0.31	
37	Czech Republic0.50	
38	Ukraine0.83	
39	Switzerland1.27	
40	Egypt1.36	
41	Japan1.49	
42	Norway1.97	
43	Italy4.90	
44	Belgium14.85	
n/a	Bahrainn/a	
n/a	Irelandn/a	
n/a	Kazakhstann/a	
n/a	Kuwaitn/a	
n/a n/a	Nigerian/a	
n/a n/a	Panaman/a	
	Saudi Arabian/a	
n/a		
n/a	Slovak Republicn/a	

**SOURCE:** Swiss Re, World Insurance in 2006: Premiums Came Back to "Life"

## 5.10

#### **Insurance penetration**

Direct domestic premiums (life and non-life) as a percentage of GDP | 2006

RANK	COUNTRY/ECONOMY	HARD DATA	
1	United Kingdom	16 50	
2	South Africa		
3	Korea, Rep		
4	Switzerland		
5	France		
6	Japan		
7	Hong Kong SAR		
8			
9	Ireland		
	Netherlands		
10 11	Belgium		
	Finland		
12	United States		
13	Sweden		
14	Italy		
15	Australia		
16	Canada		
17	Germany		
18	Singapore		
19	Austria		
20	Israel		
21	Spain		
22	Malaysia		
23	India		
24	Norway		
25	Czech Republic	3.80	
26	Poland	3.53	
27	Thailand		
28	Slovak Republic	3.43	
29	Hungary	3.39	
30	Chile	3.28	
31	Brazil	2.85	
32	Ukraine	2.82	
33	Panama	2.74	
34	China	2.71	
35	Venezuela	2.69	
36	Argentina	2.63	
37	Colombia		
38	Russian Federation	2.32	
39	Mexico	1.79	
40	United Arab Emirates	31.67	
41	Turkey	1.64	
42	Vietnam	1.54	
43	Philippines	1.50	
44	Indonesia	1.33	
45	Peru	1.16	
46	Egypt	0.79	
47	Pakistan	0.76	
48	Kuwait	0.65	
49	Nigeria	0.64	
50	Saudi Arabia	0.46	
n/a	Bahrain	n/a	
n/a	Kazakhstan	n/a	

**SOURCE**: Swiss Re, World Insurance in 2006: Premiums Came Back to "Life"

#### **Relative value-added of insurance**

The value added by insurance services to the economy after costs are subtracted, as a percentage of GDP  $\,\mid\,$  2006

RANK	COUNTRY/ECONOMY HARD DATA	
1	Switzerland4.84	
2	Hong Kong SAR4.01	
3	Singapore3.21	
4	Egypt2.91	
5	Israel2.83	
6	United Kingdom2.63	
7	Korea, Rep2.54	
8	Australia2.44	
9	United States2.38	
10	Brazil1.96	
11	South Africa1.94	
12	Netherlands1.92	
13	Austria	
14	Japan	
15	Chile	
16	Colombia	
17		
	Belgium	
18	1.46	
19	Argentina	
20	Russian Federation1.20	
21	Malaysia1.15	
22	Slovak Republic1.13	
23	France1.05	
24	Mexico1.04	
25	India1.04	
26	Philippines1.00	
27	Peru0.94	
28	Hungary0.94	
29	Germany0.92	
30	Panama0.91	
31	China0.87	
32	Italy0.86	
33	Turkey0.76	
34	Canada0.73	
35	Sweden0.72	
36	Saudi Arabia0.70	
37	Indonesia0.69	
38	Spain	
39	Vietnam0.55	
40	Finland0.42	
41	Norway	
42	Venezuela0.36	
43	Nigeria0.31	
43	Kuwait0.24	
45	Poland	
46	Czech Republic0.19	
n/a	Bahrainn/a	
n/a	Kazakhstann/a	
n/a	Pakistann/a	
n/a	Thailandn/a	
n/a	Ukrainen/a	
n/a	United Arab Emiratesn/a	

**SOURCE:** Global Insight, World Industry Monitor, October 25, 2007

## **Securitization to GDP**

5.12

The sum of asset-backed securities (ABS), mortgage-backed securities (MBS), high-yield bonds, and highly leveraged loans' deal value as a percentage of GDP  $\,\mid$  2006

RANK	COUNTRY/ECONOMY HA	ARD DATA		
1	United States	22.92		
2	Kazakhstan			
3	United Kingdom			
4	Netherlands			
5	Spain			
6	Ireland			_
7	Australia			
8	Canada			
9	Ukraine			
10	Turkey			
11	Russian Federation			
12	Germany			
13	Belgium			
14	Italy			
15	France			
16	Egypt			
17	Bahrain			
18	Sweden	3.15		
19	Korea, Rep	2.59		
20	Brazil	2.25		
21	Norway	2.24		
22	Peru	2.24		
23	Philippines	2.17		
24	India	2.02		
25	Indonesia	2.01		
26	Argentina	1.94		
27	Hungary			
28	Switzerland			
29	Nigeria			
30	Panama			
31	South Africa			
32	Vietnam			
33	Colombia			
34				
	Singapore			
35	Chile			
36	Japan			
37	Hong Kong SAR			
38	Czech Republic			
39	Mexico			
40	Thailand			
41	Finland			
42	Saudi Arabia	0.70		
43	Venezuela	0.67		
44	Austria	0.65	1	
45	Malaysia	0.40	I	
46	Pakistan	0.36	ı	
47	United Arab Emirates	0.33	I	
48	Kuwait	0.28		
49	Poland			
50	China			
51	Slovak Republic			
n/a	Israel		•	
1 1/ Cl	101001	ıı/d		

**SOURCE**: Dealogic Analytics, data retrieved February 2008

## Share of total number of securitization deals

The sum of asset-backed securities (ABS), mortgage-backed securities (MBS), high-yield bonds, and highly leveraged loans as a percentage of total deals | 2006

1 United States. 64.93 2 Russian Federation	RANK	COUNTRY/ECONOMY	HARD DATA	
2 Russian Federation	1	United States	64.93	
3 United Kingdom				
4 Korea, Rep				
5 France       1.88         6 Canada       1.85         7 Argentina       1.80         8 Germany       1.71         9 India       1.67         10 Spain       1.36         11 Say       1.26         12 Italy       1.26         13 Kazakhstan       1.18         14 Japan       1.09         15 Australia       1.06         16 Ukraine       0.94         17 Netherlands       0.77         18 Mexico       0.70         19 Peru       0.69         20 Indonesia       0.46         21 Turkey       0.44         22 China       0.23         23 Philippines       0.20         25 Belgium       0.19         25 Hong Kong SAR       0.19         26 Hong Kong SAR       0.19         27 Sweden       0.16         30 Colombia       0.13         31 Singapore       0.12         32 Norway       0.11         33 Thilland       0.01         34 Chile       0.07         35 Vietnam       0.08         36 Austria       0.07         37 Pakistan       0.05				
6 Canada				
7 Argentina       1.80         8 Germany       1.71         9 India       1.67         10 Brazil       1.36         10 Spain       1.36         12 Italy       1.26         13 Kazakhstan       1.18         14 Japan       1.09         15 Australia       1.06         16 Ukraine       0.94         17 Netherlands       0.77         18 Mexico       0.70         19 Peru       0.69         20 Indonesia       0.46         21 Turkey       0.44         22 China       0.23         23 Philippines       0.20         25 Belgium       0.19         25 Hong Kong SAR       0.19         26 Sweden       0.16         27 Sweden       0.18         28 South Africa       0.18         29 Sweden       0.16         30 Colombia       0.13         31 Singapore       0.12         32 Norway       0.11         33 Vietnam       0.00         34 Chile       0.01         35 Vietnam       0.00         36 Austria       0.07         37 Poland       0.05				
8 Germany				
9 India		•		
10 Brazil		,		
10 Spain				_
12   Italy				
13 Kazakhstan		•		
14 Japan		•		
15 Australia				
16 Ukraine				
17 Netherlands	15			
18 Mexico	16	Ukraine	0.94	
19 Peru	17	Netherlands	0.77	
20 Indonesia 0.46 ■ 21 Turkey 0.44 ■ 22 China 0.23 ■ 23 Philippines 0.20 ■ 23 Switzerland 0.20 ■ 25 Belgium 0.19 ■ 25 Hong Kong SAR 0.19 ■ 25 Ireland 0.19 ■ 28 South Africa 0.18 ■ 29 Sweden 0.16 ■ 30 Colombia 0.13 ■ 31 Singapore 0.12 ■ 32 Norway 0.11 ■ 34 Chile 0.11 ■ 35 Vietnam 0.01 ■ 36 Austria 0.07 ■ 37 Hungary 0.06 ■ 40 Czech Republic 0.05 ■ 40 Malaysia 0.05 ■ 40 Pakistan 0.05 ■ 40 Pakistan 0.05 ■ 40 Pakistan 0.05 ■ 40 Pakistan 0.05 ■ 41 Egypt 0.04 ■ 42 Saudi Arabia 0.04 ■ 43 Kuwait 0.02 ■ 50 Panama 0.01 ■ 50 Slovak Republic 0.01 ■	18	Mexico	0.70	
21 Turkey	19	Peru	0.69	
22 China	20	Indonesia	0.46	
23 Philippines	21	Turkey	0.44	
23 Switzerland	22	China	0.23	•
25 Belgium 0.19 □ 25 Hong Kong SAR 0.19 □ 25 Ireland 0.19 □ 28 South Africa 0.18 □ 29 Sweden 0.16 □ 30 Colombia 0.13 □ 31 Singapore 0.12 □ 32 Norway 0.11 □ 33 Thailand 0.11 □ 34 Chile 0.10 □ 35 Vietnam 0.08 □ 36 Austria 0.07 □ 36 Nigeria 0.07 □ 37 Hungary 0.06 □ 40 Czech Republic 0.05 □ 40 Finland 0.05 □ 40 Malaysia 0.05 □ 40 Pakistan 0.05 □ 40 Pakistan 0.05 □ 41 Egypt 0.04 □ 42 Egypt 0.04 □ 43 Suudi Arabia 0.04 □ 44 Venezuela 0.04 □ 45 Kuwait 0.02 □ 50 Panama 0.01 □	23	Philippines	0.20	
25 Hong Kong SAR	23	Switzerland	0.20	•
25 Hong Kong SAR	25	Belgium	0.19	1
25 Ireland	25	-		
28 South Africa				_
29 Sweden				
30 Colombia				
31 Singapore				
32 Norway				
32 Thailand				
34 Chile				_
35 Vietnam 0.08 I 36 Austria 0.07 I 36 Nigeria 0.07 I 37 Poland 0.07 I 38 Hungary 0.06 I 40 Czech Republic 0.05 I 40 Finland 0.05 I 40 Pakistan 0.05 I 40 Pakistan 0.05 I 41 Bahrain 0.04 I 42 Egypt 0.04 I 43 Saudi Arabia 0.04 I 44 Venezuela 0.04 I 45 Kuwait 0.02 I 50 Panama 0.01 I				_
36 Austria				-
36       Nigeria       .0.07       I         36       Poland       .0.07       I         39       Hungary       .0.06       I         40       Czech Republic       .0.05       I         40       Finland       .0.05       I         40       Malaysia       .0.05       I         40       Pakistan       .0.05       I         44       Bahrain       .0.04       I         44       Egypt       .0.04       I         44       Saudi Arabia       .0.04       I         44       Venezuela       .0.04       I         44       Venezuela       .0.04       I         49       Kuwait       .0.02       I         50       Panama       .0.01       I         50       Slovak Republic       .0.01       I				
36       Poland       0.07       I         39       Hungary       0.06       I         40       Czech Republic       0.05       I         40       Finland       0.05       I         40       Malaysia       0.05       I         40       Pakistan       0.05       I         44       Bahrain       0.04       I         44       Egypt       0.04       I         44       Saudi Arabia       0.04       I         44       United Arab Emirates       0.04       I         44       Venezuela       0.04       I         49       Kuwait       0.02       I         50       Panama       0.01       I         50       Slovak Republic       0.01       I				
39 Hungary		J		
40 Czech Republic				
40       Finland       0.05       I         40       Malaysia       0.05       I         40       Pakistan       0.05       I         44       Bahrain       0.04       I         44       Egypt       0.04       I         44       Saudi Arabia       0.04       I         44       United Arab Emirates       0.04       I         44       Venezuela       0.04       I         49       Kuwait       0.02       I         50       Panama       0.01       I         50       Slovak Republic       0.01       I		0 ,		
40 Malaysia	40			
40 Pakistan	40	Finland	0.05	
44 Bahrain	40	Malaysia	0.05	
44 Egypt	40	Pakistan	0.05	
44 Saudi Arabia	44	Bahrain	0.04	
44 United Arab Emirates0.04 I 44 Venezuela	44	Egypt	0.04	
44 Venezuela	44	Saudi Arabia	0.04	
49 Kuwait	44	United Arab Emirates	50.04	
50 Panama	44	Venezuela	0.04	
50 Slovak Republic0.01	49	Kuwait	0.02	
50 Slovak Republic0.01	50	Panama	0.01	
	50	Slovak Republic	0.01	
11/d 151dE111/d	n/a	Israel		

**SOURCE**: Dealogic Analytics, data retrieved February 2008

## Section VI Financial markets

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## **Spot foreign exchange turnover**

Percentage share of world total of spot foreign exchange turnover | April 2007

RANK	COUNTRY/ECONOMY HARD DATA	
1	United Kingdom26.62	
2	United States24.71	
3	Switzerland8.61	
4	Japan8.01	
5	Singapore7.08	
6	Australia3.52	
7	Hong Kong SAR3.01	
8	Russian Federation2.70	
9	France1.99	
10	Germany1.94	
11	•	
12	Belgium1.16	
13	India1.14	
14	Canada1.08	
15	Italy0.89	
16	China	
17	Sweden0.62	
18	Spain0.49	
19	Austria	
20	Brazil0.40	
21	Mexico0.36	
22	Ireland0.31	
23	Israel0.28	
24	Norway0.27	
25	South Africa0.27	
26	Netherlands0.24	
27	Saudi Arabia0.22	
28	Poland0.19	
29	Hungary0.17	
30	Chile0.16	
31	Indonesia0.13	
32	Malaysia0.13	l
33	Bahrain0.12	
34	Czech Republic0.11	
35	Thailand0.11	
36	Colombia0.10	I
37	Argentina0.09	
38	Philippines0.09	
39	Turkey0.06	
40	Finland0.05	
41	Peru0.05	
42	Slovak Republic0.02	
n/a	Egyptn/a	
n/a	Kazakhstann/a	
n/a	Kuwaitn/a	
n/a	Nigerian/a	
n/a	Pakistann/a	
n/a	Panaman/a	
n/a	Ukrainen/a	
n/a	United Arab Emiratesn/a	
n/a	Venezuelan/a	
n/a	Vietnamn/a	

**SOURCE:** Bank of International Settlements, Triennial Central Bank Survey, December 2007

## 6.02

## **Outright forward foreign exchange turnover**

Percentage share of world total of outright forward foreign exchange turnover | April 2007

RANK	COUNTRY/ECONOMY HARD DATA	
1	United Kingdom29.92	
2	United States27.37	
3	Japan6.17	
4	Singapore6.07	
5	Germany5.45	
6	Switzerland4.05	
7	Hong Kong SAR3.54	
8	Australia3.49	
9	France1.80	
10	Belgium1.75	
11	India1.52	
12	Netherlands1.37	
13	Korea, Rep1.24	
14	Canada1.04	
15	Italy0.61	
16	Norway	
17	Spain0.50	
18	Austria0.46	
19	Sweden0.38	
20	Chile0.36	
21	Russian Federation0.26	-
22	South Africa0.22	
23	Czech Republic0.21	
23	Ireland0.21	
25	Bahrain0.17	
26	Thailand	
27	Turkey0.16	
28 29	Poland	
30 31	Colombia	
32	Mexico0.10 Finland	
33	Malaysia0.09	
34	Brazil0.08	
35	Peru	
36	Philippines	
37	Hungary0.04	
38	Saudi Arabia	
39		
40	Argentina	
41	Slovak Republic	
n/a	Egyptn/a	
n/a	Israeln/a Kazakhstann/a	
n/a		
n/a n/a	Kuwaitn/a Nigerian/a	
n/a n/a	Pakistann/a	
n/a	Panaman/a	
n/a	Ukrainen/a United Arab Emiratesn/a	
n/a		
n/a	Venezuelan/a	
n/a	Vietnamn/a	

## Foreign exchange swap turnover

Percentage share of world total of foreign exchange swap turnover | April 2007

D.C.	OOLINITEW/FCCSSCSSSS	HADD DAT:
	COUNTRY/ECONOMY	HARD DATA
1	United Kingdom	
2	United States	
3	Hong Kong SAR	
4	Switzerland	5.44
5	Singapore	5.42
6	Japan	5.22
7	Australia	5.17
8	France	4.07
9	Germany	2.41
10	Canada	1.96
11	Sweden	1.53
12	Belgium	1.23
13	Norway	
14	Italy	
15	Russian Federation	
	Netherlands	
16		
17	India	
18	Korea, Rep	
19	Austria	
20	Mexico	
21	South Africa	0.45
22	Spain	0.37
23	Finland	0.33
24	Poland	0.27
25	Ireland	0.27
26	Israel	0.21
27	Hungary	
28	Thailand	
29	Slovak Republic	
30	Czech Republic	
31	Turkey	
32	Malaysia	
33	Saudi Arabia	
34	Philippines	
35	China	
36	Bahrain	
37	Indonesia	
38	Chile	0.02
39	Colombia	0.00
40	Brazil	0.00
n/a	Argentina	n/a
n/a	Egypt	n/a
n/a	Kazakhstan	
n/a	Kuwait	
n/a	Nigeria	
n/a	Pakistan	
n/a	Panama	
n/a	Peru	, -
n/a	Ukraine	
n/a	United Arab Emirate	esn/a
n/a	Venezuela	n/a
n/a	Vietnam	n/a

**SOURCE:** Bank of International Settlements, Triennial Central Bank Survey, December 2007

## 6.04

## Interest rate derivatives turnover: Forward rate agreements

Percentage share of world total of over-the-counter single currency forward interest rate agreements turnover | April 2007

RANK	COUNTRY/ECONOMY HARD DATA	
1	United Kingdom45.61	
2	United States27.19	
3	Germany7.35	
4	France	
5	Sweden2.61	_
6	Switzerland	
7	Canada1.83	
8		
	Norway1.58 Australia1.06	
9 10		
	Japan1.01	
11	Italy	
12	South Africa0.68	
13	Belgium0.49	
14	Singapore0.48	
15	Poland0.42	
16	Netherlands	
17	Hong Kong SAR0.21	
18	Hungary0.17	
19	Austria0.17	
20	Spain0.16	
21	Czech Republic0.14	
22	Korea, Rep0.13	
23	Mexico0.09	
24	Finland0.05	
25	Ireland0.03	
26	Thailand0.00	
27	Malaysia0.00	
28	Turkey0.00	
29	Colombia0.00	
30	Indonesia0.00	
30	Philippines0.00	
30	Saudi Arabia0.00	
33	Chile0.00	
n/a	Argentinan/a	
n/a	Bahrainn/a	
n/a	Braziln/a	
n/a	Chinan/a	
n/a	Egyptn/a	
n/a	Indian/a	
n/a	Israeln/a	
n/a	Kazakhstann/a	
n/a	Kuwaitn/a	
n/a	Nigerian/a	
n/a	Pakistann/a	
n/a	Panaman/a	
n/a	Perun/a	
n/a	Russian Federationn/a	
n/a	Slovak Republicn/a	
n/a	Ukrainen/a	
n/a	United Arab Emiratesn/a	
n/a	Venezuelan/a	
n/a	Vietnamn/a	
11/0	violitatiiIl/a	

## Interest rate derivatives turnover: Swaps

Percentage share of world total of over-the-counter single currency interest rate swaps turnover | April 2007

RANK	COUNTRY/ECONOMY HARD DATA	
1	United Kingdom45.98	
2	United States20.58	—
3	France9.00	
4	Germany4.10	
5	Switzerland	
6	Singapore3.51	
7	Japan3.18	
8	Netherlands1.65	
9	Italy1.59	
10	Australia1.15	
11	Hong Kong SAR1.04	
12	Belgium1.02	
13	Spain1.01	
14	Canada0.70	
15	Ireland0.45	
16	Korea, Rep0.29	ı
17	Austria0.26	I
18	India0.22	
19	Mexico0.15	l
20	Sweden0.13	l
21	Finland0.13	I
22	South Africa0.09	l
23	Poland0.08	
24	Norway0.08	
25	Thailand0.02	
26	Hungary0.02	
27	Czech Republic0.01	
28	Bahrain0.01	
29	Brazil0.01	
30	Malaysia0.01	
31 32	Saudi Arabia0.01 Indonesia0.00	
33	Turkey0.00	
34	Peru0.00	
35	Chile	
36	Philippines0.00	
37	Colombia0.00	
n/a	Argentinan/a	
n/a	Chinan/a	
n/a	Egyptn/a	
n/a	Israeln/a	
n/a	Kazakhstann/a	
n/a	Kuwaitn/a	
n/a	Nigerian/a	
n/a	Pakistann/a	
n/a	Panaman/a	
n/a	Russian Federationn/a	
n/a	Slovak Republicn/a	
n/a	Ukrainen/a	
n/a	United Arab Emiratesn/a	
n/a	Venezuelan/a	
n/a	Vietnamn/a	

**SOURCE:** Bank of International Settlements, Triennial Central Bank Survey, December 2007

## 6.06

## Interest rate derivatives turnover: Options

Percentage share of world total of over-the-counter interest rate options turnover | April 2007

RANK	COUNTRY/ECONOMY HARD DATA	
1	United States42.61	
2	United Kingdom34.26	
3	Japan8.83	
4	France6.06	
5	Belgium1.53	
6	Canada1.34	
7	Italy1.00	
8	Germany0.73	
9	Singapore0.57	
10	• .	
11	Australia0.49	
12	Finland0.33	
13	South Africa0.31	
14	Spain0.25	
15	Netherlands0.22	
16	Hong Kong SAR0.21	
17		
18	Korea, Rep0.16 Thailand0.15	
19	Austria	
20	Mexico	
21	Saudi Arabia0.06	
22	Ireland0.06	
23	Turkey0.04	
24	Norway	
25	Switzerland0.02	
26	Poland0.00	
27	Czech Republic0.00	
28	Indonesia	
28	Malaysia0.00	
30	Brazil0.00	
n/a	Argentinan/a	
n/a	Bahrainn/a	
n/a	Chilen/a	
n/a	Chinan/a	
n/a	Colombian/a	
n/a	Egyptn/a	
n/a	Hungaryn/a	
n/a	Indian/a	
n/a	Israeln/a	
n/a	Kazakhstann/a	
n/a	Kuwaitn/a	
n/a	Nigerian/a	
n/a	Pakistann/a	
n/a	Panaman/a	
n/a	Perun/a	
n/a	Philippinesn/a	
n/a	Russian Federationn/a	
n/a	Slovak Republicn/a	
n/a	Ukrainen/a	
n/a	United Arab Emiratesn/a	
n/a	Venezuelan/a	
n/a	Vietnamn/a	

## Foreign exchange derivatives turnover: Currency swaps

Percentage share of world total of over-the-counter foreign exchange currency swaps turnover | April 2007

D.C.	OOLINTDV/FCCAACA	HADD DATE
	COUNTRY/ECONOMY	HARD DATA
1	United Kingdom	
2	United States	
3	Australia	
4	Canada	
5	France	3.71
6	Korea, Rep	3.22
7	Singapore	3.11
8	Japan	2.77
9	Hong Kong SAR	1.67
10	Turkey	1.48
11	India	1.28
12	Netherlands	1.05
13	Ireland	1.05
14	Belgium	
15	Brazil	
16	Saudi Arabia	
17	Austria	
18	Germany	
19	Spain	
20	Italy	
21	Indonesia	0.29
22	Thailand	0.28
23	Switzerland	0.21
24	Poland	0.18
25	Norway	0.14
26	Bahrain	0.13
27	Finland	
28	South Africa	
29	Malaysia	
30	Chile	
31	Sweden	
32	Philippines	
33	Mexico	0.03
34	Colombia	0.02
34	Czech Republic	0.02
36	Hungary	0.00
n/a	Argentina	
n/a	China	
n/a	Egypt	
	Israel	
n/a		
n/a	Kazakhstan	
n/a	Kuwait	
n/a	Nigeria	
n/a	Pakistan	n/a
n/a	Panama	n/a
n/a	Peru	n/a
n/a	Russian Federation	n/a
n/a	Slovak Republic	
n/a	Ukraine	
n/a	United Arab Emirate	, .
n/a	Venezuela	
n/a	Vietnam	n/a

**SOURCE:** Bank of International Settlements, Triennial Central Bank Survey, December 2007

## 6.08

## Foreign exchange derivatives turnover: Options

Percentage share of world total of over-the-counter foreign exchange options turnover | April 2007

RANK	COUNTRY/ECONOMY HARD DATA	
1	United Kingdom42.62	
2	United States30.12	
3	Switzerland4.76	
4	Japan4.32	
5	Singapore4.04	
6	Hong Kong SAR2.29	
7	France2.22	
8	Australia	
9	India1.52	
10	Canada1.04	
11	Germany	
12	Italy0.75	
13	Sweden0.70	
14	Belgium0.61	
	•	
15	Austria	
16	Spain	
17	Netherlands	
18	Korea, Rep0.25	
19	Ireland0.18	
20	Israel0.16	
21	Poland0.14	
22	Turkey0.07	
23	Bahrain0.06	
24	Hungary0.06	
25	Mexico0.05	
26	Finland0.05	
27	Indonesia0.05	
28	Norway0.04	
29	Saudi Arabia0.04	
30	South Africa0.03	
31	Czech Republic0.03	
32	Slovak Republic0.02	
33	Brazil0.02	
34	Thailand0.01	
35	Malaysia0.01	
36	Russian Federation0.01	
37	Colombia0.00	
38	Philippines0.00	
n/a	Argentinan/a	
n/a	Chilen/a	
n/a	Chinan/a	
n/a	Egyptn/a	
n/a	Kazakhstann/a	
n/a	Kuwaitn/a	
n/a	Nigerian/a	
n/a	Pakistann/a	
n/a	Panaman/a	
n/a	Perun/a	
n/a	Ukrainen/a	
n/a	United Arab Emiratesn/a	
n/a	Venezuelan/a	
n/a	Vietnamn/a	

## **Equity market turnover**

The total value of shares traded during the period divided by the average market capitalization for the period | 2005

RANK	COUNTRY/ECONOMY HARD DATA	
1	Pakistan374.25	
2	Saudi Arabia231.00	
3	Spain162.38	
4	Turkey154.12	
5	Germany144.65	
6	United Kingdom140.67	
7	Italy139.20	
8	Finland137.95	
9	United States127.96	
10	Japan117.93	
11	Sweden117.83	
12	Czech Republic117.72	
13	Norway116.42	
14	Netherlands111.34	
15	Switzerland99.30	
16	Kuwait93.88	
17	India93.61	
18	United Arab Emirates89.39	
19	China81.92	
20	France81.91	
21	Hungary77.39	
22	Australia77.27	
23	Thailand74.09	
24	Canada63.11	
25	Singapore62.61	
26	Ireland56.17	
27	Israel55.14	
28	Indonesia53.73	
29	Hong Kong SAR48.88	
30	Austria43.01	_
31	Egypt42.82	
32	South Africa39.03	
33	Russian Federation38.89	
34	Brazil38.08	
35	Poland36.09	
36	Argentina30.23	
37	Malaysia26.61	
38	Mexico25.49	
39	Belgium20.43	
40	Philippines	
41	Colombia	
42	Kazakhstan	
43	Chile14.77	
44	Nigeria	
45	Peru	
46	Bahrain	1
47	Venezuela	
48	Ukraine	
49		
50	Slovak Republic	
n/a	Korea, Repn/a	
n/a	Vietnamn/a	

**SOURCE:** World Bank, Financial Indicators website www.financial-indicators.org

## 6.10

## **Private-sector bonds to GDP**

The total amount of outstanding domestic debt securities by private domestic entities as a percentage of GDP  $\mid$  2005

RANK	COUNTRY/ECONOMY HA	ARD DATA	
1	United States	114.00	
2	Netherlands	69.53	
3	Malaysia		
4	Italy		
5	Sweden		
6	Japan		
7	Spain		
8	France		
9	Austria		
10	Australia		
11			
	Belgium		
12	Germany		
13	Switzerland		
14	Ireland		
15	Finland		
16	Norway		
17	Thailand		
18	Chile	19.92	
19	Singapore		
20	Canada	18.73	
21	Hong Kong SAR	17.86	
22	United Kingdom	15.89	
23	South Africa	12.94	
24	Brazil	12.01	
25	China	11.07	
26	Argentina	8.42	
27	Czech Republic	5.92	
28	Hungary	4.97	
29	Mexico	4.83	
30	Peru	3.97	
31	Indonesia	2.37	l
32	India	0.97	I
33	Colombia	0.51	
34	Venezuela	0.32	
35	Philippines	0.26	
n/a	Bahrain		
n/a	Egypt		
n/a	Israel		
n/a	Kazakhstan		
n/a	Korea, Rep		
n/a	Kuwait		
n/a	Nigeria		
n/a	Pakistan		
n/a	Panama	, -	
n/a	Poland		
n/a	Russian Federation	, .	
n/a	Saudi Arabia		
n/a	Slovak Republic		
n/a	Turkey		
n/a	Ukraine		
n/a	United Arab Emirates		
n/a	Vietnam	n/a	

**SOURCE:** World Bank, Financial Indicators website www.financial-indicators.org

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## 6.11

#### **Public-sector bonds to GDP**

This index is based on the total amount of outstanding domestic debt securities by public domestic entities as a percentage of GDP | 2005

RANK	COUNTRY/ECONOMY HARD DATA	
1	France7.00	
2	Canada6.70	
3	Turkey6.44	
4	Netherlands6.17	
5	United States6.10	
6	Czech Republic6.10	
7	Brazil5.91	
8	Sweden5.62	
9	Hungary5.58	
10	Germany5.49	
11	Italy5.41	
12	Singapore5.28	
13	Spain5.23	
14	Philippines5.19	
15	Malaysia5.15	
16	Belgium5.06	
17	Venezuela4.90	
18	Finland4.83	
19	India4.52	
20	South Africa4.50	
21	Switzerland4.45	
22	Poland4.45	
23	Austria4.40	
24	United Kingdom4.31	
25	Pakistan4.15	
26	Colombia4.01	
27	Japan4.00	
28	Slovak Republic3.63	
29	Argentina3.62	
30	China3.54	
31	Mexico3.25	
32	Thailand3.14	
33	Ireland3.06	
34	Indonesia2.76	
35	Chile2.67	
36	Norway2.46	
37	Australia2.15	
38	Hong Kong SAR1.81	
39	Peru	
40	Russian Federation1.00	
n/a	Bahrainn/a	
n/a	Egyptn/a	
n/a	Israeln/a	
n/a	Kazakhstann/a	
n/a	Korea, Repn/a	
n/a	Kuwaitn/a	
n/a	Nigerian/a	
n/a	Panaman/a Saudi Arabian/a	
n/a n/a	Ukrainen/a	
, .	United Arab Emiratesn/a	
n/a		
n/a	Vietnamn/a	

**SOURCE:** World Bank, Financial Indicators website www.financial-indicators.org. Adjusted based on World Economic Forum analysis.

## 6.12

## **International bonds to GDP**

Percentage of GDP represented by international bonds | 2005

RANK	COUNTRY/ECONOMY HARD DATA	
1	Netherlands121.66	
2	Ireland87.04	
3	Belgium81.98	
4	Germany80.51	
5	Switzerland74.89	
6	Austria68.83	
7	United Kingdom67.65	
8	Spain57.50	
9	Sweden49.56	
10	Finland46.63	
11	France46.11	
12	Panama45.90	
13	Italy42.20	
14	Argentina41.62	
15	Australia39.29	
16	Singapore32.39	
17	Hong Kong SAR32.17	
18	Bahrain29.90	
19	Philippines29.66	
20	Norway27.89	
21	United States27.83	
22	Canada27.61	
23	Malaysia	
24	Venezuela16.88	
25	Hungary15.83	
26	Israel14.30	
27	Brazil13.65	
28	Kazakhstan13.50	
29	Colombia11.94	
30	Mexico11.26	
31	Poland9.76	•
32	Chile9.66	
33	Turkey9.24	
34	Peru9.15	-
35	Russian Federation8.38	
36	South Africa7.81	•
37	Slovak Republic7.64	
38	Ukraine7.05	•
39	Japan6.39	•
40	Thailand6.07	
41	Czech Republic4.58	
42	Indonesia4.22	
43	Egypt3.25	ı
44	Vietnam2.70	1
45	Kuwait2.49	
46	Nigeria1.48	
47	China1.19	
48	India1.10	
49	Pakistan0.79	
50	Saudi Arabia0.35	
n/a	Korea, Repn/a	

**SOURCE:** World Bank, Financial Indicators website www.financial-indicators.org



# Section VII Size, depth, and access

323

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## 7.01

#### M2 to GDP

Money and quasi-money supply as a percentage of GDP | 2005

RANK	COUNTRY/ECONOMY	HARD DATA
1	Hong Kong SAR	252.27
2	China	153.55
3	Switzerland	146.71
4	Canada	146.30
5	Japan	137.88
6	Malaysia	124.80
7	United Kingdom	124.78
8	Singapore	
9	Thailand	
10	Israel	
11	Egypt	92.36
12	Australia	
13	United States	
14	Panama	
15	Korea, Rep	
16	Vietnam	
17	Czech Republic	
18	Bahrain	
19	India	
20	Slovak Republic	
21	South Africa	
22	Kuwait	52.31
23	Philippines	51.33
24	Chile	49.72
25	Sweden	48.27
26	Hungary	47.97
27	Pakistan	
28	Turkey	44.39
29	Saudi Arabia	
30	Poland	
31	Indonesia	
32	Ukraine	
33	Colombia	
34		
	Russian Federation	
35	Argentina	
36	Brazil	
37	Peru	
38	Mexico	
39	Kazakhstan	
40	Nigeria	20.57
41	Venezuela	19.24
n/a	Austria	n/a
n/a	Belgium	n/a
n/a	Finland	n/a
n/a	France	n/a
n/a	Germany	
n/a	Ireland	
n/a	Italy	
n/a	Netherlands	
n/a	Norway	
n/a	Spain	
n/a	United Arab Emira	tesn/a

**SOURCE:** World Bank, Financial Indicators website www.financial-indicators.org

## 7.02

#### Private debt to GDP

The sum of domestic debt securities and international debt securities for financial institutions and corporate issuers as a percentage of GDP  $\mid$  2006

1 Netherlands	RANK	COUNTRY/ECONOMY	HARD DATA	
2 Ireland	1	Netherlands	216.17	
3 United States				
4 Spain				
5 Switzerland				
6 Germany		'		
7 United Kingdom.       104.60         8 Austria       103.88         9 Belgium       103.67         10 France.       101.08         11 Sweden       99.04         12 Australia       97.50         13 Italy.       94.63         14 Malaysia       77.44         15 Korea, Rep.       68.59         16 Norway.       60.31         17 Singapore       52.66         18 Canada       50.65         19 Hong Kong SAR       50.19         20 Finland       48.92         21 Japan       45.46         22 Bahrain       29.63         23 Kazakhstan       27.30         24 Brazil       22.56         25 South Africa       22.51         26 Mexico       22.47         27 Thailand       22.31         28 Chile       21.69         29 United Arab Emirates       18.57         30 China       15.80         31 Hungary       12.73         32 Czech Republic       11.06         33 Argentina       10.53         34 Philippines       9.90         35 Israel       7.53         36 Russian Federation       6.22 <td></td> <td></td> <td></td> <td></td>				
8 Austria		•		
9 Belgium		_		
10 France				
11 Sweden 99.04  12 Australia 97.50  13 Italy 94.63  14 Malaysia 77.44  15 Korea, Rep. 68.59  16 Norway 60.31  17 Singapore 52.66  18 Canada 50.65  19 Hong Kong SAR 50.19  20 Finland 48.92  21 Japan 45.46  22 Bahrain 29.63  23 Kazakhstan 27.30  24 Brazil 22.56  25 South Africa 22.51  26 Mexico 22.47  27 Thailand 22.31  28 Chile 21.69  29 United Arab Emirates 18.57  30 China 15.80  31 Hungary 12.73  32 Czech Republic 11.06  33 Argentina 10.53  34 Philippines 9.90  35 Israel 7.53  36 Russian Federation 6.22  37 Peru 5.88  38 Indonesia 5.62  39 Panama 4.50  40 India 4.50  41 Kuwait 3.17  42 Ukraine 2.97  43 Egypt 2.17  44 Turkey 2.15  45 Venezuela 1.99  46 Poland 1.90  47 Slovak Republic 1.42  48 Colombia 1.40  49 Saudi Arabia 0.9.97		- 9 -		
12 Australia				
13 Italy				
14 Malaysia 77.44 15 Korea, Rep 68.59 16 Norway 60.31 17 Singapore 52.66 18 Canada 50.65 19 Hong Kong SAR 50.19 20 Finland 48.92 21 Japan 45.46 22 Bahrain 29.63 23 Kazakhstan 27.30 24 Brazil 22.56 25 South Africa 22.51 26 Mexico 22.47 27 Thailand 22.31 28 Chile 21.69 29 United Arab Emirates 18.57 30 China 15.80 31 Hungary 12.73 32 Czech Republic 11.06 33 Argentina 10.53 34 Philippines 9.90 35 Israel 7.53 36 Russian Federation 6.22 37 Peru 5.89 38 Indonesia 5.62 39 Panama 4.50 40 India 4.50 41 Kuwait 3.17 42 Ukraine 2.97 43 Egypt 2.17 44 Turkey 2.15 45 Venezuela 1.99 46 Poland 1.90 47 Slovak Republic 1.42 48 Colombia 1.40 49 Saudi Arabia 0.97				
15 Korea, Rep		*		
16 Norway				
17 Singapore				
18 Canada 50.65  19 Hong Kong SAR 50.19  20 Finland 48.92  21 Japan 45.46  22 Bahrain 29.63  23 Kazakhstan 27.30  24 Brazil 22.56  25 South Africa 22.51  26 Mexico 22.47  27 Thailand 22.31  28 Chile 21.69  29 United Arab Emirates 18.57  30 China 15.80  31 Hungary 12.73  32 Czech Republic 11.06  33 Argentina 10.53  34 Philippines 9.90  35 Israel 7.53  36 Russian Federation 6.22  37 Peru 5.89  38 Indonesia 5.62  39 Panama 4.50  40 India 4.50  41 Kuwait 3.17  42 Ukraine 2.97  43 Egypt 2.17  44 Turkey 2.15  45 Venezuela 1.99  46 Poland 1.90  47 Slovak Republic 1.42  48 Colombia 1.40  49 Saudi Arabia 0.97		,		
19 Hong Kong SAR 50.19 20 Finland 48.92 21 Japan 45.46 22 Bahrain 29.63 ■ 23 Kazakhstan 27.30 ■ 24 Brazil 22.56 ■ 25 South Africa 22.51 ■ 26 Mexico 22.47 ■ 27 Thailand 22.31 ■ 28 Chile 21.69 ■ 29 United Arab Emirates 18.57 ■ 30 China 15.80 ■ 31 Hungary 12.73 ■ 32 Czech Republic 11.06 ■ 33 Argentina 10.53 ■ 34 Philippines 9.90 ■ 35 Israel 7.53 ■ 36 Russian Federation 6.22 ■ 37 Peru 5.89 ■ 38 Indonesia 5.62 ■ 39 Panama 4.50 ■ 40 India 4.50 ■ 41 Kuwait 3.17 ■ 42 Ukraine 2.97 ■ 43 Egypt 2.17 ■ 44 Turkey 2.15 ■ 45 Venezuela 1.99 ■ 46 Poland 1.90 ■ 47 Slovak Republic 1.42 ■ 48 Colombia 1.40 ■		• .		
20 Finland				
21 Japan				
22 Bahrain				
23 Kazakhstan		·		
24 Brazil				
25 South Africa				
26 Mexico				
27 Thailand				
28 Chile				
29 United Arab Emirates				
30 China				
31 Hungary				
32 Czech Republic				
33 Argentina	31			_
34 Philippines	32	Czech Republic	11.06	•
35 Israel		•		
36 Russian Federation	34	Philippines	9.90	
37 Peru	35	Israel	7.53	
38 Indonesia	36	Russian Federation	6.22	1
39 Panama	37	Peru	5.89	1
40 India	38	Indonesia	5.62	
41 Kuwait	39	Panama	4.50	I
42 Ukraine 2.97 I 43 Egypt 2.17 I 44 Turkey 2.15 I 45 Venezuela 1.99 I 46 Poland 1.90 I 47 Slovak Republic 1.42 I 48 Colombia 1.40 I 49 Saudi Arabia 0.97 I	40	India	4.50	I
43 Egypt	41	Kuwait	3.17	I
44 Turkey	42	Ukraine	2.97	I
45 Venezuela	43			l
46 Poland	44	Turkey	2.15	l
47 Slovak Republic1.42 I 48 Colombia1.40 I 49 Saudi Arabia0.97 I	45	Venezuela	1.99	J
48 Colombia	46	Poland	1.90	
49 Saudi Arabia0.97	47	Slovak Republic	1.42	
	48	Colombia	1.40	
	49	Saudi Arabia	0.97	
50 Pakistan0.47	50	Pakistan	0.47	
n/a Nigerian/a	n/a	Nigeria	n/a	
n/a Vietnamn/a	n/a	Vietnam	n/a	

**SOURCE:** Bank of International Settlements, Quarterly Review, December 2007

#### **Public debt to GDP**

This index is based on the total debt owed by government to domestic residents, foreign nationals, and multilateral institutions as a percentage of GDP  $\,\mid\,$  2006

RANK	COUNTRY/ECONOMY F	HARD DATA	
1	Austria	7.00	
2	Panama		
3	Argentina		
4	Philippines		
5	France		
6	Hungary		
7	India		
8	Norway		
9	Germany		
10	Canada		
11	Colombia		
12	Pakistan		
13			
	Israel		
14	Belgium		
15	Netherlands		
16	Switzerland		
17	Sweden		
18	Singapore		
19	Brazil		
20	Poland		
21	Turkey		
22	Vietnam		
23	United Kingdom	4.98	
24	Malaysia	4.93	
25	Italy		
26	Thailand	4.82	
27	Spain	4.66	
28	Finland	4.59	
29	Indonesia	4.54	
30	Slovak Republic	4.44	
31	United States	4.40	
32	Egypt	4.38	
33	Japan	4.00	
34	South Africa	3.95	
35	Peru	3.92	
36	Saudi Arabia	3.83	
37	Bahrain	3.77	
38	Korea, Rep	3.22	
39	Czech Republic	3.22	
40	Ireland	3.11	
41	Venezuela	2.98	
42	Mexico	2.91	
43	China	2.66	
44	United Arab Emirates.	2.63	
45	Australia	2.17	
46	Ukraine		
47	Nigeria		
48	Hong Kong SAR		
49	Kazakhstan		
50	Russian Federation		
51	Kuwait		
52	Chile		
52			

**SOURCE**: Economist Intelligence Unit, *CountryData Database* (July 2008). Adjusted based on World Economic Forum analysis.

#### **Bank deposits to GDP**

7.04

This variable shows the demand, time, and savings deposits in deposit money banks as a share of GDP  $\,\mid\,$  2006

RANK	COUNTRY/ECONOMY HARD D	ATA
1	Hong Kong SAR250	12
2	Japan189	
3	Canada152	
4	China <sup>1</sup> 147	
5	Switzerland137	
6	United Kingdom130	
	•	
7	Belgium118	
8	Netherlands	
9	Spain112	
10	Malaysia110	
11	Ireland104	
12	Singapore103	
13	Germany102	
14	Thailand94	
15	Austria90	
16	Israel87	
17	Egypt78	
18	Australia75	
19	Panama74	
20	Bahrain73	
21	France70	
22	United States69	
23	Korea, Rep66	
24	Vietnam61	.90
25	Czech Republic60	
26	South Africa56	
27	Italy55	.97
28	India52	.99
29	Brazil51	.74
30	Norway50	.46
31	Finland48	.47
32	Slovak Republic47	.82
33	Philippines46	.60
34	Sweden46	.42
35	Chile46	.39
36	Kuwait46	.29
37	Hungary42	.32
38	Saudi Arabia40	.65
39	Poland38	.11 🚾
40	Turkey35	.67
41	Indonesia34	.50
42	Pakistan34	.46
43	Ukraine <sup>1</sup> 33	.86
44	Russian Federation23	.54
45	Kazakhstan22	.75
46	Peru21	.24
47	Argentina20	.69
48	Mexico20	.34
49	Venezuela20	.13
50	Colombia19	.35
51	Nigeria17	.19
n/a	United Arab Emirates	n/a

**SOURCE**: IMF, International Financial Statistics (electronic version, July 2008 or PDF version, July 2007). Calculated using methodology detailed in Thorsten Beck, Asli Demirgüç-Kunt, and Ross Levine. 2000. "A New Database on Financial Development and Structure." World Bank Economic Review 14: 597–605

<sup>&</sup>lt;sup>1</sup> Not deflated

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## 7.05

## Stock market capitalization to GDP

This indicator is the value of listed shares as a percentage of GDP  $\,\mid\,$  2006 or most recent year available

2000	or most recent year	available	
RANK	COUNTRY/ECONOMY	HARD DATA	
1	Hong Kong SAR	713.26	
2	Switzerland	280.20	
3	South Africa	240.44	
4	Singapore	221.54	
5	Kuwait <sup>1</sup>		
6	United Kingdom		
7	Saudi Arabia		
8	United States		
9	Malaysia		
10	Sweden		
11	Canada		
12	Bahrain <sup>2</sup>		
13	Australia		
14	Finland		
15	Japan		
	Chile		
16 17	Israel		
18	Netherlands		
19	France		
20	Spain		
21	Korea, Rep		
22	Belgium		
23	Egypt		
24	Russian Federation		
25	India		
26	Norway		
27	Thailand		
28	Ireland		
29	Brazil		
30	Peru		
31	Italy		
32	Germany		•
33	Austria		
34	Philippines		
35	Turkey		
36	Poland		
37	Pakistan		
38	Mexico		
39	Colombia	32.13	•
40	Hungary	31.68	
41	Panama	30.86	
42	Kazakhstan	30.30	
43	Czech Republic		
44	Argentina	29.73	
45	Indonesia	26.52	•
46	Nigeria	21.33	
47	Slovak Republic	8.75	
48	Vietnam	7.15	
49	Venezuela	3.14	
n/a	China	n/a	
n/a	Ukraine	n/a	
n/a	United Arab Emira	tesn/a	
		,-	

**SOURCE**: Stock market capitalization and GDP data from the World Bank, *World Development Indicators* (July 2008); other data from the IMF, *International Financial Statistics* (electronic version, July 2008 or PDF version, July 2007). Calculated using methodology detailed in Thorsten Beck, Asli Demirgüç-Kunt, and Ross Levine. 2000. "A New Database on Financial Development and Structure." *World Bank Economic Review* 14: 597–605

#### <sup>1</sup> GDP from 2005 <sup>2</sup> 2005

## 7.06

## Relative value-added of financial institutions to GDP

Value that financial institutions add to the economy after costs are subtracted as a percentage of GDP  $\,\mid\,$  2006

RANK	COUNTRY/ECONOMY	HARD DATA	
1	Panama	9 21	
2	Switzerland		
3	Hong Kong SAR		
4	Singapore		
5			
	China		
6	Egypt		
7	Israel		
8	Canada		
9	Korea, Rep		
10	Australia		
11	United States		
12	United Kingdom		
13	Italy		
14	India		
15	Netherlands	4.59	
16	Spain	4.55	
17	Brazil	4.39	
18	Japan	4.39	
19	Belgium	4.31	
20	South Africa	4.16	
21	Venezuela	4.10	
22	Austria	3.96	
23	Slovak Republic	3.95	
24	Germany		
25	France		
26	Philippines		
27	Hungary		
28	Chile		
29	Kuwait		
30			
30	Argentina		
	Ireland		
32	Czech Republic		
33	Colombia		
34	Thailand		
35	Norway		
36	Sweden		
37	Russian Federation		
38	Malaysia		
39	Mexico	2.29	
40	Peru	2.08	
41	Finland	1.75	
42	Saudi Arabia	1.51	
43	Indonesia	1.44	
44	Vietnam	1.21	
45	Turkey	1.19	
46	Nigeria	0.66	
47	Poland	0.45	
n/a	Bahrain		
n/a	Kazakhstan		
n/a	Pakistan	, -	
n/a	Ukraine		
n/a	United Arab Emirates	, .	
ı ı, a	OTHER MIGH FILLINGES	II/d	

SOURCE: Global Insight, World Industry Monitor, October 25, 2007

#### **Private credit to GDP**

Private credit by deposit-money banks and other financial institutions as a percentage of GDP | 2006 or most recent year available

RANK	COUNTRY/ECONOMY	HARD DATA	
1	United States		
2	Canada		
3	Netherlands		
4	Switzerland		
5	Ireland		
6	United Kingdom		
7	Spain		
8	Hong Kong SAR		
9	Korea, Rep		
10	Sweden		
11	Austria		
12	Malaysia		
13	Germany		
14	Australia		
15	South Africa		
16	Norway		
17	Japan		
18	Singapore		
19	France		
20	Italy		
21	Israel		
22	Thailand		
23	Belgium		
24	Finland		
25	Chile		
26	Panama <sup>1</sup>	74.43	
27	Vietnam <sup>1</sup>		
28	Kuwait		
29	Egypt <sup>1</sup>	55.92	
30	Hungary	51.36	
31	Saudi Arabia	49.23	
32	India	40.23	
33	Kazakhstan	37.67	
34	Czech Republic	37.32	
35	Slovak Republic		
36	Brazil		
37	Philippines	29.00	
38	Turkey	28.82	
39	Pakistan	26.48	
40	Russian Federation	26.22	
41	Poland <sup>1</sup>	26.15	
42	Colombia	24.46	
43	Indonesia	22.69	
44	Mexico	19.54	
45	Peru		
46	Nigeria <sup>1</sup>	12.15	
47	Argentina	11.36	
48	Venezuela <sup>1</sup>	10.47	
n/a	Bahrain	n/a	
n/a	China	n/a	
n/a	Ukraine	n/a	
n/a	United Arab Emirat	esn/a	

**SOURCE:** Thorsten Beck, Asli Demirgüç-Kunt, and Ross Levine. 2000. "A New Database on Financial Development and Structure." *World Bank Economic Review* 14: 597–605

#### 1 2005

## 7.08

#### Stock market value traded to GDP

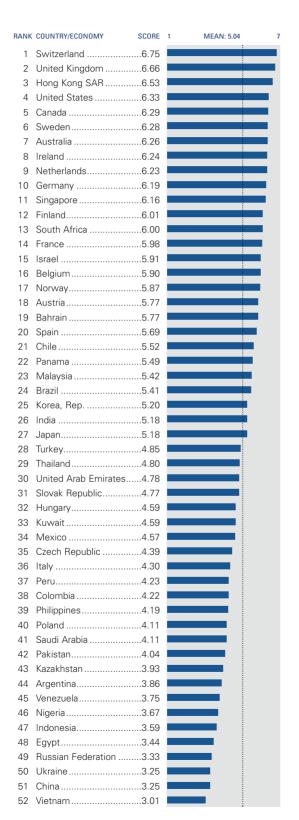
Total value of shares traded on stock market exchanges as a percentage of GDP | 2006 or most recent year available

RANK	COUNTRY/ECONOMY HARD DATA	
1	Saudi Arabia <sup>1</sup> 356.22	
2	Hong Kong SAR <sup>1</sup> 258.82	
3	Switzerland <sup>1</sup> 240.65	
4	United Kingdom <sup>1</sup> 189.27	
5	United States <sup>1</sup> 173.24	
6	Korea, Rep150.91	
7	Finland <sup>1</sup> 141.58	
8	Spain <sup>1</sup> 138.47	
9	Sweden <sup>1</sup> 129.71	
10	South Africa122.53	
11	Netherlands <sup>1</sup> 121.34	
12	Kuwait <sup>1</sup> 116.38	
13	United Arab Emirates <sup>1</sup> 110.35	
14	Japan110.22	
15	Singapore <sup>1</sup> 102.68	
16	Pakistan98.24	
17	Australia <sup>1</sup> 84.08	
18	Canada75.87	
19	India70.45	
20	France <sup>1</sup> 69.38	
21	Norway <sup>1</sup> 65.92	
22	Italy63.27	
23	Germanv <sup>1</sup> 63.08	
24	China	
25	Turkey	
26	Russian Federation52.12	
20	Israel	
28	Thailand	=
29	Malaysia44.92	
30	Egypt44.16	
31	Ireland32.06	
32	Belgium <sup>1</sup> 30.67	
33	Hungary27.62	
34	Brazil23.83	
35	Czech Republic23.18	
36	Chile19.72	
37	Poland16.25	
38	Austria <sup>1</sup> 15.00	
39	Indonesia13.40	
40	Philippines9.62	
41	Mexico9.54	
42	Colombia8.34	
43	Bahrain <sup>1</sup> 5.51	
44	Peru4.58	
45	Nigeria3.10	
46	Argentina2.12	
47	Kazakhstan1.89	
48	Ukraine1.32	
49	Panama <sup>1</sup> 0.48	Į.
50	Venezuela0.37	
51	Slovak Republic0.17	
n/a	Vietnamn/a	

**SOURCE**: Thorsten Beck, Asli Demirgüç-Kunt, and Ross Levine. 2000. "A New Database on Financial Development and Structure." *World Bank Economic Review* 14: 597–605

## **Financial market sophistication**

The level of sophistication of financial markets in your country is (1 = lower than international norms, 7 = higher than international norms)



SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

## 7.10

## Venture capital availability

In your country, how difficult is it for entrepreneurs with innovative but risky projects to find venture capital? (1 = impossible, 7 = very easy)

RANK	COUNTRY/ECONOMY	SCORE	1 MEAN: 3.85 7
1	United States	5 28	
2	Finland		
3	Netherlands		
4	Norway		
5	Israel		
6	United Kingdom		
7	•		
-	Sweden		
8	Ireland		
9	Hong Kong SAR		
10	Australia		
11	Singapore		
12	United Arab Emirates		
13	Korea, Rep		
14	Malaysia		
15	Germany		
16	Canada		
17	Switzerland		
18	Belgium		
19	Spain		
20	Austria		
21	India		
22	France		
23	Kuwait	4.02	
24	Chile		
25	Indonesia	3.87	
26	Panama	3.87	
27	Japan	3.86	
28	Bahrain	3.78	
29	Slovak Republic	3.75	
30	South Africa	3.72	
31	Saudi Arabia	3.66	
32	Poland	3.58	
33	Kazakhstan	3.44	
34	Hungary	3.37	
35	Thailand	3.37	
36	Ukraine	3.19	
37	Russian Federation	3.15	
38	Vietnam	3.12	
39	Czech Republic	3.04	
40	Peru	3.02	
41	China	2.98	
42	Colombia	2.94	
43	Egypt	2.91	
44	Philippines	2.89	
45	Italy		
46	Turkey		
47	Argentina	2.84	
48	Nigeria		
49	Mexico		
50	Pakistan		
51	Venezuela		
52	Brazil		
			·

SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

#### Ease of access to credit

During the past year, obtaining credit for your company has become  $(1 = more\ difficult, 7 = easier)$ 

Slovak Republic   5.88   2   Sweden   5.72   3   Turkey   5.52   4   Norway   5.52   4   Norway   5.549   5   United Arab Emirates   5.49   6   Finland   5.38   7   Panama   5.38   8   Hong Kong SAR   5.36   9   Kuwait   5.35   10   India   5.35   11   Chile   5.33   12   Peru   5.30   13   Ireland   5.28   14   South Africa   5.26   15   Colombia   5.17   16   Korea, Rep   5.10   17   Thailand   5.10   18   Singapore   5.09   19   Netherlands   5.07   20   Israel   5.06   21   United States   5.06   22   Zech Republic   5.06   23   Indonesia   5.06   24   Bahrain   5.05   25   Malaysia   5.05   26   United Kingdom   5.03   27   Japan   4.98   28   Australia   4.97   29   Russian Federation   4.89   30   Pakistan   4.83   31   Canada   4.82   32   Venezuela   4.81   33   Kazakhstan   4.77   34   Switzerland   4.77   35   Germany   4.75   36   Philippines   4.74   4.75   37   38   38   37   4.69   4.71   39   Brazil   4.69   4.69   4.40   4.77   4.50   4.40   4.77   4.50   4.40	RANK	COUNTRY/ECONOMY	SCORE	1	MEAN: 4.91	7
3 Turkey       5.52         4 Norway       5.49         5 United Arab Emirates       5.49         6 Finland       5.38         7 Panama       5.38         8 Hong Kong SAR       5.36         9 Kuwait       5.35         10 India       5.35         11 Chile       5.33         12 Peru       5.30         13 Ireland       5.28         14 South Africa       5.26         15 Colombia       5.17         16 Korea, Rep       5.10         17 Thailand       5.10         18 Singapore       5.09         19 Netherlands       5.07         20 Israel       5.06         21 United States       5.06         22 Czech Republic       5.06         23 Indonesia       5.06         24 Bahrain       5.05         25 Malaysia       5.05         26 United Kingdom       5.03         27 Japan       4.98         28 Australia       4.97         29 Russian Federation       4.89         30 Pakistan       4.83         31 Canada       4.82         32 Venezuela       4.81         33 Kazakhstan	1	Slovak Republic	5.88			
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7 Panama       5.38         8 Hong Kong SAR       5.36         9 Kuwait       5.35         10 India       5.35         11 Chile       5.33         12 Peru       5.30         13 Ireland       5.28         14 South Africa       5.26         15 Colombia       5.17         16 Korea, Rep       5.10         17 Thailand       5.10         18 Singapore       5.09         19 Netherlands       5.07         20 Israel       5.06         21 United States       5.06         22 Czech Republic       5.06         23 Indonesia       5.06         24 Bahrain       5.05         25 Malaysia       5.05         26 United Kingdom       5.03         27 Japan       4.98         28 Australia       4.97         29 Russian Federation       4.89         30 Pakistan       4.83         31 Canada       4.82         32 Venezuela       4.81         33 Kazakhstan       4.77         34 Spain       4.75         36 Philippines       4.74         37 Spain       4.72         38 Mexico	5	United Arab Emirates	5.49			
8 Hong Kong SAR       .5.36         9 Kuwait       .5.35         10 India       .5.35         11 Chile       .5.33         12 Peru       .5.30         13 Ireland       .5.28         14 South Africa       .5.26         15 Colombia       .5.17         16 Korea, Rep.       .5.10         17 Thailand       .5.10         17 Thailand       .5.10         18 Singapore       .5.09         19 Netherlands       .5.07         20 Israel       .5.06         21 United States       .5.06         22 Czech Republic       .5.06         23 Indonesia       .5.06         24 Bahrain       .5.05         25 Malaysia       .5.05         26 United Kingdom       .5.03         27 Japan       .4.98         28 Australia       .4.97         29 Russian Federation       .4.89         30 Pakistan       .4.83         31 Canada       .4.82         32 Venezuela       .4.81         33 Kazakhstan       .4.77         34 Switzerland       .4.77         35 Spain       .4.72         38 Mexico       .4.71	6	Finland	5.38			l
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15 Colombia	13	Ireland	5.28			
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26 United Kingdom       5.03         27 Japan       4.98         28 Australia       4.97         29 Russian Federation       4.89         30 Pakistan       4.83         31 Canada       4.82         32 Venezuela       4.81         33 Kazakhstan       4.77         34 Switzerland       4.77         35 Germany       4.75         36 Philippines       4.74         37 Spain       4.72         38 Mexico       4.71         39 Brazil       4.69         40 Vietnam       4.69         41 Hungary       4.67         42 Belgium       4.58         43 France       4.56         44 Austria       4.43         45 Argentina       4.43         46 Poland       4.40         47 Saudi Arabia       4.38         48 Ukraine       4.26         49 Italy       4.24         50 Egypt       4.14         51 China       3.68	24	Bahrain	5.05			
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29 Russian Federation	27	Japan	4.98			
30 Pakistan	28	Australia	4.97			
31 Canada	29	Russian Federation	4.89			
32 Venezuela	30	Pakistan	4.83			
33 Kazakhstan	31	Canada	4.82			
34 Switzerland 4.77 35 Germany 4.75 36 Philippines 4.74 37 Spain 4.72 38 Mexico 4.71 39 Brazil 4.69 40 Vietnam 4.69 41 Hungary 4.67 42 Belgium 4.58 43 France 4.56 44 Austria 4.43 45 Argentina 4.43 46 Poland 4.40 47 Saudi Arabia 4.38 48 Ukraine 4.26 49 Italy 4.24 50 Egypt 4.14 51 China 3.68	32	Venezuela	4.81			
35 Germany	33	Kazakhstan	4.77			
36 Philippines       4.74         37 Spain       4.72         38 Mexico       4.71         39 Brazil       4.69         40 Vietnam       4.69         41 Hungary       4.67         42 Belgium       4.58         43 France       4.56         44 Austria       4.43         45 Argentina       4.43         46 Poland       4.40         47 Saudi Arabia       4.38         48 Ukraine       4.26         49 Italy       4.24         50 Egypt       4.14         51 China       3.68	34	Switzerland	4.77			
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48 Ukraine						
49 Italy						
50 Egypt4.14 51 China3.68						
51 China3.68		,				
52 Nigeria3.54						
	52	Nigeria	3.54			

**SOURCE:** World Economic Forum, Executive Opinion Survey 2006, 2007

## Ease of access to local equity market

7.12

Raising money by issuing shares on the stock market in your country is (1 = impossible, 7 = very easy)

RANK	COUNTRY/ECONOMY	SCORE	1	MEAN: 5.19	
1	Sweden	6.24			
2	Indonesia				
3	Hong Kong SAR				
4	South Africa				
5	Norway				
6	Australia				
7	Chile				
8	Japan				
9	United Kingdom				
10	India				
11	United States				
12	Kuwait				
13	Bahrain				
14	Singapore				
15	Israel				
16	Malaysia				
17	Netherlands				
18	Finland				
19	Switzerland				
20	Germany				
21	France				
22	Canada				
23	Korea, Rep.				
24	Turkey				
25	Austria				
26	United Arab Emirates				
27	Vietnam				
28	Nigeria				
29	Thailand				
30	Panama				
31	Belgium				
32	Ireland				
33	Philippines				
34	Spain				
35	Peru				
36	Pakistan				
37	Brazil				
38	Egypt				
39	Italy				
40	Saudi Arabia				
41	Poland				
42	Mexico				
43	Colombia				
44	Czech Republic				
45	Hungary				
46	Russian Federation				
47	China				
48	Venezuela				
49	Kazakhstan				
50	Ukraine				
51	Argentina				
52	Slovak Republic				
	•				

SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

#### **Bank branches**

Number of branches per 100,000 inhabitants | 2005

RANK	COUNTRY/ECONOMY	HARD DATA	
1	Spain		
2	Austria		
3	Belgium	53.15	
4	Italy	52.07	
5	Germany	49.41	
6	Canada	45.60	
7	France	43.23	
8	Switzerland	37.99	
9	Netherlands	34.23	
10	United States	30.86	
11	Australia	29.86	
12	Hungary	28.25	
13	Ireland	23.41	
14	Norway	22.92	
15	Sweden	21.80	
16	Finland	19.06	
17	United Kingdom	18.35	
18	Israel		
19	Brazil		
20	Bahrain		
21	Korea, Rep		
22	Panama		
23	Czech Republic		- 
24	Slovak Republic		
25	Argentina		
26	Japan		
27	Malaysia		
28	Chile		
29	Singapore		
30	Colombia		
31			
31	Turkey		
	Indonesia		
33	Kuwait		
34	Poland		
35	Philippines		
36	Mexico		
37	Thailand		
38	India	_	
39	South Africa		
40	Saudi Arabia		
41	Pakistan		
42	Venezuela		
43	Peru		
44	Egypt	3.62	
45	Kazakhstan	2.47	
46	Russian Federation		
47	Nigeria	1.62	
48	China	1.33 <b>I</b>	
n/a	Hong Kong SAR	n/a	
n/a	Ukraine	n/a	
n/a	United Arab Emirat	esn/a	
n/a	Vietnam	n/a	

**SOURCE**: Maria Soledad Martinez Peria, Thorsten Beck, and Asli Demirguc-Kunt. 2005. Indicators of Access to and Use of Financial Services Across Countries. World Bank database available at http://go.worldbank.org/EZDOBVQT20

## 7.14

#### Ease of access to loans

How easy is it to obtain a bank loan in your country with only a good business plan and no collateral? (1 = impossible, 7 = very easy)

RANK	COUNTRY/ECONOMY	SCORE	1	MEAN: 3.	97	7
1	Norway					
2	Finland					
3	United Kingdom					
4	Netherlands					
5	Sweden					
6	United Arab Emirates.					
7	United States					
8	Ireland					
9	Australia					
10	Hong Kong SAR					
11	Singapore					
12	Kuwait					
13	Malaysia					
14	Israel					
15	Switzerland					
16	Germany					
17	Panama					
18	Slovak Republic					
19	Korea, Rep					
20	Belgium					
21	Canada					
22	Chile					
23	Bahrain					
24	Austria					
25	India					
26	Thailand					
27	Pakistan					
28	Indonesia					
29	Spain					
30	South Africa					
31	France					
32	Hungary	3.67				
33	Japan					
34	Kazakhstan					
35	Saudi Arabia	3.63				
36	Poland	3.43				
37	Peru	3.43				
38	Czech Republic	3.36				
39	Venezuela	3.29				
40	Ukraine					
41	Colombia	3.17				
42	Turkey	3.15				
43	Philippines	2.92				
44	Italy	2.88		•		
45	Vietnam	2.82				
46	Russian Federation	2.81				
47	Mexico	2.79				
48	Brazil	2.79				
49	Egypt	2.69				
50	China	2.57				
51	Nigeria	2.50				
52	Argentina	2.33				

SOURCE: World Economic Forum, Executive Opinion Survey 2006, 2007

## **Technical Notes and Sources**

The following section complements the data tables by providing additional information and definitions for the hard data indicators that enter the composition of the Financial Development Index 2008. In the following pages, the number next to the variable corresponds to the number of the data table that shows the ranks and scores for all countries on this particular indicator.

The data used in this *Report* represent the best available estimates from various international agencies, private sources, and national authorities at the time the *Report* was prepared. It is possible that some data will have been updated or revised after publication.

#### Section I: Institutional environment

#### 1.01 Capital account liberalization

This index measures the degree of capital account liberalization within a country, standardized on a 1-to-7 scale | 2005

This variable measures specifically the level of capital controls based on information from the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER). The World Economic Forum created an interaction term between these data and the Legal and regulatory issues subpillar of this Financial Development Index and standardized the scores on a scale from 1 to 7.

Source: Menzie Chinn and Hiro Ito. 2007. "A New Measure of Financial Openness." *Journal of Comparative Policy Analysis* (forthcoming). Data set available at http://www.ssc.wisc.edu/~mchinn/research.html. Interaction results from World Economic Forum analysis.

#### 1.07 Shareholder rights index

This variable is an aggregation of numerous measures of shareholder rights

Source: Sergio Schmukler (personal communication)

#### 1.20 Number of procedures to enforce a contract

Number of procedures from the moment the plaintiff files a lawsuit in court until the moment of payment | 2007

A procedure is defined as any interaction between the parties, or between them and the judge or court officer. This includes steps to file the case, steps for trial and judgment, and steps necessary to enforce the judgment. The survey allowed respondents to record procedures that exist in civil law but not common law jurisdictions, and vice versa. For example, the judge can appoint an independent expert in civil law countries, whereas both parties in common law countries send lists of their expert witnesses to the court. To indicate the overall efficiency of court procedures, one procedure is now subtracted for countries that have specialized commercial courts and one procedure for countries that allow electronic filing of court cases.

Source: The World Bank, Doing Business 2008

#### 1.21 Time to enforce a contract

#### Number of days required to resolve a dispute | 2007

Time is recorded in calendar days, counted from the moment the plaintiff files the lawsuit in court until payment. This includes both the days when actions take place and the waiting periods in between. The respondents make separate estimates of the average duration of different stages of dispute resolution: the completion of service of process (time to file the case), the issuance of judgment (time for the trial and obtaining the judgment), and the moment of payment (time for enforcement).

Source: The World Bank, Doing Business 2008

#### 1.22 Cost of enforcing contracts

#### Cost of enforcing contracts as a percentage of debt | 2007

This variable is recorded as a percentage of the claim, assumed to be equivalent to 200 percent of income per capita. Only official costs required by law are recorded, including court and enforcement costs and average attorney fees where the use of attorneys is mandatory or common.

Source: The World Bank, Doing Business 2008

#### 1.23 Strength of investor protection

## This index assesses the strength of investor protection on a 0-to-10 (best) scale | 2007

The Strength of Investor Protection Index is the average of the extent of disclosure index, the extent of director liability index, and the ease of shareholder suits index. The index ranges from 0 to 10, with higher values indicating more investor protection.

Source: The World Bank, Doing Business 2008

#### 1.24 Time to close a business

#### Time in years to close a business | 2007

Information is collected on the sequence of procedures and on whether any procedures can be carried out simultaneously. Potential delay tactics by the parties, such as the filing of dilatory appeals or requests for extension, are taken into consideration.

Source: The World Bank, Doing Business 2008

#### 1.25 Domestic financial sector liberalization

This index measures the degree of domestic financial sector liberalization within a country, standardized on a 1-to-7 scale | 2005

This index was calculated on the basis of whether or not controls (ceilings and floors) on interest rates and credit exist, and whether or not deposits in foreign currency are allowed. Schmukler and Kaminsky updated their results up to 2005 for a subset of the sample countries. The World Economic Forum used their methodology to update the rest of the countries for the purposes of the calculations in this report. National sources, central banks, and IMF reports were the main sources of these updates. The World Economic Forum then created an interaction term between these data and the Legal and regulatory issues subpillar of this Financial Development Index and standardized the scores on a scale from 1 to 7.

Source: Graciela Kaminsky and Sergio Schmukler, 2003. "Short-Run Pain, Long-Run Gain: The Effects of Financial Liberalization." IMF Working Paper 03/34 Washington, DC: International Monetary Fund

#### Section II: Business environment

#### 2.06 Tertiary enrollment

## Gross tertiary enrollment rate | 2006 or most recent year available

This variable is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Estimates are based on UNESCO's classification of education levels. Tertiary enrollment requires, as a minimum condition of admission, the successful completion of education at the secondary level or evidence of attainment of an equivalent level of knowledge; instruction is provided at a university, teachers' college, or higher-level professional school.

Source: UNESCO Institute for Statistics (June 2008); World Bank, World Development Indicators 2008 (published version); national sources

#### 2.09 Corporate tax rate

#### The top tax rate on corporate income | 2006

This represents the top tax rate on corporate income in a country, as compiled by the Heritage Foundation from Ernst &Young, Deloitte, IMF, investment agency and governmental sources.

Source: Heritage Foundation, 2008 Index of Economic Freedom

#### 2.12 Internet users

#### Internet users per 100 inhabitants | 2006

Internet users are people with access to the worldwide network

Source: International Telecommunication Union, World Telecommunication Indicators 2007; national sources

#### 2.13 Broadband Internet subscribers

## Total broadband Internet subscribers per 100 inhabitants | 2006 or most recent year available

The International Telecommunication Union considers broadband to be any dedicated connection to the Internet of 256 kilobits per second (kb/s) or faster, in both directions. *Broadband subscribers* refers to the sum of DSL, cable modem, and other broadband (for example, fiber optic, fixed wireless, apartment LANs, satellite connections) subscribers.

Source: International Telecommunication Union, World Telecommunication Indicators 2007; national sources

#### 2.14 Telephone lines

## Main telephone lines per 100 inhabitants | 2006 or most recent year available

A main telephone line is a telephone line connecting the subscriber's terminal equipment to the public switched telephone network and that has a dedicated port in the telephone exchange equipment.

Source: International Telecommunication Union, World Telecommunication Indicators 2007; national sources

#### 2.15 Mobile telephone subscribers

## Mobile cellular telephone subscribers per 100 inhabitants | 2006

The term *subscribers* refers to users of mobile telephones subscribing to an automatic public mobile telephone service that provides access to the public switched telephone network using cellular technology. This can include analogue and digital cellular systems but should not include noncellular systems. Subscribers to fixed wireless, public mobile data services or radio paging services are not included.

Source: International Telecommunication Union, World Telecommunication Indicators 2007; national sources

#### 2.16 Cost of starting a business

## Cost of starting a business as a percentage of income per capita | 2007

This variable measures the official fees and fees for legal or professional services if such services are required by law to start a new business. Fees for purchasing and legalizing company books are included if these transactions are required by law. The company law, the commercial code, and specific regulations and fee schedules are used as sources for calculating costs. In the absence of fee schedules, a government officer's estimate is taken as an official source. In the absence of a government officer's estimate, estimates of incorporation lawyers are used. If several incorporation lawyers provide different estimates, the median reported value is applied. In all cases the cost excludes bribes.

Source: The World Bank, Doing Business 2008

#### 2.17 Cost of dealing with licenses

## Cost of dealing with licenses as a percentage of income per capita | 2007

This variable measures fees associated with completing the procedures to legally build a warehouse are recorded, including those associated with obtaining land use approvals and preconstruction design clearances; receiving inspections before, during, and after construction; getting utility connections; and registering the warehouse property. Nonrecurring taxes required for the completion of the warehouse project also are recorded. The building code, information from local experts, and specific regulations and fee schedules are used as sources for costs. If several local partners provide different estimates, the median reported value is used.

Source: The World Bank, Doing Business 2008

#### 2.18 Cost of registering property

## Cost of registering property as a percentage of income per capita | 2007

This variable is a percentage of the property value, assumed to be equivalent to 50 times income per capita. Only official costs required by law are recorded; these include fees, transfer taxes, stamp duties, and any other payment to the property registry, notaries, public agencies, or lawyers. Other taxes, such as capital gains tax or value-added tax, are excluded from the cost measure. Both costs borne by the buyer and those borne by the seller are included. If cost estimates differ among sources, the median reported value is used.

Source: The World Bank, Doing Business 2008

#### 2.19 Cost to export

## Total official cost in US dollars associated with exporting a container, excluding tariffs and trade taxes | 2007

This variable measures the fees levied on a 20-foot container in US dollars. All the fees associated with completing the procedures to export the goods are included. These include costs for documents, administrative fees for customs clearance and technical control, terminal handling charges, and inland transport. The cost measure does not include tariffs or trade taxes. Only official costs are recorded.

Source: The World Bank, Doing Business 2008

#### 2.20 Cost to import

## Total official cost in US dollars associated with importing a container, excluding tariffs and trade taxes | 2007

This variable measures the fees levied on a 20-foot container in US dollars. All the fees associated with completing the procedures to import the goods are included. These include costs for documents, administrative fees for customs clearance and technical control, terminal handling charges, and inland transport. The cost measure does not include tariffs or trade taxes. Only official costs are recorded.

Source: The World Bank, Doing Business 2008

#### 2.21 Cost of enforcing contracts

Cost of enforcing contracts as a percentage of claim | 2007

This variable is recorded as a percentage of the claim, assumed to be equivalent to 200 percent of income per capita. Only official costs required by law are recorded, including court and enforcement costs and average attorney fees where the use of attorneys is mandatory or common.

Source: The World Bank, Doing Business 2008

#### 2.22 Cost of closing a business

Cost of closing a business as a percentage of the estate | 2007

The cost of the proceedings is recorded as a percentage of the estate's value. The cost is calculated on the basis of survey responses by insolvency practitioners and includes court fees as well as fees of insolvency practitioners, independent assessors, lawyers, and accountants. Respondents provide cost estimates from among the following options: less than 2%, 2–5%, 5–8%, 8–11%, 11–18%, 18–25%, 25–33%, 33–50%, 50–75%, and more than 75% of the value of the business estate.

Source: The World Bank, Doing Business 2008

#### **Section III: Financial stability**

#### 3.01 Change in real effective exchange rate

Average percentage change in real effective exchange rate from year to year over the period 2002–06

Real effective exchange rates (REERs) are available only for a subgroup of rated countries and come from two main sources: JP Morgan and the IMF. The JP Morgan REER index relies on available measures of the prices of domestically produced finished manufactured goods (excluding primary food and energy), while the IMF index is based on consumer prices. Cross-country comparisons are therefore difficult, but changes over time for individual countries still give a rough indication of the evolution of relative costs. This variable relies on available measures of the prices of domestically produced finished manufactured goods and consumer prices.

Source: Moody's Statistical Handbook (May 2007)

#### 3.02 External vulnerability indicator

The external vulnerability indicator is the sum of several measures of external exposure as a percentage of foreign exchange reserves | 2006

This variable is the short-term external debt + currently maturing long-term external debt + total nonresident deposits over one year / official foreign exchange reserves (%).

Source: Moody's Statistical Handbook (May 2007)

#### 3.03 Current account balance to GDP

The current account balance to GDP provides an indicator of the difficulty a country might have in mobilizing the foreign exchange necessary for debt service | 2006

Source: Moody's Statistical Handbook (May 2007)

#### 3.04 Dollarization vulnerability indicator

This variable measures the risk of payment crisis and default originating from the presence of a large amount of dollarization in the domestic banking system | 2006

Source: Moody's Statistical Handbook (May 2007)

#### 3.05A External debt to GDP (developing economies)

External debt as a percentage of GDP | 2006

This variable measures the total debt held by nonresidents, regardless of the currency in which the debt is denominated, as a share of GDP for emerging markets only.

Source: Moody's Statistical Handbook (May 2007)

## 3.05B Net international investment position to GDP (advanced economies)

Net international investment position as a percentage of GDP | 2006

For advanced economies only, this variable measures the role these countries play in the international movement of capital. The estimate is based on the difference between the market value of a country's foreign assets and that of its liabilities relative to GDP.

Source: Moody's Statistical Handbook (May 2007)

#### 3.06 Activity restrictions for banks

This index measures the degree to which banks are allowed to engage in fee-based activities rather than more traditional interest spread–based activities | 2006

Measured activities include securities activities, insurance activities, and real estate activities.

Source: James Barth, Gerard Caprio, and Ross Levine. 2007. "Bank Regulations Are Changing: But for Better or Worse?" World Bank Discussion Paper, Washington, DC

#### 3.07 Entry restrictions for banks

This index measures the extent of procedures required for opening a bank and maintaining a banking license | 2006

Source: James Barth, Gerard Caprio, and Ross Levine. 2007. "Bank Regulations Are Changing: But for Better or Worse?" World Bank Discussion Paper, Washington, DC

#### 3.08 Capital restrictions for banks

This index is based on different measures of capital regulatory stringency | 2006

This variable is composed of different measures of capital regulatory stringency including overall capital stringency and initial capital stringency. Overall capital stringency measures the extent of regulatory requirements and specific guidelines regarding the amount of capital that banks must have. Initial capital stringency measures the extent to which the source of funds that count as regulatory capital can include assets other than cash or government securities, borrowed funds, and whether the sources of capital are verified by the regulatory or supervisory authorities.

Source: James Barth, Gerard Caprio, and Ross Levine. 2007. "Bank Regulations Are Changing: But for Better or Worse?" World Bank Discussion Paper, Washington, DC

#### 3.09 Official supervisory power

This index measures the extent to which official supervisory authorities have the authority to take specific actions to prevent and correct problems | 2006

Possible actions include restructuring power, declaring insolvency power, and prompt corrective power that force automatic enforcement actions such as intervention.

Source: James Barth, Gerard Caprio, and Ross Levine. 2007. "Bank Regulations Are Changing: But for Better or Worse?" World Bank Discussion Paper, Washington, DC

#### 3.10 Private monitoring of the banking industry

This index measures the degree to which the private sector monitors the banking industry (higher percentage values indicate greater transparency) | 2006

Indicators included in assessment of private monitoring include the requirement of certified auditing, percentage of 10 biggest banks rated by international rating agencies, and bank accounting.

Source: James Barth, Gerard Caprio, and Ross Levine. 2007. "Bank Regulations Are Changing: But for Better or Worse?" World Bank Discussion Paper, Washington, DC

#### 3.11 Frequency of banking crises

This variable is calculated based on the number of banking crises that countries experienced from 1974 to 2003

The crisis count includes systemic banking crises (defined as much or all of bank capital being exhausted), borderline cases of systemic crisis, and smaller non-systemic crises.

Source: Gerard Caprio and Daniela Klingebiel. 2003. "Episodes of Systemic and Borderline Financial Crises." Washington, DC: World Bank

#### 3.12 Stability Index

This variable measures the asset quality, capital adequacy, liquidity and sensitivity to market risk in a banking system | 2005

This variable is the average of the subdimension indexes within the dimension of stability. This dimension is comprised of capital adequacy, asset quality (borrowers), asset quality (lenders), liquidity, and sensitivity to market risk. The average is calculated with at least one subdimension index. The variable values are very specific to banking stability; as explained in the Methodology section, very high stability does not imply efficiency or a positive influence on access to capital.

Source: World Bank, Financial Indicators website www.financial-indicators.org

#### 3.13 Cumulative real estate appreciation

Percentage average annual appreciation of national real estate prices deflated with the local GDP deflator for the period 2001–05

Source: Joshua Aizenman and Yothin Jinjarak. 2008. "Current Account Patterns and National Real Estate Markets." NBER Working Paper No. 13921. Cambridge, MA: NBER

#### 3.14 Local currency sovereign rating

This variable measures the probability that a country will pay its local currency borrowing in a full and timely manner I 2006

Local currency sovereign credit ratings of Standard and Poor's were converted on a linear numerical scale from 0 (reflecting SD) to 20 (reflecting AAA). Credit outlooks were given either a positive 0.3 or a negative 0.3 to be added or taken off of the actual rating of a country. Accounting for structural breaks occurred when a country was upgraded or downgraded between an investment and sub-investment grade. Given that ratings action does not take place at regular intervals, calculating the ratings for one year would take into account the number of days that a country was rated before a change in the rating. For instance, if a country was upgraded one notch on February first, from a 16 to a 17, then a weighted average would be calculated (11 months based on the new rating of 17 and 1 month based on the rating of 16). The same thing occurred for downgrades, and for credit outlook changes.

Source: Standard and Poor's, "Sovereign Ratings History Since 1975" (January, 2007)

#### 3.15 Foreign currency sovereign rating

This variable measures the probability that a country will pay its foreign currency borrowing in a full and timely manner | 2006

Foreign currency sovereign credit ratings of Standard and Poor's were converted on a linear numerical scale from 0 (reflecting SD) to 20 (reflecting AAA). Credit outlooks were given either a positive 0.3 or a negative 0.3 to be added or taken off of the actual rating of a country. Accounting for structural breaks occurred when a country was upgraded or downgraded between an investment and sub-investment grade. Given that ratings action does not take place at regular intervals, calculating the ratings for one year would take into account the number of days that a country was rated before a change in the rating. For instance, if a country was upgraded one notch on February first, from a 16 to a 17, then a weighted average would be calculated (11 months based on the new rating of 17 and 1 month based on the rating of 16). The same thing occurred for downgrades, and for credit outlook changes.

Source: Standard and Poor's, "Sovereign Ratings History Since 1975" (January, 2007)

#### Section IV: Banks

#### 4.01 Size index

This index is an average of scaled indicators measuring the size of the banking sector  $\mid$  2005

These indicators are deposit money bank assets to GDP, central bank assets to GDP, M2 to GDP, total system deposits to GDP, private credit to GDP, private credit to total domestic GDP, and private credit to total funding. The average is calculated when a value is present for at least one indicator.

Source: World Bank, Financial Indicators website www.financial-indicators.org

#### 4.02 Efficiency index

Average of the subdimension indexes measuring profitability, efficiency, and competitiveness | 2005

Specifically, this variable is comprised of the Three-bank concentration ratio (assets), Three-bank concentration ratio (deposits), Lending-deposit rates spread, Net interest margin, Operating costs to total assets, Return on assets (adjusted), Return on assets (median), and foreign bank ownership. In addition to the above variables calculated by the World Bank, the fraction of the banking system that is foreign-owned was added to capture an additional dimension of banking efficiency.

Source: James Barth, Gerard Caprio, and Ross Levine. 2007. "Bank Regulations Are Changing: But for Better or Worse?" World Bank Discussion Paper, Washington, DC

#### 4.03 Public ownership of banks

Percentage of the banking system's assets that is in banks that are 50 percent or more government owned | 2005 Measured as of year-end 2005.

Source: James Barth, Gerard Caprio, and Ross Levine. 2007. "Bank Regulations Are Changing: But for Better or Worse?" World Bank Discussion Paper, Washington, DC; associated "World Bank Survey III" database, available at http://go.worldbank.org/SNUSW978P0

#### 4.04 Public credit registry coverage

Percentage of adults covered by a public credit registry | 2007

Includes information on repayment history, unpaid debts, or credit outstanding.

Source: The World Bank, Doing Business 2008

#### 4.05 Private credit bureau coverage

Percentage of adults covered by a private credit registry | 2007

Includes information on repayment history, unpaid debts, or credit outstanding.

Source: The World Bank, Doing Business 2008

#### 4.06 Credit Information Index

Indexed value for the amount of credit information available from either a public registry or a private bureau | 2007

Higher values of this index, with responses ranging from 0 to 6, indicate more credit information available from either a public registry or a private bureau to facilitate lending decisions.

Source: The World Bank, Doing Business 2008

#### Section V: Non-banks

#### 5.01 IPO market share

Percentage of world IPOs (initial public offerings) issued in a given country as measured by US dollars | 2006

IPOs are issues where the common stock has never traded publicly in any market and is offered in its initial public offering. Annual volumes accumulate the proceeds amount + over allotment sold (US\$ millions) [amount of the issue in this market plus the over allotment amount (a.k.a. green shoe) sold in this market] for all issues based on the issue/announcement date.

Source: Thomson Financial SDC Platinum, retrieved December 2007

#### 5.02 IPO proceeds amount

Total IPO (initial public offering) proceeds as a percentage of GDP | 2006

This variable represents IPO proceeds as a percentage of GDP. The initial public offering (IPO) proceeds amount is calculated when the common stock has never before traded publicly in any market. Annual volumes accumulate as the proceeds amount + over allotment sold (US\$ millions), which is the amount of the issue in this market plus the over allotment amount (a.k.a. green shoe) sold in this market] for all issues based on the issue/announcement date.

Source: IPO information from Thomson Financial SDC Platinum, retrieved December 2007, GDP data from Moody's Investors Service

#### 5.03 Share of world IPOs

Number of IPO (initial public offering) issues as a percentage of total global number of issues | 2006

This variable counts the number of IPO issues as defined in variable 5.02 and shows the percentage of the total global issuance in number of issues attributable to that country.

Source: Thomson Financial SDC Platinum, retrieved December 2007

#### 5.04 M&A market share

Dollar value of M&A (mergers and acquisitions) occurring in a given country as a percentage of total global value | 2006 Percentage of the total world rank value of the transaction in US dollars (including the net debt of the target) attributable to a given country. The rank value is calculated by subtracting the value of any liabilities assumed in a transaction from the transaction value and by adding the target's net debt (US\$ millions). Net debt is straight debt + short-term debt + preferred equity – cash and marketable securities as of the date of the most current financial information prior to the announcement of the transaction. Preferred equity is not included if the cost to acquire preferred shares (CSTPFD) is filled in.

Source: Thomson Financial SDC Platinum, retrieved December 2007

#### 5.05 M&A transaction value to GDP

This variable is the rank value of the transaction in US dollars (including the net debt of the target) as a percentage of GDP  $\mid$  2006

The rank value is calculated by subtracting the value of any liabilities assumed in a transaction from the transaction value and by adding the target's net debt (US\$ millions). Net debt is straight debt + short-term debt + preferred equity – cash and marketable securities as of the date of the most current financial information prior to the announcement of the transaction. Preferred equity is not included if the cost to acquire preferred shares (CSTPFD) is filled in.

Source: Thomson Financial SDC Platinum, retrieved December 2007

#### 5.06 Share of total number of M&A deals

Percentage of world M&A (mergers and acquisitions) deals occurring in a given country as measured by the share of total number of global M&A deals?2006

The percentage of total world rank value of transactions in US dollars (including the net debt of the target), attributable to a particular country. The rank value is calculated by subtracting the value of any liabilities assumed in a transaction from the transaction value and by adding the target's net debt (US\$ millions). Net debt is straight debt + short-term debt + preferred equity – cash and marketable securities as of the date of the most current financial information prior to the announcement of the transaction. Preferred equity is not included if the cost to acquire preferred shares (CSTPFD) is filled in.

Source: Thomson Financial SDC Platinum, retrieved December 2007

#### 5.07 Insurance premiums, direct

Direct insurance premiums (life and non-life), including commissions and other charges, prior to cession to a reinsurance company (US\$ millions) | 2006

Premium volumes are converted into US dollars to facilitate comparisons between the different markets and regions, using the average exchange rate for the financial year. Where no premium data are available (indicated by "n/a" for the local currency value), the premium income in US dollars is estimated based on the assumption that the ratio of insurance premiums to GDP remained constant (constant insurance penetration).

Source: Swiss Re, World Insurance in 2006: Premiums Came Back to "Life"

#### 5.08 Insurance density

Direct life insurance premiums (life and non-life) per capita from domestic sources (US dollars) | 2006

Only premium income from domestic risks is used to calculate insurance penetration and density. Cross-border business is not included. This exclusion has a significant effect in Luxembourg, Ireland, and the United Kingdom.

Source: Swiss Re, World Insurance in 2006: Premiums Came Back to "Life"

#### 5.09 Real growth of direct insurance premiums

Annual real rate of growth (%) of direct premiums (life and non-life) based on local currency prices | 2006

Real growth rates are calculated using premiums in local currencies and adjusted for inflation using the consumer price index for each country.

Source: Swiss Re, World Insurance in 2006: Premiums Came Back to "Life"

#### 5.10 Insurance penetration

## Direct domestic premiums (life and non-life) as a percentage of GDP | 2006

Only premium income from domestic risks is used to calculate insurance penetration and density. Cross-border business is not included. This exclusion has a significant effect in Luxembourg, Ireland and the United Kingdom.

Source: Swiss Re, World Insurance in 2006: Premiums Came Back to "Life"

#### 5.11 Relative value-added of insurance

The value added by insurance services to the economy after costs are subtracted, as a percentage of GDP | 2006

This indicator represents what remains of total sales revenue after the costs of providing insurance products are taken out, signifying the value the insurance sector creates in the economy.

Source: Global Insight, World Industry Monitor, October 25, 2007

#### 5.12 Securitization to GDP

The sum of asset-backed securities (ABS), mortgage-backed securities (MBS), high-yield bonds, and highly leveraged loans' deal value as a percentage of GDP | 2006

Source: Dealogic Analytics, data retrieved February 2008

#### 5.13 Share of total number of securitization deals

The sum of asset-backed securities (ABS), mortgage-backed securities (MBS), high-yield bonds, and highly leveraged loans as a percentage of total deals | 2006

Source: Dealogic Analytics, data retrieved February 2008

#### **Section VI: Financial markets**

#### 6.01 Spot foreign exchange turnover

Percentage share of world total of spot foreign exchange turnover | April 2007

Transactions are measured in US dollars and involve the exchange of two currencies at a rate agreed upon on the date of the contract for value of delivery at a time less than two days into the future. The spot legs of swaps were not included among spot transactions but were treated as swap transactions even when they were for settlement within two days (i.e., including "tomorrow/next day" transactions).

Source: Bank of International Settlements, Triennial Central Bank Survey, December 2007

#### 6.02 Outright forward foreign exchange turnover

Percentage share of world total of outright forward foreign exchange turnover | April 2007

Transactions are measured in US dollars and involve the exchange of two currencies at a rate agreed upon on the date of the contract for value of delivery at a time more than two days into the future. Exchange rate is for cash settlement at some time in the future (more than two business days later).

Source: Bank of International Settlements, Triennial Central Bank Survey, December 2007

#### 6.03 Foreign exchange swap turnover

## Percentage share of world total of foreign exchange swap turnover | April 2007

Transactions are measured in US dollars and involve the actual exchange of two currencies (principal amount only) on a specific date at a rate agreed upon at the time of conclusion of the contract (the short leg), and a reverse exchange of the same two currencies at a date further in the future and at a rate (generally different from the rate applied to the short leg) agreed at the time of the contract (the long leg). Both spot/forward and forward/forward swaps are included. Short-term swaps carried out as "tomorrow/next day" transactions are also included in this category.

Source: Bank of International Settlements, Triennial Central Bank Survey, December 2007

#### 6.04 Interest rate derivatives turnover: Forward rate agreements

Percentage share of world total of over-the-counter single currency forward interest rate agreements turnover | April 2007

Transactions are measured in US dollars and involve interest rate forward contracts in which the rate to be paid or received on a specific obligation for a set period of time, beginning at some time in the future, is determined at contract initiation.

Source: Bank of International Settlements, Triennial Central Bank Survey, December 2007

#### 6.05 Interest rate derivatives turnover: Swaps

Percentage share of world total of over-the-counter single currency interest rate swaps turnover | April 2007

Transactions are measured in US dollars and involve agreements to exchange periodic payments related to interest rates on a single currency; these can be fixed for floating, or floating for floating based on different indices. This group includes those swaps whose notional principal is amortized according to a fixed schedule independent of interest rates.

Source: Bank of International Settlements, Triennial Central Bank Survey, December 2007

#### 6.06 Interest rate derivatives turnover: Options

Percentage share of world total of over-the-counter interest rate options turnover | April 2007

Transactions are measured in US dollars and involve option contracts that give the right to pay or receive a specific interest rate on a predetermined principal for a set period of time.

Source: Bank of International Settlements, Triennial Central Bank Survey, December 2007

#### 6.07 Foreign exchange derivatives turnover: Currency swaps

Percentage share of world total of over-the-counter foreign exchange currency swaps turnover | April 2007

Transactions are measured in US dollars and involve contracts that commit two counterparties to exchange streams of interest payments in different currencies for an agreed period of time and to exchange principal amounts in different currencies at a pre-agreed exchange rate at maturity.

Source: Bank of International Settlements, Triennial Central Bank Survey, December 2007

#### 6.08 Foreign exchange derivatives turnover: Options

Percentage share of world total of over-the-counter foreign exchange options turnover | April 2007

Transactions are measured in US dollars and involve contracts that give the right to buy or sell a currency with another currency at a specified exchange rate during a specified period. This category also includes exotic foreign exchange options such as average rate options and barrier options.

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#### 6.09 Equity market turnover

The total value of shares traded during the period divided by the average market capitalization for the period | 2005
The average market capitalization is calculated as the average of the end-of-period values for the current period and the previous period.

Source: World Bank, Financial Indicators website www.financial-indicators.org

#### 6.10 Private-sector bonds to GDP

The total amount of outstanding domestic debt securities by private domestic entities as a percentage of GDP | 2005

Domestic debt is deflated by the average of the end-of-year value for year t and year t-1, both deflated by the end-of-year consumer price index (CPI); the GDP is deflated by the annual value of the CPI.

Source: World Bank, Financial Indicators website www.financial-indicators.org

#### 6.11 Public-sector bonds to GDP

This index is based on the total amount of outstanding domestic debt securities by public domestic entities as a percentage of GDP | 2005

Domestic debt is deflated by the average of the end-of-year value for year t and year t-1, both deflated by the end-of-year consumer price index (CPI); the GDP is deflated by the annual value of the CPI. A non-monotonic treatment was applied as described in the methodology section and the values standardized on a 1-to-7 scale.

Source: World Bank, Financial Indicators website www.financial-indicators.org

#### 6.12 International bonds to GDP

Percentage of GDP represented by international bonds | 2005

Source: World Bank, Financial Indicators website www.financial-indicators.org

#### Section VII: Size, depth, and access

#### 7.01 M2 to GDP

Money and quasi-money supply as a percentage of GDP  $\,\mid\,$  2005

This variable shows money and quasi-money as a percentage of GDP, calculated using the following deflation method:

$$\frac{(0.5) \times \left[ \frac{F_t}{P_- e_t} + \frac{F_{t-1}}{P_- e_{t-1}} \right]}{\frac{\text{GDP}_t}{P_- a_t}},$$

where F is money and quasi-money,  $P\_e$  is end-of-period CPI, and  $P\_a$  is average annual CPI.

Source: World Bank, Financial Indicators website www.financial-indicators.org

#### 7.02 Private debt to GDP

The sum of domestic debt securities and international debt securities for financial institutions and corporate issuers as a percentage of GDP | 2006

Source: Bank of International Settlements, *Quarterly Review* December 2007

#### 7.03 Public debt to GDP

This index is based on the total debt owed by government to domestic residents, foreign nationals, and multilateral institutions as a percentage of GDP | 2006

The total debt includes both local and foreign currency owed by government to domestic residents, foreign nationals, and multi-lateral institutions such as the IMF, and is expressed as a percentage of GDP. A non-monotonic treatment was applied as described in the methodology section and the values standardized on a 1-to-7 scale.

Source: Economist Intelligence Unit CountryData Database, data retrieved July 2008

#### 7.04 Bank deposits to GDP

This variable shows the demand, time, and savings deposits in deposit money banks as a share of GDP | 2006 The ratio is calculated using the following deflation method:

$$\frac{(0.5) \times \left[ \frac{F_t}{P_- e_t} + \frac{F_{t-1}}{P_- e_{t-1}} \right]}{\frac{\text{GDP}_t}{P_- a_t}} ,$$

where F is demand and time and saving deposits,  $P\_e$  is end-of-period CPI, and  $P\_a$  is average annual CPI.

Source: Data are from the IMF International Financial Statistics database, electronic version, accessed July 2008 or the July 2007 PDF version. Calculated using methodology detailed in Thorsten Beck, Asli Demirgüç-Kunt, and Ross Levine. 2000. "A New Database on Financial Development and Structure." World Bank Economic Review 14: 5977605

#### 7.05 Stock market capitalization to GDP

This indicator is the value of listed shares as a percentage of GDP | 2006 or most recent year available

The ratio is calculated using the following deflation method:

$$\frac{(0.5) \times \left[ \frac{F_t}{P_- e_t} + \frac{F_{t-1}}{P_- e_{t-1}} \right]}{\frac{\text{GDP}_t}{P_- a_t}} ,$$

where F is stock market capitalization,  $P_{-}e$  is end-of-period CPI, and  $P_{-}a$  is average annual CPI.

Source: Stock market capitalization and GDP data are from the World Bank World Development Indicators database, accessed July 2008; other data from the IMF International Financial Statistics database, electronic version, accessed July 2008 or the July 2007 PDF version. Calculated using methodology detailed in Thorsten Beck, Asli Demirgüç-Kunt, and Ross Levine. 2000. "A New Database on Financial Development and Structure." World Bank Economic Review 14: 5977605

#### 7.06 Relative value-added of financial institutions to GDP

Value that financial institutions add to the economy after costs are subtracted as a percentage of GDP  $\,\,$  | 2006

This indicator represents what remains of total sales revenue after the costs of providing financial products are taken into account. This signifies the value the financial institutions sector creates in the economy.

Source: Global Insight, World Industry Monitor, October 25, 2007

#### 7.07 Private credit to GDP

Private credit by deposit-money banks and other financial institutions as a percentage of GDP | 2006 or most recent year available

The ratio is calculated using the following deflation method:

$$\frac{(0.5) \times \left[\frac{F_t}{P\_e_t} + \frac{F_{t-1}}{P\_e_{t-1}}\right]}{\frac{\text{GDP}_t}{P\_a_t}},$$

where F is credit to the private sector, P\_e is end-of-period CPI, and P\_a is average annual CPI .

Source: Thorsten Beck, Asli Demirgüç-Kunt, and Ross Levine. 2000. "A New Database on Financial Development and Structure." World Bank Economic Review 14: 597?605.

#### 7.08 Stock market value traded to GDP

Total value of shares traded on stock market exchanges as a percentage of GDP | 2006 or most recent year available

Source: Thorsten Beck, Asli Demirgüç-Kunt, and Ross Levine. 2000. "A New Database on Financial Development and Structure." *World Bank Economic Review* 14: 597?605

#### 7.13 Bank branches

Number of branches per 100,000 inhabitants | 2005

Source: Maria Soledad Martinez Peria, Thorsten Beck, and Asli Demirgüç-Kunt. 2005. *Indicators of Access to and Use of Financial Services Across Countries*. World Bank database, available at http://go.worldbank.org/EZDOBVQT20

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Nouriel Roubini is an internationally renowned expert in the field of international macroeconomics. He is a Professor of Economics at New York University's Stern School of Business and is also the Co-founder and Chairman of RGE Monitor (www.rgemonitor.com). From 1998-2000, Professor Roubini served as the Senior Economist for International Affairs at the White House Council of Economic Advisers and then the Senior Adviser to the Under Secretary for International Affairs at the US Treasury Department, helping to resolve the Asian and global financial crises, among other issues. The International Monetary Fund, the World Bank and numerous other prominent public and private institutions have also drawn upon his consulting expertise. He has published more than 70 theoretical and empirical policy papers on international macroeconomic issues and co-authored the books, Political Cycles: Theory and Evidence (MIT Press, 1997) and Bailouts or Bail-ins? Responding to Financial Crises in Emerging Markets (Institute for International Economics, 2004). Professor Roubini's views on global economics issues are widely cited by the media, and his blog was named one of 20 "must-read" sources by the Wall Street Journal. Professor Roubini received an undergraduate degree from Bocconi University in Milan, Italy and a PhD in Economics from Harvard University. Prior to joining Stern, he was a faculty member of the Economics Department at Yale University.

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Doan Nguyen Ngoc Quynh, Researcher of the Research Management and International Cooperation Department Du Phuoc Tan, Head of the Research Management and International Cooperation Department While financial systems are a key factor in economic growth, there is still surprisingly little agreement about how to define and measure their development. To address this gap, the World Economic Forum has undertaken a research initiative aimed at providing business leaders and policymakers with a common framework to identify and discuss the key factors in the development of global financial systems and markets.

This inaugural *Financial Development Report 2008* measures and analyzes the factors enabling the development of financial systems in 52 countries. The *Report* aims to provide a comprehensive means for countries to benchmark the various aspects of their financial systems and establish priorities for improvement. It will be published annually so that countries can continue to benchmark themselves and track their progress over time.

The *Report* presents the rankings of the first Financial Development Index (FDI) developed by the World Economic Forum in collaboration with the academic community, multilateral organizations and business leaders. It assembles a vast amount of data to create a holistic assessment of the different aspects of complex financial systems including the institutional environment, the business environment, financial stability, banks, capital markets, and overall capital availability and access. Essay contributions elaborate on the role of financial systems in reducing poverty as well as the relationship between financial stability and the development of financial systems. The *Report* contains detailed profiles for the 52 countries covered by the FDI this year. Data used in the calculation of the Index are fully annotated and clearly presented.

Written in a nontechnical language and style, the *Report* appeals to a large audience made up of policymakers, business leaders, academics, and different organizations of civil society. It aims to provide policymakers a balanced perspective as to which aspects of their country's financial system are most important and the ability to empirically calibrate this view relative to other countries.



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