McKinsey Global Institute

Mapping Global Capital Markets
Fourth Annual Report

January 2008

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McKinsey Global Institute

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MGI's research is conducted by a group of full-time MGI fellows based in offices in San Francisco, Washington, DC, London, and Shanghai and led by MGI's director, Diana Farrell. MGI project teams also include consultants drawn from McKinsey's offices around the world and are supported by McKinsey's network of industry and management experts and worldwide partners. In addition, MGI teams work with leading economists, including Nobel laureates and policy experts, who act as advisors to MGI projects.

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Mapping Global Capital Markets
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Diana Farrell
Susan Lund
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Preface

Mapping Global Capital Markets: Fourth Annual Report is the latest research by the McKinsey Global Institute on the evolution of the world's financial markets. This report is based on findings from three proprietary databases that document the financial assets, capital inflows and outflows, and cross-border investments of more than 100 countries around the world since 1990. By examining this data, we see the process of globalization at work and countries' shifting positions and power in the world financial order.

Susan Lund, a senior fellow at the McKinsey Global Institute based in Washington, DC, worked closely with me to provide leadership on this project. The project team included Christian Fölster, a McKinsey consultant from the Berlin office; Raphael Bick, a consultant from McKinsey's Munich office; Moira Pierce, a senior research analyst at the North American Knowledge Center; and Charles Atkins, an MGI analyst. Essential research support was provided by Tim Beacom and Susan Sutherland.

This report would not have been possible without the tireless support of several MGI professionals: Nell Henderson, senior editor; Rebeca Robboy, external relations manager; Deadra Henderson, practice administrator; and Sara Larsen, executive assistant.

Our aspiration is to provide business leaders and policy makers around the world with a fact base to better understand some of the most important trends shaping global financial markets today. As with all MGI projects, this research is independent and has not been commissioned or sponsored in any way by any business, government, or other institution.

Diana Farrell
Director, McKinsey Global Institute
January 2008
San Francisco

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Executive summary

Abu Dhabi buys a stake in Citigroup. China's stock market doubles in value, while Japan's stagnates. The dollar slides as the euro surges. And oil prices rise to new records. All these headlines reflect a world financial system in flux, as global capital markets grow bigger and more linked.

They also tell the story of countries' shifting positions and power in the world financial order—a microcosm of globalization at work. This report paints a portrait of the long-term trends in global capital markets. Our research stems from several proprietary McKinsey Global Institute databases that cover the financial assets, cross-border capital flows, and foreign investments of more than 100 countries since 1990. In this year's update, we focus on how world financial markets evolved in 2006, the latest year for which comprehensive data are available. It remains to be seen how the 2007 credit market turmoil plays out, but we expect the fundamental trends we discuss here to continue: Europe's capital markets growing in size and financial clout, and emerging markets rising. Financial power is spreading beyond the United States as other markets mature.

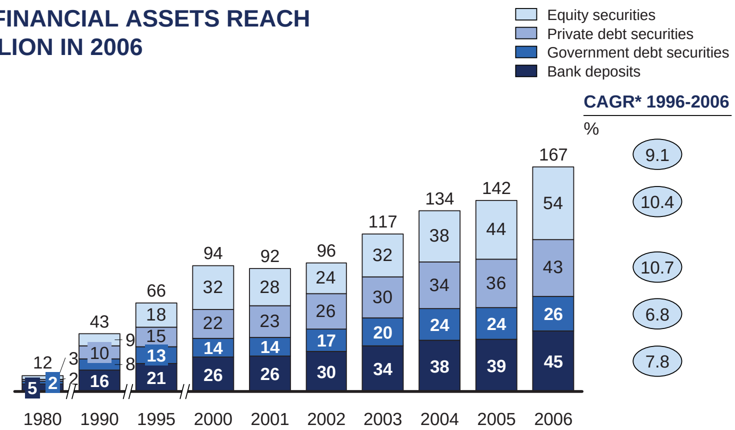
Through the data, we seek to illuminate the ways in which world financial markets are evolving—and dispel some myths and misunderstandings that result from focusing on just one statistic in isolation. In this report we do not discuss whether financial globalization is ultimately beneficial or not, or the regulatory issues faced by policy makers. Instead, we seek to provide a robust fact base that depicts the structural, long-term changes taking place in global capital markets.

WORLD FINANCIAL ASSETS REACH $167 TRILLION

The total value of the world's financial assets grew faster in 2006 than the historical average rate. This sum—including equities, private and government debt securities, and bank deposits—climbed by $25 trillion in nominal terms, or 17 percent, to reach $167 trillion (Exhibit 1). At constant exchange rates, growth was $18.9 trillion, or 13 percent—still above trend.

Exhibit 1

GLOBAL FINANCIAL ASSETS REACH $167 TRILLION IN 2006
$ trillion



	1980	1990	1995	2000	2001	2002	2003	2004	2005	2006	CAGR* 1996-2006 %
Nominal GDP $ trillion	10.1	21.5	29.4	31.7	31.6	32.8	36.9	41.6	44.8	48.3	5.7
Financial depth % of GDP	109	201	223	294	290	292	318	323	317	346	

* Compound annual growth rate.

Note: See Technical Notes in the appendix for summary of revisions to data from 2005 and earlier years. Some numbers do not add up due to rounding.

Source: McKinsey Global Institute Global Financial Stock Database

Growth in financial assets also outpaced growth in global GDP. World financial depth, measured as the ratio of financial assets to global GDP, rose to nearly 350 percent. Moreover, the gains in financial market evolution are broad-based. In 1990, only 33 countries in the world had financial assets that exceeded the value of their GDP. By 2006, this figure had more than doubled to 72 countries. Today, all the industrial economies and even the largest emerging markets have financial markets that are two to three times the size of their GDP.

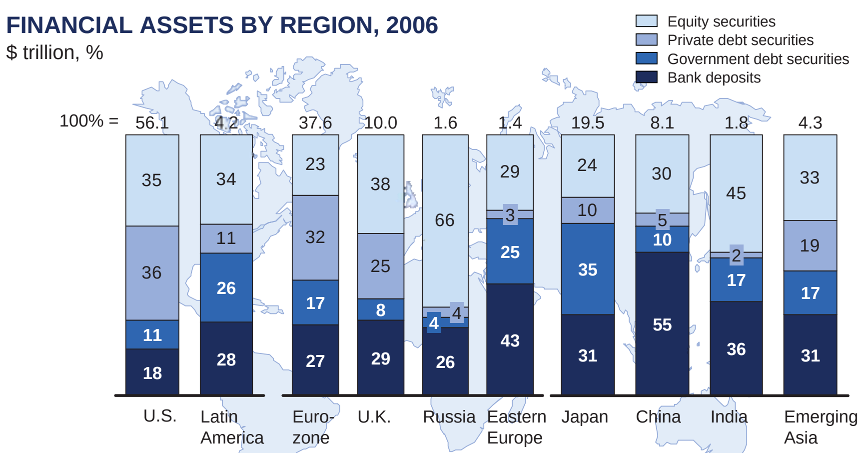
Deeper financial markets are beneficial because they create broader access to capital for borrowers, offer more efficient pricing, and increase opportunities for sharing risk. This can promote economic growth through better allocation of capital. Sometimes, however, financial deepening is the result of unhealthy increases in government debt levels or in equity market valuations—both of which can lead to painful corrections. Moreover, too much liquidity in financial markets can lead to inflationary pressures in many asset classes, as too much money chases too few productive investments.

In 2006, equities drove the growth in global financial assets. The value of the world's equities rose by $9 trillion at constant exchange rates, or 20 percent, accounting for nearly half the total increase in financial assets. In developed countries, the equity gains primarily reflected higher corporate earnings, not inflated price-earnings ratios—an example of healthy financial deepening. Stock markets also soared in emerging markets for a combination of reasons, including rising commodity prices, the partial privatization of some huge state-owned companies, and the emergence of some new global companies. But rising P/E ratios have also been a factor—a potential sign of trouble ahead. In China and Russia, P/E ratios have doubled since 2003.

THE UNITED STATES HOLDS THE LEAD, BUT EUROPE CONTINUES TO ASCEND

As financial globalization gains momentum, the pecking order in world markets is beginning to shift. The United States remains the world's largest and most liquid financial market, with $56.1 trillion in assets, or nearly one-third of the global total (Exhibit 2).

Exhibit 2



	U.S.	Latin America	Euro-zone	U.K.	Russia	Eastern Europe	Japan	China	India	Emerging Asia
Financial depth % of GDP	424	159	356	422	162	130	446	307	202	250
CAGR (90-06)* %	8.7	23.0	9.2	9.5	54.2	26.9	3.6	25.7	19.9	15.5

* Compound annual growth rate at constant 2006 exchange rates.
Note: Some numbers do not add to 100% due to rounding.
Source: McKinsey Global Institute Global Financial Stock Database

But Europe's financial markets collectively are approaching the scale of the US market. Including the United Kingdom, Europe's financial markets reached $53.2 trillion in 2006—still less than the US total, but growing faster. We find that three-fourths of the gain came from the deepening of Europe's equity and private debt markets. The eurozone's financial markets reached $37.6 trillion, the UK markets $10 trillion, and other Western European nations[1] $5.6 trillion. Equally important, the euro is emerging as a rival to the dollar as the world's global reserve currency, reflecting in part the growing vibrancy and depth of Europe's financial markets. In mid-2007, the value of euro currency in circulation surpassed that of dollar notes in the world for the first time, and the euro has been the top choice in the issuance of international bonds.

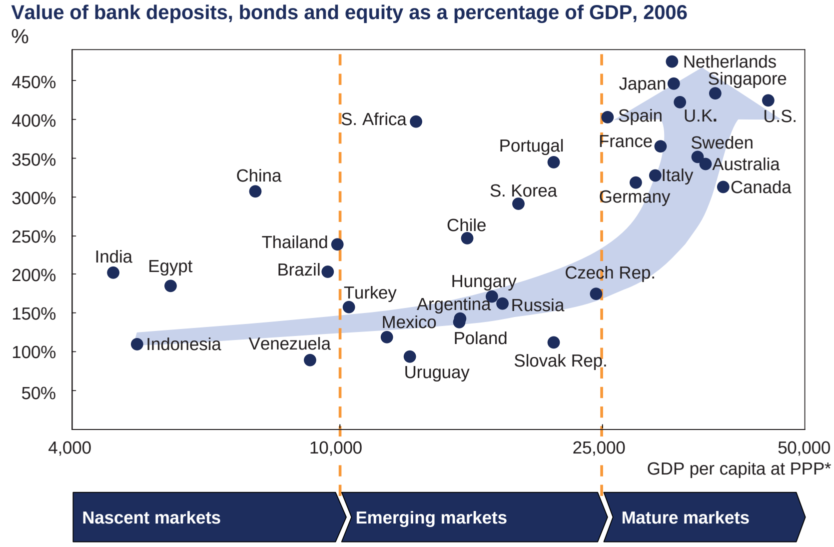
CHINA SURGES, WHILE JAPAN FALTERS

China's financial influence is growing. The value of its domestic financial assets increased by 44 percent in 2006 and grew more in absolute terms than the assets of any country other than the United States. Chinese companies were second only to those in the United States in raising capital through initial public offerings (IPOs). Part of China's financial growth, however, is due to soaring equity market valuations that may not last. Still, at $8.1 trillion, China's financial market is now roughly three times its GDP (Exhibit 3). Enriched by bulging trade surpluses, China also became the world's largest net exporter of capital in 2006. China's investments abroad exceeded foreign investments in China by $217 billion—an amount that surpassed for the first time those of Japan, Germany, and any of the oil exporters.

Exhibit 3

MAP OF GLOBAL FINANCIAL DEPTH

Value of bank deposits, bonds and equity as a percentage of GDP, 2006



* Log scale.
Source: McKinsey Global Institute Global Financial Stock Database

1 Includes Switzerland, Sweden, Denmark, Iceland, and Norway.

Japan's short-lived financial market recovery ground to a halt in 2006, with total financial assets flat compared with the previous year. Meanwhile, the financial markets of the rest of Asia combined grew to $18.8 trillion, just shy of Japan's $19.5 trillion. Asia's other contenders for financial hubs—Hong Kong, Singapore, and Taiwan—now have larger cross-border investments with China and other emerging Asian nations than Japan does.

EMERGING MARKETS STILL SMALL BUT GROWING FAST

Emerging markets have rebounded from the financial crises that rocked many of their economies a decade ago. China is the heavyweight, but the group also includes Russia and other rapidly developing nations in Asia, Latin America, Eastern Europe, and Africa. Altogether, their financial assets grew $5.3 trillion in 2006 in constant exchange rates, or 29 percent, to a total of $23.6 trillion. That increase accounted for one-quarter of total global growth in financial assets.

Since 1990, the total value of financial assets in emerging markets has grown at more than twice the rate of those in developed countries, or 21 percent and 8 percent, respectively. Growth over that period has been mainly in deposits and equities, which accounted for 39 and 38 percent of growth, respectively. Still, emerging markets accounted for just 14 percent of global financial assets at the end of 2006. Although this is up from 10 percent in 2000, it is significantly less than their 23 percent share of global GDP.

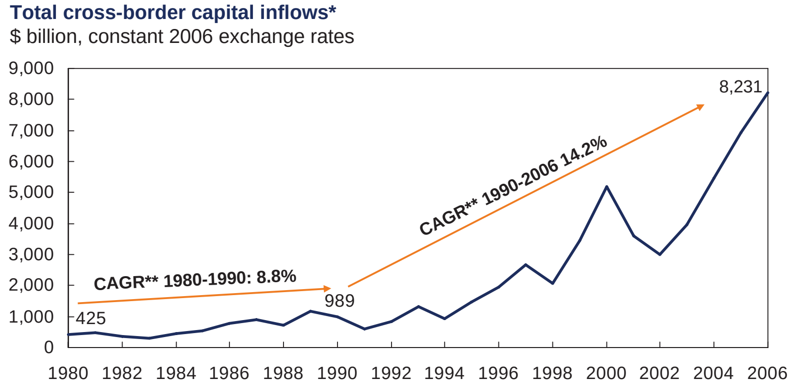
Within this group, emerging Asia has the largest, most developed financial systems; Eastern Europe has the fastest-growing financial markets, dominated by Russia; Africa's financial markets are very small but enjoying a growth spurt fueled largely by rising commodity prices; and Latin America's financial markets remain surprisingly shallow, given the long history of banking and foreign investment in the region.

CROSS-BORDER CAPITAL FLOWS REACH $8.2 TRILLION, WITH THE EUROZONE ACCOUNTING FOR NEARLY HALF OF THE GROWTH

As world financial markets grow, more money than ever is flowing between countries and regions as investors seek opportunities outside their home market. Cross-border capital flows take many forms, including foreign direct investment (FDI), purchases of foreign equity and debt securities, and cross-border lending and deposits. US companies build factories in China, while American workers snap up Latin American stocks. Middle East investors buy stakes in private equity firms, while German banks lend to Eastern European companies. Such flows climbed in 2006 to a record $8.2 trillion—$1.3 trillion more than the year before and triple the amount just four years earlier (Exhibit 4).

Exhibit 4

GROWTH IN CROSS-BORDER CAPITAL FLOWS



% of global GDP	4.7	3.5	3.7	5.6	4.5	5.2	3.8	3.9	7.1	7.0	15.3	8.1	13.1	17.2
% of global imports	23.1	17.2	18.1	31.5	24.9	27.4	21.1	20.6	34.8	30.6	58.5	32.4	48.5	62.1

* Due to a discrepancy in data collection, global capital inflows exceed recorded outflows by an average of $87 billion per year.

** Compound annual growth rate.

Source: McKinsey Global Institute Global Capital Flows Database

Cross-border investing is still dominated by the most developed economies. Together, the eurozone, the United States, and the United Kingdom accounted for 80 percent of the growth in global capital flows over the past ten years. The eurozone alone accounted for nearly half of the growth over that period. This is due in equal parts to rising capital flows between the individual eurozone countries, reflecting integration of the region's financial markets, as well as growing capital flows between the eurozone and the rest of the world.

Cross-border capital flows into emerging markets have grown at nearly twice the rate of flows into developed countries. They reached a new height of $700 billion in 2006—but that is still less than 10 percent of the global total. Moreover, capital outflows from emerging markets now exceed inflows, making emerging markets net capital providers to developed countries.

The increasing movement of capital around the world has significant ramifications. Domestic investment in any country is less dependent on local saving. Foreign funds can help spur economic growth and raise living standards. At the same time, however, there is growing unease as financial risk is spread more widely and as new investors around the world gain influence. And there is growing concern in some quarters about the lack of any clear international authority to regulate new activity and players in global capital markets.

CROSS-BORDER INVESTMENTS REACH $74.5 TRILLION

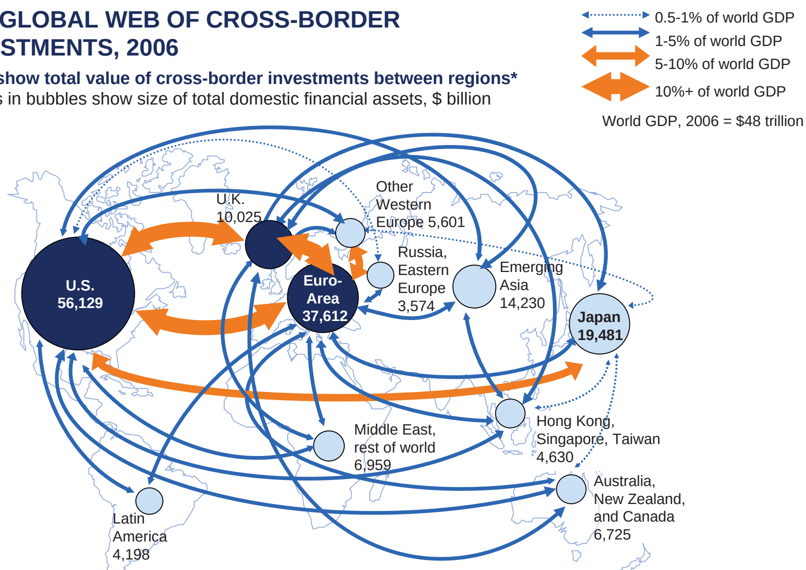
As global capital flows have grown, so has foreign ownership of financial assets. The global value of all foreign investments—the sum of those annual flows—grew by $10.8 trillion in 2006 at constant exchange rates, or 17 percent, to reach $74.5 trillion. Today, the world is more financially intertwined than ever before: foreign investors own one in three government bonds around the world, up from just one in nine in 1990. One in four equities and one in five private debt securities is now held by a foreign investor, triple the level in 1990.

Similarly, when we look at the financial ties between countries and regions, we see the web of cross-border investments between them has grown (Exhibit 5). The United States remains the largest foreign investor in other countries and the major hub in global capital markets. But the eurozone countries together now have as many financial links with other regions of the world, including emerging markets, as does the United States. Notably, Asia lacks a single dominant financial hub and has relatively weak cross-border financial ties within the region.

Exhibit 5

THE GLOBAL WEB OF CROSS-BORDER INVESTMENTS, 2006

Lines show total value of cross-border investments between regions*
Figures in bubbles show size of total domestic financial assets, $ billion



* Includes total value of cross-border investments in equity and debt securities, lending and deposits, and foreign direct investment.

Source: McKinsey Global Institute Cross-Border Investments Database

Other countries are exerting new influence in world financial markets as well. The oil-exporting nations of the Middle East and other parts of the world have reaped a windfall from rising oil prices and growing exports. Because their domestic financial markets are small, much of this wealth has been invested abroad. We estimate that the value of all petrodollar foreign investments rose to between $3.4 trillion and $3.8 trillion at the end of 2006.[2] In 2006, oil exporters rivaled East Asia for the first time as the world's net supplier of capital.

The world financial system is at the leading edge of globalization as capital markets grow larger and more interconnected. These and other developments are described in more detail in the chapters of this report. In chapter 1, we assess the growth in the domestic financial markets of countries around the world. In chapter 2, we examine the pattern of cross-border capital flows between countries. In chapter 3, we conclude by looking at the foreign assets and liabilities of countries, examining how the web of cross-border investments is growing and how the roles played by countries are shifting.

2 This includes countries of the Middle East as well as Norway, Russia, Nigeria, Venezuela, and Indonesia.

1. $167 trillion and counting

Global capital markets had a banner year in 2006. The value of the world's financial assets rose by $25 trillion, in nominal terms, to $167 trillion. This stunning growth occurred amid shifts in the roles played by different countries, regions, and asset classes.

The US financial market remains the largest in the world and posted the greatest absolute growth in 2006. But Europe's markets continued to deepen and gain share. China burst onto the scene, with more financial asset growth than any country other than the United States. Japan's financial recovery stalled, but its market remains the third largest in the world (after the United States and the combined eurozone markets).[1] Emerging markets reached new financial heights but still accounted for a smaller share of world financial assets than of global GDP. And equities accounted for the largest share of growth in global financial markets for the fourth consecutive year.

Together, these and other changes in capital markets illustrate the shifting positions of countries within the world economy and provide a window on the process of globalization. In this chapter, based on the McKinsey Global Institute's proprietary database of the financial assets of more than 100 countries around the world, we assess the size and growth of the world's financial markets in 2006, the latest year for which comprehensive global data are available. We examine the sources of growth and the different roles that regions and countries are playing in the global financial system. In doing so, we illustrate the long-term trends

1 In our analysis, the eurozone comprises Austria, Belgium, France, Finland, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Slovenia, and Spain. Cyprus and Malta joined in January 2008.

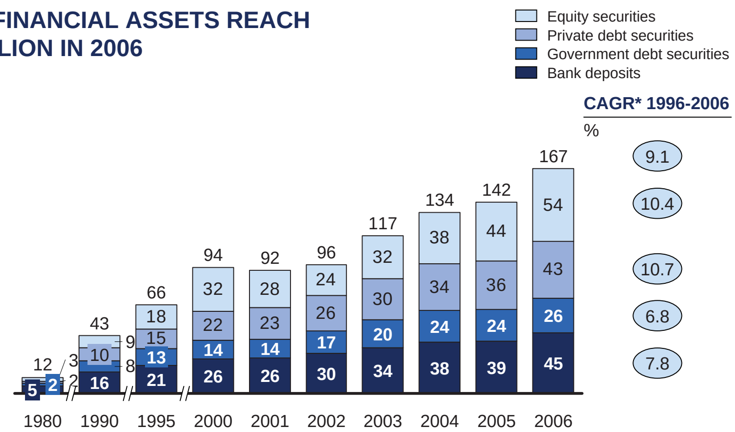
that are reshaping global capital markets—trends likely to continue and not be significantly altered by the credit market turbulence in the United States and Europe in 2007.

GLOBAL FINANCIAL ASSETS REACH $167 TRILLION IN 2006

In 2006, total global financial assets reached an unprecedented $167 trillion, up from $142 trillion in 2005 and just $12 trillion in 1980 (Exhibit 1.1).[2] We measure the size of the global capital market by adding together the market value of publicly traded equities, the value of all bank deposits, and the outstanding face value of government and private debt securities. The sum represents the amount of capital that is intermediated through banks and securities markets. When measuring a country's total financial assets, we counted the value of equity and debt securities issued by the public companies of the country.[3] (For information on the derivatives market, see *A look at the global derivatives market*.)

Exhibit 1.1

GLOBAL FINANCIAL ASSETS REACH $167 TRILLION IN 2006
$ trillion



	1980	1990	1995	2000	2001	2002	2003	2004	2005	2006	CAGR* 1996-2006 %
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Financial depth % of GDP	109	201	223	294	290	292	318	323	317	346	

* Compound annual growth rate.
Note: See Technical Notes in the appendix for summary of revisions to data from 2005 and earlier years. Some numbers do not add up due to rounding.
Source: McKinsey Global Institute Global Financial Stock Database

By our count, global financial assets grew 17.5 percent in 2006, more than double the average annual growth rate of 8 percent from 1995 through 2005. The nominal value of total assets rose by $24.8 trillion. But this partly reflects

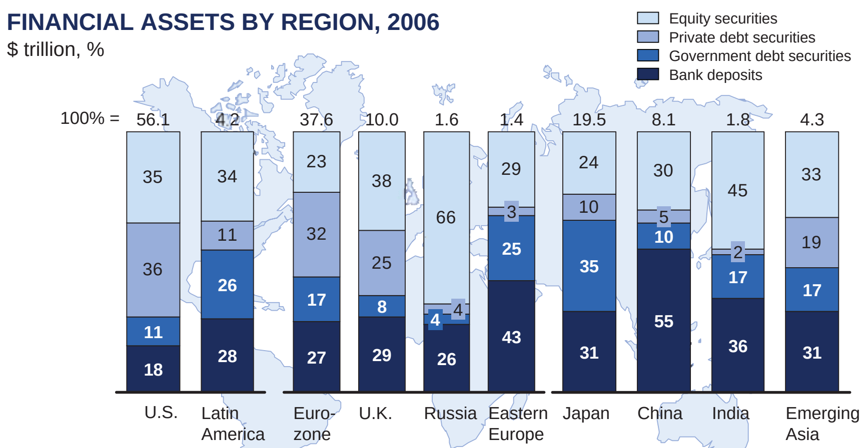
2 All dollars are current US dollars. All growth rates are nominal growth rates based on financial asset numbers expressed in current US dollars; thus, they reflect inflation and exchange rate shifts.

3 See Technical Notes in the appendix for more on how we measure global financial assets.

exchange rate movements, including the depreciation of the dollar against other major currencies. When measured at constant end-of-2006 exchange rates, to remove the effect of such distortions, we see the "real growth" in financial assets was $18.9 trillion—more than twice the "real" $7.7 trillion increase in 2005.

The United States, the United Kingdom, the eurozone, and Japan account for more than 75 percent of global financial assets, reflecting the huge size of their economies and financial markets. Despite growing concerns that the United States is losing ground to new rivals, it remains the world's largest market by a significant margin. In 2006, the United States had $56.1 trillion of financial assets, or nearly one-third of the global total (Exhibit 1.2).

Exhibit 1.2



	U.S.	Latin America	Euro-zone	U.K.	Russia	Eastern Europe	Japan	China	India	Emerging Asia
Financial depth % of GDP	424	159	356	422	162	130	446	307	202	250
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* Compound annual growth rate at constant 2006 exchange rates.
Note: Some numbers do not add to 100% due to rounding.
Source: McKinsey Global Institute Global Financial Stock Database

The eurozone—the countries that share the common continental currency—ranks second, with $37.6 trillion of financial assets. Japan places third with $19.5 trillion. The United Kingdom has just $10 trillion in financial assets but is nevertheless an important intermediary for cross-border capital flows and international banks. Asian financial markets remain fragmented and have very different characteristics. For instance, Japan has a very large government-debt market; but more than half of China's $8.1 trillion in financial assets are bank deposits.

Countries' and regions' shares of the world's financial assets have shifted over time. The United States' share grew from 34 percent in 1990 to 42 percent in

A look at the global derivatives market

Complex derivatives were at the heart of the credit market turmoil that rippled through financial markets in 2007, raising concerns about the financial players' abilities to manage risk as capital markets rapidly evolve.

Unlike equities, debt securities, and bank deposits, which represent financial claims against future earnings by households and companies, derivatives are risk-shifting agreements among financial market participants. Because of this fundamental difference, McKinsey Global Institute (MGI) does not include derivatives in the calculation of the value of global financial assets. However, it is worth noting that the size of the market for derivative contracts has boomed over the past 15 years, as its impact has grown.

According to the Bank of International Settlement (BIS), global derivatives markets have grown at an annual rate of 32 percent since 1990 and the total notional value outstanding amounted to $477 trillion in 2006, or three times the value of global financial assets. However, notional value—the value of the underlying asset—does not provide an accurate measure of risk exposures. Gross market value,[4] or the cost of replacing all derivative contracts, was just $10 trillion in 2006. After considering netting agreements, the net credit exposure, that is, the amounts truly at risk, from global derivative contracts outstanding amounted to just 1 percent of global financial assets in 2006.

That would appear to be a small risk. But the credit crunch that began in mid-2007 arose from the markets' sudden inability to value many of the newest complex financial products, collateralized debt obligations. When defaults began to rise on US subprime mortgages, investors shunned products that had mixed these loans with others into asset-backed securities that were pooled, sliced, and priced according to the purported level of risk.

The growth of derivatives has brought benefits to the world's financial system by helping many investors hedge risk, adding liquidity, and even creating an alternative investment class for less risk-averse market participants. But in recent years, as has happened in the past, risk management lagged financial innovation—a challenge worth keeping in mind as global capital markets grow ever more complex.

4 Defined as gross market value (cost of replacing contracts at market value) after taking into account legally enforceable bilateral netting agreements.

2001, but then shrank back to 34 percent in 2006. The eurozone experienced the opposite, losing share between 1990 and 2001 (from 23 to 19 percent), and then gaining share back to 23 percent in 2006. The United Kingdom's share has been fairly stable since 1990 at 5 to 6 percent.

Changes have been more dramatic in other regions. In Asia, Japan's share of global financial assets has fallen from 23 percent to 12 percent, while China's share has increased from less than 1 percent to 5 percent. Today, the financial assets of Asian countries outside Japan are nearly equal to Japan's $19.5 trillion—and they are growing much faster. Emerging markets have seen their share of financial assets slowly rise over time.

FINANCIAL MARKETS GET DEEPER AND DEEPER

Financial depth, or the ratio of a country's financial assets to its GDP, is an important measure of the development of global capital markets. In 1980, the total value of global financial assets was roughly equal to world GDP. By 1993, assets were double the size of GDP, and by the end of 2006, assets were worth nearly 3.5 times world GDP.

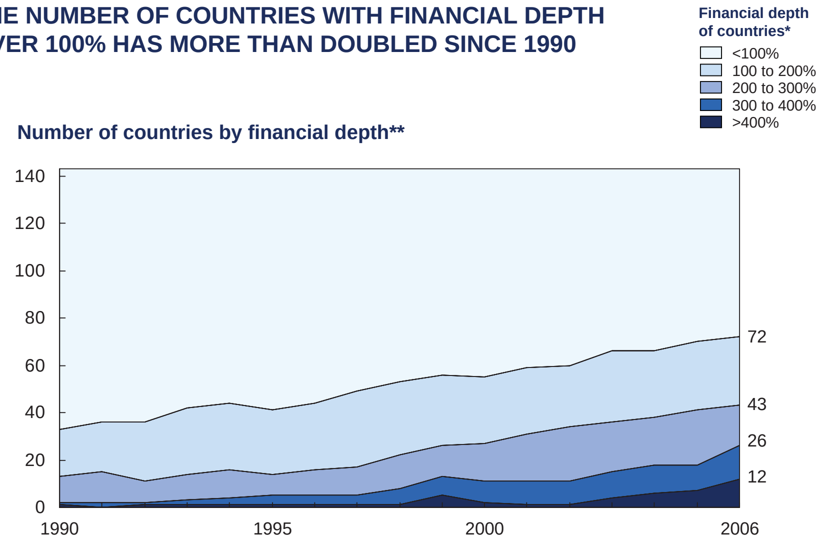
Financial deepening has occurred across all regions. In 1990, only 33 countries in the world had financial assets that exceeded the value of their GDP (excluding financial hubs such as Hong Kong). By 2006, this number had more than doubled to 72 countries. In 1990, only 2 countries had financial depth exceeding 300 percent—whereas 26 countries do today (Exhibit 1.3). By 2006, China, Russia, India, and Brazil each had financial assets worth far more than their respective GDP (Exhibit 1.4).

For the most part, deeper financial markets are beneficial because they are more liquid, create better access to capital for borrowers, offer more efficient pricing, and increase opportunities for sharing risk. In some developing countries with shallow financial markets, the main available savings instrument for households is a low-yielding bank account, and the only source of external funding for companies is a bank loan. In developed markets, however, households can invest their savings in stocks, bonds, mutual funds, and other instruments; borrowers can go to a bank, issue debt, or sell stock.

The value of financial assets can be many times larger than GDP because it reflects predicted future returns of companies and economic growth. A country's financial market deepens through several mechanisms. One is the issuance of more publicly traded equities, as has occurred over the past decade with the

Exhibit 1.3

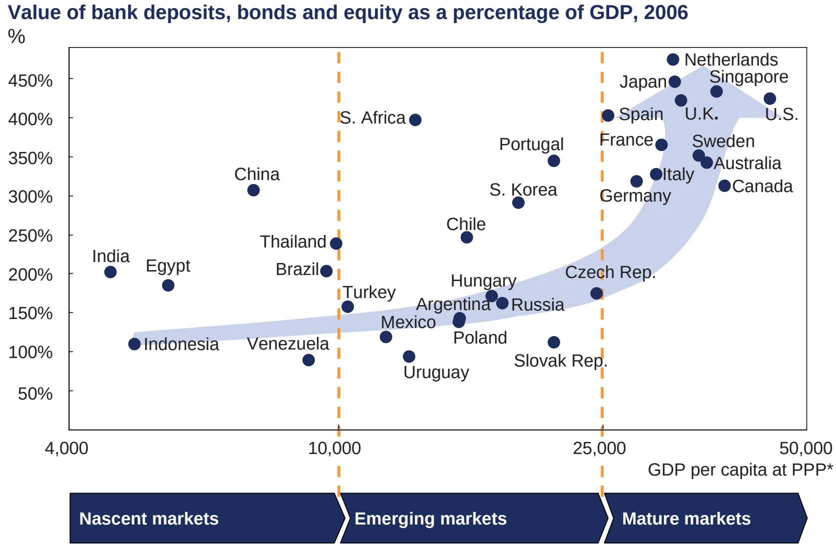
THE NUMBER OF COUNTRIES WITH FINANCIAL DEPTH OVER 100% HAS MORE THAN DOUBLED SINCE 1990



* Financial assets as % of GDP.
** Excludes financial hubs such as Hong Kong and Luxembourg.
Source: McKinsey Global Institute Global Financial Stock Database

Exhibit 1.4

MAP OF GLOBAL FINANCIAL DEPTH



* Log scale.
Source: McKinsey Global Institute Global Financial Stock Database

privatization of state-owned companies in China, Russia, and Eastern Europe.[5] Another is the issuance of more corporate bonds or the creation of asset-backed securities. In addition, bank deposits can swell with income growth or the creation of new savings products, such as certificates of deposit and money market accounts. Markets will also deepen when equity values rise because of stronger corporate earnings.

However, financial deepening also can result from unhealthy increases in government debt or from asset-price bubbles. During the late-1990s stock market boom, global financial depth increased due to soaring equity-market valuations, and then declined in 2001 and 2002 as those valuations tumbled. Excessive government debt can lead to economic stagnation because it can crowd out private lending and hamper growth; when issued in foreign currencies, it can trigger a costly financial crisis, as happened in Argentina in 2002 and Mexico in 1994.

Over time, we see a consistent upward trend in world financial depth. In 2006, depth increased by 16 percentage points to an all-time high. Nearly half of the deepening came from growth in equities, largely due to higher corporate earnings rather than increases in price-earnings ratios.

IT'S ALL ABOUT EQUITIES

For the fourth year in a row, equities made the largest contribution to the growth of global financial assets. During 2006, equities rose by $9 trillion,[6] accounting for nearly half of the total increase. Just three countries account for 52 percent of equity growth that year: the United States, China, and Hong Kong (Exhibit 1.5).

Equity markets have grown faster than debt markets in 11 out of 16 years since 1990. However, debt markets have grown more in absolute terms than equity markets since 1990. This is because of falling equity prices after the stock bubble started losing air in 2000, which caused global market capitalization to decline. Equities increased by $45 trillion from 1990 to 2006 while debt securities increased by $50 trillion.

Since equity market growth picked up in 2003, gains in developed countries have mainly reflected higher earnings, not higher P/E ratios. US and Japanese P/E ratios fell during this time and remained flat in Europe, even though market capitalization increased (Exhibit 1.6).

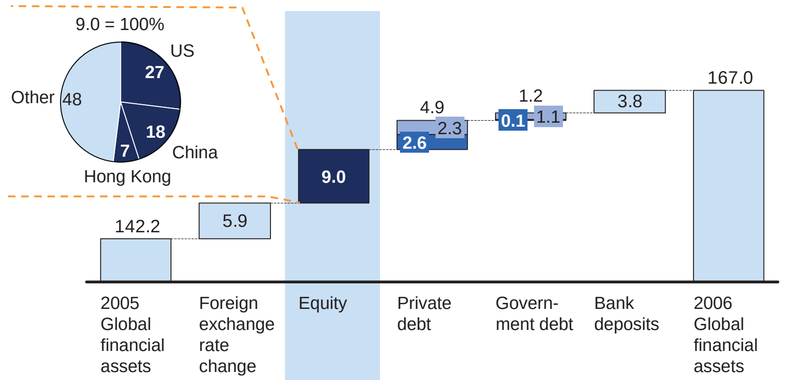
5 Eastern Europe includes Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Ukraine.

6 Growth excludes exchange rate changes.

Exhibit 1.5

EQUITIES WERE THE MOST IMPORTANT CONTRIBUTOR TO GROWTH IN 2006

$ trillion, constant 2006 exchange rates



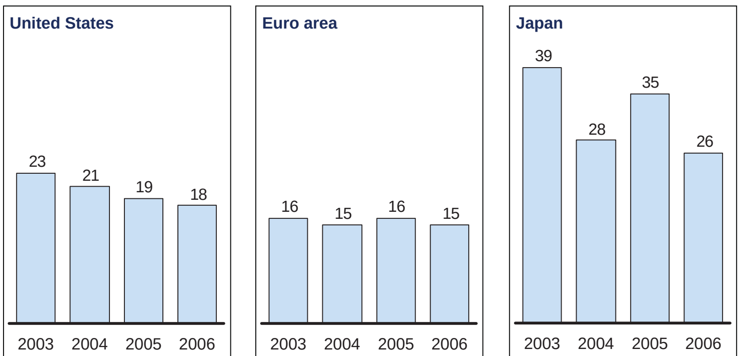
	Foreign exchange rate change	Equity	Private debt	Government debt	Bank deposits	2006 Global financial assets
Contribution to growth %	23.8	36.3	19.8	4.8	15.3	
Growth rate (05-06) %		20.0	13.0	4.6	9.4	17.4

Source: McKinsey Global Institute Global Financial Stock Database

Exhibit 1.6

PRICE-EARNINGS RATIOS HAVE NOT INCREASED IN DEVELOPED MARKETS

Price-earnings ratios of selected developed markets



	United States 2003	2004	2005	2006	Euro area 2003	2004	2005	2006	Japan 2003	2004	2005	2006
Stock market cap $ trillion*	14.3	16.3	16.9	19.4	5.0	5.9	6.3	8.6	3.0	3.7	4.7	4.7
Implied earnings $ billion*	620	777	893	1,079	309	395	396	574	78	131	135	182

* Market exchange rates during the year.

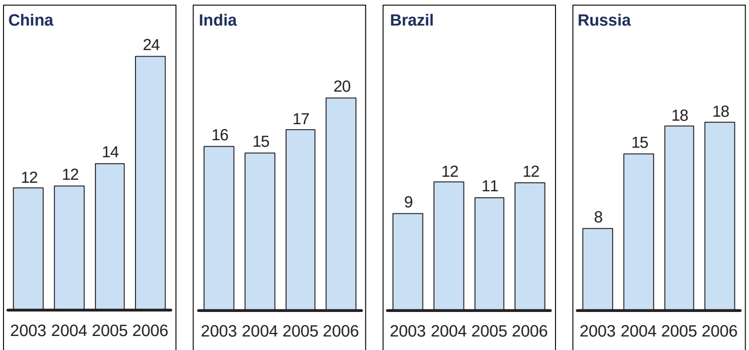
Source: Datastream; McKinsey Global Institute Financial Stock Database; McKinsey Global Institute analysis

Stock markets also have soared in emerging economies, accounting for more than one-third of global equity market growth from 2003 through 2006. Emerging-market equity valuations increased by $3.3 trillion during these years, with Chinese companies accounting for almost half the gain. This reflects rising commodity prices, partial privatization of some huge state-owned companies, and the emergence of some new global companies. Even so, equity growth in many emerging markets has been due mainly to rising P/E ratios—an indication we could see trouble ahead. Since 2003, P/E ratios have doubled in China and Russia, and increased more than 20 percent in India and Brazil (Exhibit 1.7).

Exhibit 1.7

PRICE-EARNINGS RATIOS HAVE INCREASED SIGNIFICANTLY IN EMERGING MARKETS

Price-earnings ratios of selected emerging markets



	China 2003	China 2004	China 2005	China 2006	India 2003	India 2004	India 2005	India 2006	Brazil 2003	Brazil 2004	Brazil 2005	Brazil 2006	Russia 2003	Russia 2004	Russia 2005	Russia 2006
Stock market cap $ trillion*	681	640	781	2,426	279	388	553	819	235	330	475	711	231	268	549	1,057
Implied earnings $ billion*	58.7	54.2	56.2	100.7	17.9	25.9	32.2	40.5	25.5	27.1	44.4	58.8	29.6	18.0	31.3	59.1

* Market exchange rates during the year.

Source: Datastream; McKinsey Global Institute Financial Stock Database; McKinsey Global Institute analysis

Worldwide, corporate-debt securities rose by $4.9 trillion in 2006, making them the second-largest contributor to total asset growth. Just over half of this increase came from international debt issues—bonds issued outside the home country and usually in a foreign currency, such as the dollar or the euro—which rose $2.6 trillion, or 18.9 percent. The US domestic market alone accounted for almost half of the total increase in private debt ($2.2 trillion), largely because of heavy corporate issuance, but also because the still-strong housing market generated a flood of securities backed by mortgages and home-equity loans. Spain and the United Kingdom were the next largest contributors to the growth of private debt, with $498 billion and $353 billion respectively.

One surprise in 2006 was the surge in bank deposits. For many years, bank deposits have accounted for a shrinking share of total financial assets, as equity and bond markets have thrived. But the absolute value of the world's bank deposits continues to climb, jumping in 2006 by $3.8 trillion—the biggest annual gain ever. The largest contributor to the 2006 increase was the United States, largely because of strong income growth and the housing boom, which enabled many households to tap their home equity for quick cash. China, where bank deposits are the primary savings vehicle in a fast-growing economy, was the second-largest source of growth. The United Kingdom was third, in large part because of London's role as an international financial center.

Government debt showed the smallest growth across asset classes in 2006, expanding by $1.2 trillion. This is the smallest increase in government debt since 2000 when government debt increased only $0.6 trillion. The largest source of growth was the United States, with an increase of $312 billion. Japan was second, with an increase of $197 billion, followed by China, with $122 billion in new government debt.[7] Together, these three nations accounted for more than half of the total growth. Government debt declined in some Latin American countries such as Chile and Venezuela, in several smaller European countries such as Sweden and Denmark, and in oil-rich Saudi Arabia.

UNITED STATES AND CHINA POST LARGEST GROWTH IN 2006

There is much gloomy talk in the United States these days about the eclipse of New York City by London as a global financial hub. In 2006, for the first time, the funds raised by all IPOs in London exceeded New York's total, and the value of London's IPOs by foreign companies was three times the value of those in the United States.

But don't write off the US markets just yet. In 2006, they posted the largest growth in financial assets in the world, adding $5.7 trillion (Exhibit 1.8). Equities contributed 43 percent of that growth—and this reflected earnings growth, not rising equity market valuations. And as of November 2007, New York looked likely to reclaim the top ranking in IPOs in 2007 (Exhibit 1.9). As noted above, US financial asset growth in 2006 also reflected strong corporate bond issuance, increases in mortgage-backed securities, and increases in other types of asset-backed securities. The US government debt, although very large, accounted for only 5 percent of growth.

7 Not counting sterilization notes issued as monetary instruments by the People's Bank of China.

Exhibit 1.8

THE U.S. AND CHINA SHOW THE LARGEST ABSOLUTE GROWTH IN 2006

Constant exchange rates

Financial asset growth by country, 2005-2006

	Absolute change $ trillion	Contribution to growth %	Growth rate %
United States	**5.7**	30.3	11.4
China	**2.5**	13.0	43.8
United Kingdom	1.1	5.6	11.9
France	1.0	5.1	13.5
Spain	0.9	4.9	23.2
Germany	0.8	4.0	8.6
Hong Kong	0.7	3.9	45.2
Russia	0.6	3.2	60.0
Italy	0.5	2.9	10.1
Australia	0.4	2.3	20.1
India	0.4	2.2	30.1
Canada	0.4	2.0	10.5
Brazil	0.4	2.0	20.8
Netherlands	0.3	1.6	10.6
Switzerland	0.3	1.4	12.1

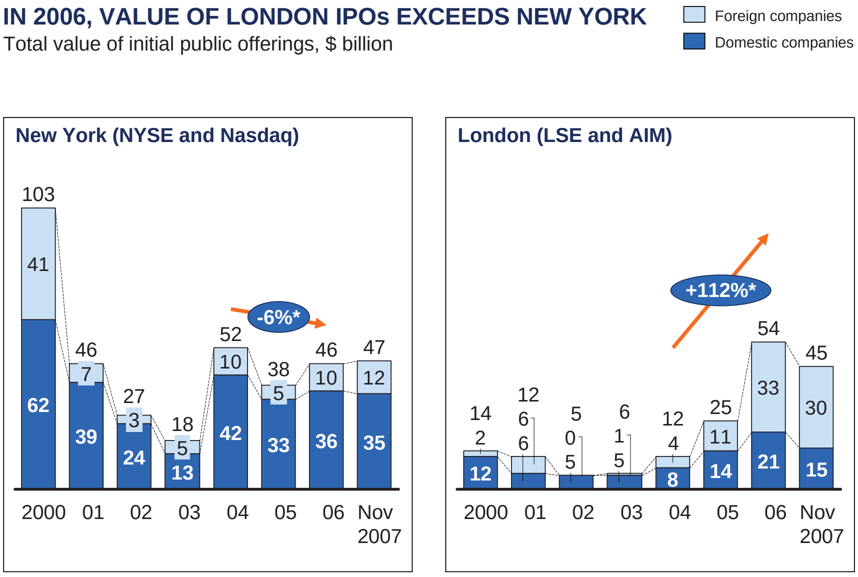
The eurozone accounts for $4.2 trillion of growth, or 13%

Source: McKinsey Global Institute Global Financial Stock Database

Exhibit 1.9

IN 2006, VALUE OF LONDON IPOs EXCEEDS NEW YORK

Total value of initial public offerings, $ billion



* Compound annual growth rate 2004-2006.

Source: Dealogic

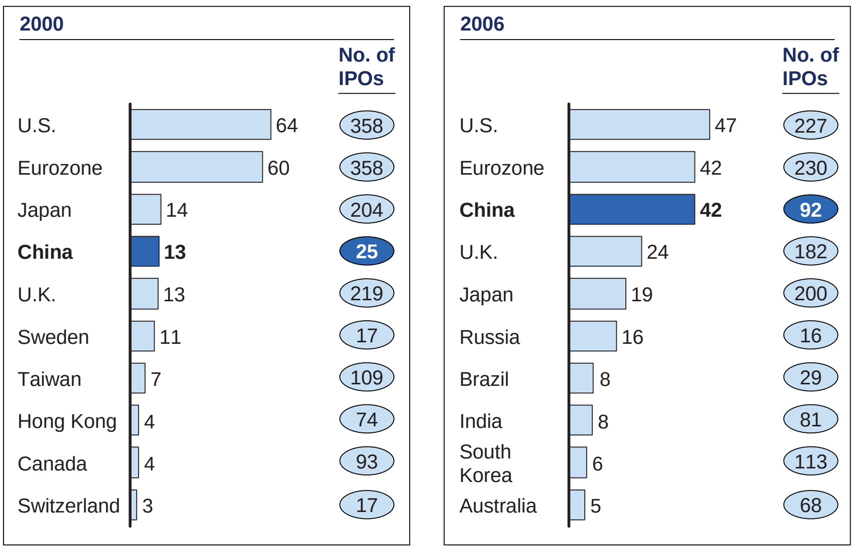
Growth in China's roaring financial markets was second only to the US increase. China's financial assets grew by $2.5 trillion during 2006—nearly half the US amount. This represents a 44 percent increase over 2005, the second-highest growth rate in the world after Russia's 60 percent. China's total value of domestic financial assets reached $8.1 trillion in 2006, boosting financial depth to 307 percent of GDP. This far outstrips India's financial assets, which grew to $1.8 trillion in 2006.

China's equity markets accounted for 65 percent of the country's overall growth in financial assets in 2006. This is due in part to P/E ratios that have doubled since 2003, pushing company valuations sky-high. But it is also due to major new listings of state-owned companies. For example, Industrial and Commercial Bank of China (ICBC), which only a few years earlier had been mired in bad loans, overtook Citigroup to become the biggest financial institution in the world in terms of market value. This trend continued into 2007, as PetroChina's first public sale of shares in Shanghai left it with market capitalization in November of more than $1 trillion—more than twice the size of ExxonMobil—albeit with a P/E ratio of 54. China emerged as the second-largest equity issuer in the world in 2006, running even with the eurozone and only slightly behind the United States (Exhibit 1.10).

Exhibit 1.10

IN 2006, CHINA ON PAR WITH EUROZONE EQUITY ISSUANCE

Money raised by initial public offerings, $ billion



Source: Dealogic

China’s equity market growth in 2006 marked a sharp rebound after the Shanghai stock index lost 50 percent of its value between 2001 and mid-2005.[8] Several reforms helped spark the turnaround. When the government first started privatizing state-owned enterprises in the 1990s, it retained control of roughly two-thirds of the shares issued. These “nontradeable” shares could neither be sold nor transferred without government approval. Then in 2005 and 2006, the government adopted reforms to end this two-tier equity system, requiring companies to plan to make all their shares fully tradeable over the next five years. These reforms have already spurred expansion of both the supply of and the demand for public shares in these companies, whipping their prices higher. Many investors expect the gradual increase in public ownership to improve corporate governance and performance over time, eventually resulting in mergers, acquisitions, and other forms of needed restructuring. In addition, more foreign investors have been allowed to enter the mainland stock market, further accelerating market reforms but also adding to recent price increases. As China’s equity market has grown, its bank deposits—the country’s predominant financial asset—fell to 55 percent of overall financial assets in 2006, from 70 percent in 2005. Still, Chinese bank deposits totaled $4.4 trillion in 2006—an increase of $2.4 trillion over the past five years, reflecting savings of both households and corporations.

EUROPE CONTINUES TO SHOW ROBUST GROWTH

Europe’s financial markets continued their ascent. If we add together the financial assets in the eurozone, the United Kingdom, and other Western European countries,[9] the total rose by $6 trillion in 2006, to reach $53.2 trillion. That’s nearly equal to the US total of $56.1 trillion and represents a third of the world total. Moreover, Europe’s combined financial market depth is increasing faster, albeit from a lower base. Financial depth has grown at a compound annual growth rate of 4.4 percent from 1996 through 2006, compared with the US rate of 2.8 percent.

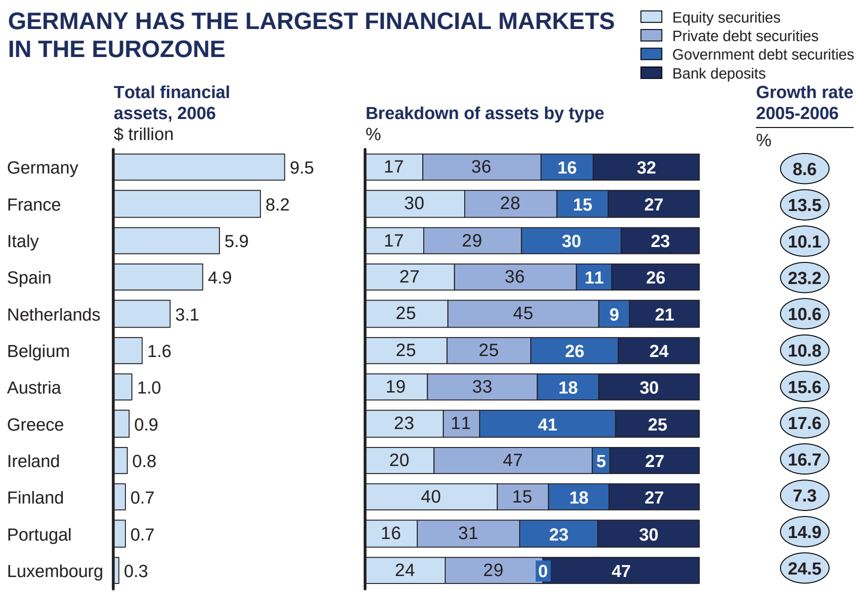
Europe’s financial deepening reflects healthy development of its financial markets. In the eurozone, the expansion of equity markets has been due mainly to rising corporate earnings rather than rising valuations. The corporate debt market is growing rapidly, and government debt has remained steady or even decreased in some countries.

8 For more on China’s financial system, see *Putting China’s Capital to Work: The Value of Financial System Reform*, McKinsey Global Institute, May 2006. Available online at www.mckinsey.com/mgi.

9 This includes Denmark, Iceland, Norway, Sweden, and Switzerland.

Within Europe, we see that the eurozone countries together have the most financial assets ($38 trillion) and account for most of the growth. The eurozone added $4.2 trillion in financial assets in 2006 at constant exchange rates, or 5.5 trillion euros. Germany, France, and Italy—the eurozone's largest financial markets—accounted for the most growth in absolute terms in 2006. However, the rates of growth were highest in Spain and Luxembourg, followed by Ireland and Greece (Exhibit 1.11).

Exhibit 1.11



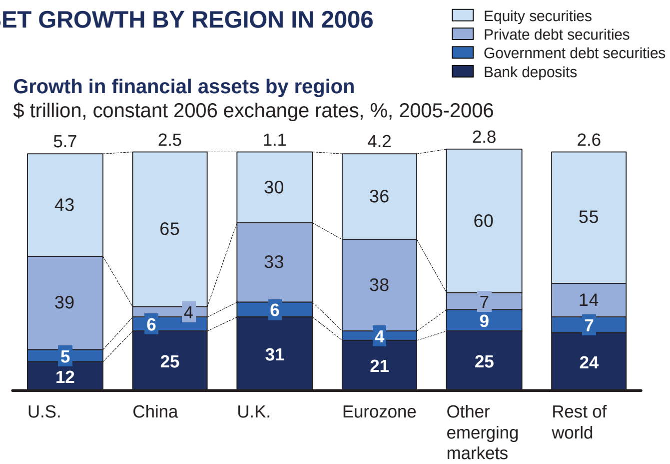
Note: Some numbers do not add to 100% due to rounding.Slovenia not shown.
Source: McKinsey Global Institute Global Financial Stock Database

Outside the eurozone, other major Western European economies saw their financial assets grow by $660 billion, or 13.4 percent. The largest driver was equity, accounting for $442 billion, or nearly two-thirds of total growth. The second largest was private debt, which accounted for a fourth of total growth. Government debt decreased by $23 billion, or 5 percent, from its 2005 level.

UK financial assets increased by $1.1 trillion in 2006 to reach $10 trillion. This represents the same percentage increase as US financial assets, and reflects London's increasingly prominent role as a global financial hub, particularly for eurozone companies and investors. As noted above, London attracted more listings by foreign companies than New York in recent years and also attracted significant private foreign wealth. As a result, bank deposits accounted for nearly one-third of the growth in UK financial assets in 2006, compared with around 10 percent of US growth (Exhibit 1.12). Although hard data on the source of these deposits are not available, their size of $330 billion suggests that at least part must be foreign wealth.

Exhibit 1.12

FINANCIAL ASSET GROWTH BY REGION IN 2006



	U.S.	China	U.K.	Eurozone	Other emerging markets	Rest of world
Financial depth % of GDP	424	307	422	356	157	355
CAGR* (1990-2006) %	8.7	25.7	9.5	9.2	19.0	6.3

* Compound annual growth rate.

Note: Some numbers do not add up due to rounding.

Source: McKinsey Global Institute Global Financial Stock Database

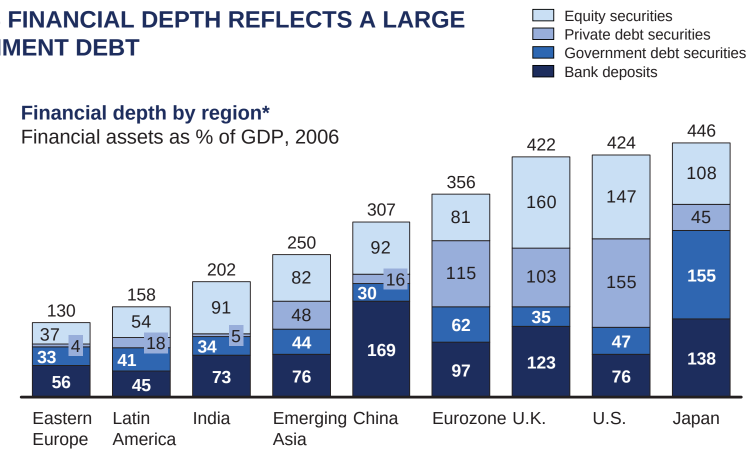
JAPAN'S FINANCIAL MARKET STAGNATES

Japan's financial recovery stalled in 2006. After three years of growth, Japan's total domestic financial assets remained essentially flat at $19.5 trillion in 2006, an increase of just $140 billion from 2005. Although government debt and equities grew slightly, private debt securities and bank deposits declined a bit. This reflected continuing weak economic conditions there.

Nonetheless, Japan remains the third-largest financial market in the world after the United States and the eurozone, and Japan has higher financial depth than the United States or the United Kingdom (Exhibit 1.13). However, Japan's huge government debt accounts for more than one-third of its financial assets and has exceeded 150 percent of GDP. The government over the past ten years has tried repeatedly to use fiscal policy to revive the economy, without much success. Excluding government debt, Japan's financial depth would be the same as it was in 1990. In contrast, over the same period, the United States has seen its financial depth increase by 168 percentage points, and the eurozone has seen financial depth increase by 173 percentage points.

Exhibit 1.13

JAPAN'S FINANCIAL DEPTH REFLECTS A LARGE GOVERNMENT DEBT



	Eastern Europe	Latin America	India	Emerging Asia	China	Eurozone	U.K.	U.S.	Japan
Total financial assets $ trillion	1.4	4.2	1.8	4.3	8.1	37.6	10.0	56.1	19.5

* Eastern Europe includes Bulgaria, Croatia, Czech Rep., Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Slovak Rep., Slovenia and Ukraine. Latin America includes Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Panama, Peru, Uruguay and Venezuela. Emerging Asia includes Indonesia, South Korea, Malaysia, Philippines and Thailand. Some numbers do not add up due to rounding.

Source: McKinsey Global Institute Global Financial Stock Database

MIDDLE EAST SEES A MAJOR CORRECTION IN EQUITIES

With the tripling of world oil prices since 2002, oil-exporting nations have become a significant force in global financial markets. As we will see in chapters 2 and 3, these nations are among the biggest cross-border investors and have accumulated large stores of foreign financial assets. In the Middle East, the oil windfall has also spurred the development of domestic financial markets and creates enormous potential for the future.

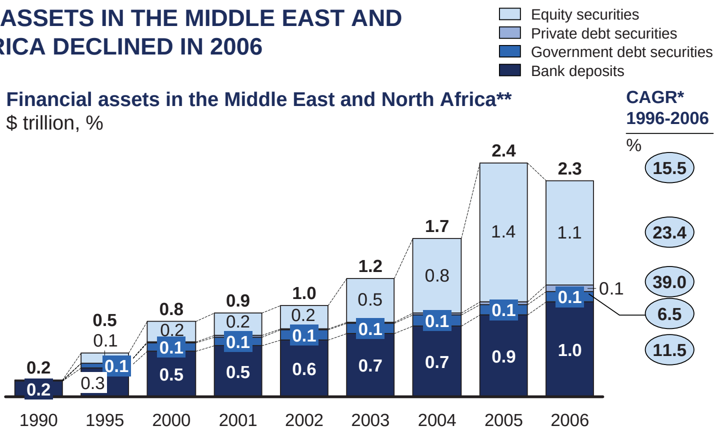
Since 2002, the domestic financial markets of the Middle East and North Africa have more than doubled in size. In 2002, these countries had $1 trillion of assets in their domestic financial systems, equivalent to 120 percent of GDP. Sixty percent of these assets were in the region’s banks, and the corporate and government bond markets were very small. By 2006, their financial assets had grown to $2.3 trillion, or 144 percent of GDP (Exhibit 1.14).[10] Equity markets were a big part of this growth, as the region’s relatively new markets gained momentum. A nascent corporate bond market (including Islamic bonds) has emerged as well. Nonetheless, this level of financial depth remains far lower than that in mature economies or in emerging Asian nations, reflecting significant opportunity for further development.

10 The countries of the Gulf Cooperation Council (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates) had domestic financial assets of $400 billion in 2002, which tripled to $1.2 trillion in 2006. For more on their financial systems, investments, and the coming oil windfall, see forthcoming McKinsey Global Institute research in February 2008.

Exhibit 1.14

FINANCIAL ASSETS IN THE MIDDLE EAST AND NORTH AFRICA DECLINED IN 2006

Financial assets in the Middle East and North Africa**
$ trillion, %



	1990	1995	2000	2001	2002	2003	2004	2005	2006	CAGR* 1996-2006 %
Nominal GDP $ billion	284	441	709	721	799	952	1,108	1,326	1,568	11.7
Financial depth % of GDP	62	104	112	121	120	130	149	184	144	

* Compound annual growth rate.
** Includes Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Tunisia, United Arab Emirates, Yemen.
Note: Some numbers do not add up due to rounding.
Source: McKinsey Global Institute Global Financial Stock Database

However, in 2006 the region learned that some markets can get too hot too fast, and cool down even more quickly. Equity markets suffered a major correction, with total capitalization in these countries falling by $300 billion overall. The particularly overheated stock markets of the Gulf countries lost more than $400 billion. Saudi Arabia saw its domestic equity market capitalization fall by 49 percent, while the United Arab Emirates' domestic equity market capitalization declined by 39 percent and Qatar's slid by 29 percent.

Saudi Arabia's equity market, which lost $320 billion in market capitalization, was the largest contributor to the correction. At the beginning of 2006, Saudi Arabian equities had reached P/E ratios above 50 as swelling oil profits were invested in just 79 publicly listed companies. With few institutional investors, there were virtually no short sellers to restrain the price surge. Half the population—including many inexperienced investors—bought shares in the December 2005 IPO of the petrochemical company Yansab. In the buying frenzy, some Saudis even borrowed money to buy cars, and then immediately exchanged them for shares. The bubble burst in spring 2006, partly because of the cancellation of a popular after-work trading session. Saudi P/E ratios fell back to a more sustainable level of 15.

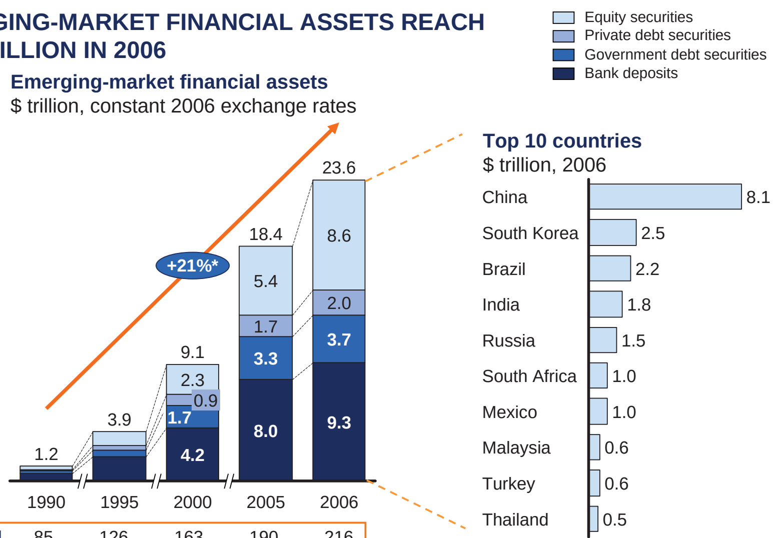
Overall, although 2006 brought losses for some investors, the equity market correction put the Gulf's financial markets on a more solid foundation. With oil prices still high and most countries working to reform their financial systems, the region's markets hold great promise for future development. This bodes well for other parts of the world that benefit from the outflow of investment capital from the Middle East and North Africa. But the region's long-term economic health will depend largely on whether Gulf countries improve the flow of oil profits into productive domestic investment as well.

EMERGING MARKETS: SMALL BUT GROWING FAST

After being devastated by a string of financial crises ten years ago, emerging economies' financial markets are on the rebound. Their financial assets grew $5.3 trillion in 2006, to a total of $23.6 trillion. That increase—nearly as much as in the United States—accounted for one-quarter of total global growth in financial assets. And over the past ten years, emerging-market financial assets have grown more than twice as fast as those in developed countries (Exhibit 1.15).

Exhibit 1.15

EMERGING-MARKET FINANCIAL ASSETS REACH $24 TRILLION IN 2006



	1990	1995	2000	2005	2006
Financial depth % of GDP	85	126	163	190	216

* Compound annual growth rate 1990-2006.
Source: McKinsey Global Institute Global Financial Stock Database

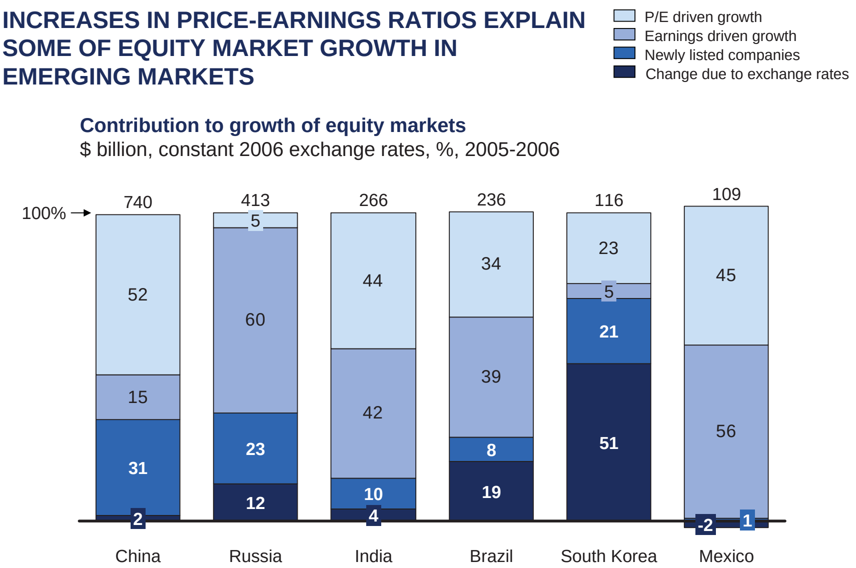
The star performer among these countries is China, which accounted for a third of all financial assets in emerging markets and almost half of the growth in 2006. The group also includes Russia and other rapidly developing nations in Asia, Latin America, Eastern Europe, and Africa.

The largest asset class in emerging markets remains bank deposits, reflecting the immature financial systems in emerging markets. But much of the growth in assets comes from equities. Companies from emerging markets accounted for 35 percent of all the money raised globally through IPOs in 2006, up from 10 percent in 2000. Most noteworthy is that China raised more money through IPOs in 2006 than Japan, Germany, or the United Kingdom—and as much as companies from all countries of the eurozone combined. However, rising P/E ratios also explain a significant portion of the equity growth in many emerging markets. The exceptions, among the largest markets, are South Korea, which has seen many IPOs and exchange-rate changes, and Russia, which is seeing higher corporate earnings due in part to rising commodity prices (Exhibit 1.16).

Exhibit 1.16

INCREASES IN PRICE-EARNINGS RATIOS EXPLAIN SOME OF EQUITY MARKET GROWTH IN EMERGING MARKETS

Contribution to growth of equity markets
$ billion, constant 2006 exchange rates, %, 2005-2006

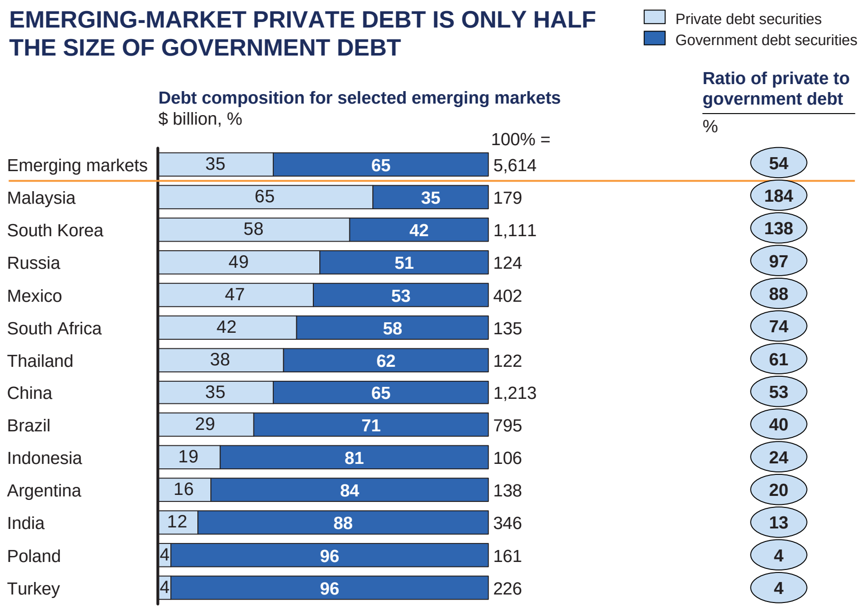


Source: Datastream; World Federation of Exchanges; McKinsey Global Institute analysis

Notably, emerging-market private debt grew faster than government debt for the second year in a row, a sign of the development of a healthy corporate sector in many countries. They have growing numbers of large, creditworthy companies with sophisticated financial management capable of drawing on global credit markets. Also, in many regions—particularly Latin America—governments are paying down their debts and getting their fiscal house in order.[11] Nonetheless, private debt securities remain just half the size of government debt outstanding for emerging markets (Exhibit 1.17).

11 Latin America includes Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Panama, Peru, Uruguay, and Venezuela.

Exhibit 1.17



Source: McKinsey Global Institute Financial Stock Database

Despite rapid growth and promising developments, emerging markets still account for only 14 percent of global financial assets (Exhibit 1.18). Although this is up from 3 percent in 1990, it is significantly less than their share of global GDP (23 percent). This indicates significant room for further financial growth—and that today's investment opportunities in emerging markets are smaller than some large investors may realize.

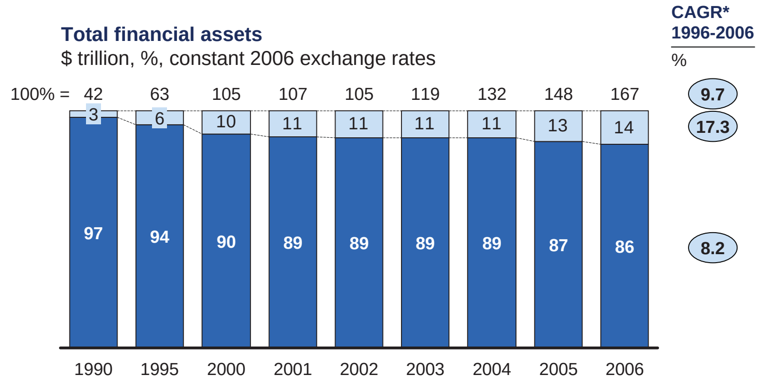
Across emerging markets, we see different trends:

Emerging Asia's financial markets have recovered since the 1997 financial crisis, and the region now has the most developed financial systems across emerging markets.[12] With $14.2 trillion in financial assets, or 9 percent of the global total, its financial depth was 250 percent of GDP at the end of 2006, far higher than that of Latin America or Eastern Europe. China alone accounts for more than half of the region's assets, and South Korea and India together account for another 40 percent of the total (see *A Closer Look at China and India*). Although China's financial system is still dominated by its banks, elsewhere in the region the asset distribution is fairly balanced, with about one-third each in equities, debt, and deposits. The region also has the largest private debt markets across emerging markets.

12 Emerging Asia includes China, India, Indonesia, Macao, Malaysia, the Philippines, South Korea, and Thailand.

Exhibit 1.18

EMERGING MARKETS ACCOUNT FOR 14 PERCENT OF GLOBAL FINANCIAL ASSETS



	1990	1995	2000	2001	2002	2003	2004	2005	2006
Emerging markets' share of GDP %	6	11	18	19	20	20	21	22	23

* Compound annual growth rate.
Source: McKinsey Global Institute Global Financial Stock Database

Latin America's financial markets remain surprisingly shallow, despite a long history of banking and foreign investment in the region. By the end of 2006, financial depth in the region was only 158 percent compared with 250 percent in emerging Asia and more than 300 percent in China. One problem is that the region has been plagued for many years by financial crises and economic instability. Another factor that has historically stymied growth is the region's large government debt, which has deprived the private sector of credit. But in recent years, the region has posted significant growth and may be turning the corner.[13] By the end of 2006, Latin America had $4.2 trillion of domestic financial assets, up from $3.5 trillion in 2005. Equities have accounted for nearly half the growth since 2003—and almost 60 percent of the growth in 2006. Most of this growth reflects increased earnings; the P/E ratio in Brazil, the region's largest market, remains quite low by international standards at 12. And the region's government debt declined to 41 percent of GDP by the end of 2006, on par with emerging Asia and the United States.

Eastern Europe has the fastest-growing financial markets of any emerging-market region. Its financial assets have risen 26 percent per year since 2000, compared with emerging Asia's annual growth rates of 17 percent. Russia

13 For more on this topic, see Luis Andrade, Diana Farrell, and Susan Lund, "Fulfilling the promise of Latin America's financial systems," *The McKinsey Quarterly*, January 2007. Available online at www.mckinseyquarterly.com.

dominates the financial landscape, with $1.6 trillion in financial assets—just a bit less than India. Moreover, Russia's financial assets have grown 47 percent per year since 2000. Equities account for two-thirds of Russia's financial assets, reflecting in part rising oil and commodity prices. But Russia's automobile, financial services, and real estate sectors also posted strong gains. The rest of Eastern Europe combined has $1.4 trillion in financial assets. In other Eastern European economies, bank deposits account for more than half of all financial assets, reflecting the fact that equity and debt markets did not exist there before the fall of the Berlin Wall in late 1989. However, by 2006, equities accounted for 46 percent of growth.

Africa's financial markets, although tiny in most countries, are having a growth spurt. Financial assets in sub-Saharan Africa increased by $287 billion in 2006, reaching a total of $1.2 trillion, or 183 percent of GDP.[14] South Africa alone accounted for 81 percent of the total ($1 trillion), leaving just $235 billion for the rest of sub-Saharan Africa. The next five largest African financial markets—those in Nigeria, Zimbabwe, Kenya, Mauritius, and Cote d'Ivoire—accounted for 65 percent of the remainder. South Africa's financial system is dominated by its equity market; mining accounts for about one-quarter of stock market capitalization, while the financial sector accounts for another quarter. Across the continent, equity markets and banking account for nearly all financial assets; debt markets are almost nonexistent. But equity-market indexes are soaring in some countries, with Nigeria's skyrocketing 770 percent between 2000 and end of 2007, followed by Botswana's jump of 680 percent, Mauritius's increase of 320 percent, South Africa's gain of 250 percent, and Kenya's, up 130 percent.

A Closer Look at China and India

The world's two emerging economic giants, China and India, have captured the imaginations of investors, industrialists, and economists alike. But the countries' parallel bursts of growth are marked by striking differences. Their financial systems are one example.

At $1.8 trillion, India's financial assets were just one-fourth the size of China's $8.1 trillion in 2006—and growing more slowly.[15] This gap is only partially explained by the size of their economies. India's domestic financial assets

14 In addition, North African countries (Algeria, Egypt, Libya, Morocco, and Tunisia) account for $423 billion in financial assets with a financial depth at 117 percent of GDP.

15 See Diana Farrell and Susan Lund, *A Tale of Two Financial Systems: A Comparison of China and India*, McKinsey Global Institute, September 2006. Available online at www.mckinsey.com/mgi.

that year were equal to just 202 percent of GDP—significantly below China's 307 percent. This constrains India's ability to invest in machinery, buildings, infrastructure, and other forms of physical capital necessary for economic growth.

Of course, size is not everything; equally important is how efficiently a financial system allocates capital. And both countries have a significant opportunity for improvement. Bank deposits account for more than half of China's financial assets, and much of that money is loaned to inefficient state-owned enterprises, starving the more dynamic private enterprises of the funding needed to grow. MGI estimates that such financial system inefficiencies cost the nation 17 percent of GDP each year.

India's financial system, meanwhile, funnels most of its capital to the government itself. Including state-owned enterprises, India's large public sector absorbs nearly 70 percent of the nation's savings. MGI calculates that if India's financial markets allocated more capital to its thriving private enterprises, the country could raise its GDP growth rate to 9.4 annually, after inflation.[16]

One reason India has less money to invest is that its national saving rate is only half of China's 40 percent. India's households save as much as Chinese ones do, but many Indian families put their money in informal savings vehicles rather than banks, so the funds are not available for investment. Foreign capital inflows widen the investment gap: in 2006 foreign direct investment in China equaled 3 percent of GDP; in India, it equaled just 0.9 percent, due mostly to restrictions on foreign investment. As a result, India's investment level is far lower than China's.

Going forward, both China and India have significant opportunities to improve their financial systems, and they are pursuing reforms. Their future growth trajectories will depend in part on their success.

• • •

The world's capital markets were buoyant in 2006, lifted by rapid growth in equities, financial depth, and the power of rising players such as China. That momentum was slowed but not stopped in 2007 by the US subprime mortgage crisis. Credit markets bore the brunt of the turbulence in 2007, as banks tight-

16 See *Accelerating India's Growth Through Financial System Reform*, McKinsey Global Institute, May 2006. Available online at www.mckinsey.com/mgi.

ened lending standards, some leveraged buyout deals were shelved or repriced, and the most exotic debt securities plummeted in value. However, equity-market growth remained robust through the first three-quarters of the year, even in the United States. And early signs are that Asian and European financial markets continued to thrive, highlighting the shift in global consumption and growth away from the United States.

2. Capital without borders

Globalization of financial markets is a trend that is often discussed but rarely quantified. The growth of cross-border capital flows—or the value of purchases and sales of financial assets by investors from different countries—is one vivid illustration of financial globalization at work.

Cross-border capital flows take many forms, including foreign direct investment (FDI), purchases of foreign equity and debt securities, and cross-border lending and deposits. US companies build factories in China, while American workers snap up Latin American stocks. Middle East investors buy equity stakes in US banks and private-equity firms. Asian central banks buy US Treasury securities while Chinese companies take stakes in African commodities producers. In 2006, the annual value of such cross-border capital flows totaled $8.2 trillion—nearly triple the level of capital flows in 2002—and an eightfold increase since 1990 (Exhibit 2.1). All signs indicated these flows continued to grow through 2007.

The growth of capital flows is having a profound impact on financial markets and economies around the world. Much attention has focused on the risks that cross-border investments create—such as the “hot money” that can surge into a country suddenly and rush out just as fast, leaving financial ruin in its wake. More recently, concern has grown as increasingly powerful state investors from Asia and oil-exporting nations buy ever-larger investments in US, European, and other markets.

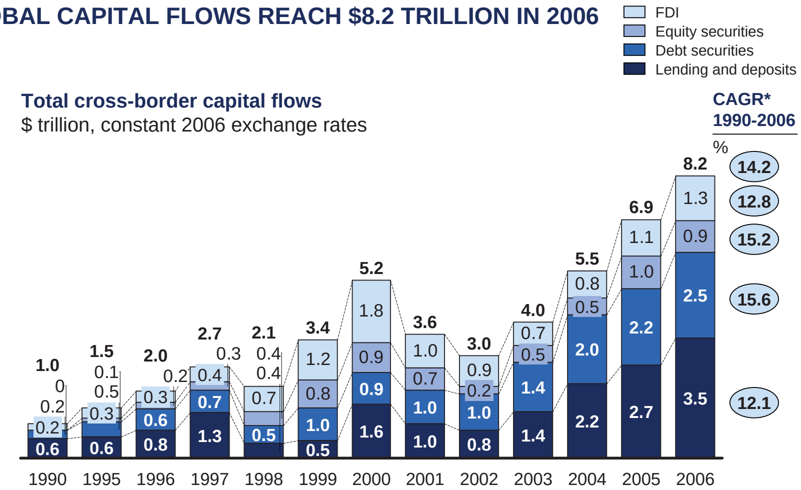
But the increasing movement of capital across borders has significant benefits as well.[1] Foreign investors are footing the bill for soaring investment in Eastern

1 There is a large academic literature that attempts to measure the benefits of financial globalization, often with mixed results. See, for instance, M. Ayhan Kose, Eswar Prasad, Kenneth Rogoff, and Shang-Jin Wei, “Financial globalization: A reappraisal,” IMF working paper WP/06/189, August 2006.

Europe. Oil exporters are injecting much-needed capital into US and European banks suffering from the fallout of the US subprime mortgage debacle. Companies around the world can tap larger pools of capital, at better prices, while consumers are gaining unprecedented access to credit. And investors can diversify their portfolios across asset classes around the world, enhancing their risk-adjusted returns.

Exhibit 2.1

GLOBAL CAPITAL FLOWS REACH $8.2 TRILLION IN 2006



% of global GDP	5.2	5.7	7.1	9.2	7.0	10.8	15.3	10.2	8.1	10.2	13.1	15.6	17.2

* Compound annual growth rate.
Note: See Technical Notes in the appendix for summary of revisions to data from 2005 and earlier years.
Source: McKinsey Global Institute Capital Flows Database

This chapter provides a detailed look at global capital flows. Several notable findings emerge. The eurozone has accounted for nearly half of the growth in cross-border capital flows over the past ten years. This included both capital flows between eurozone countries and increasing financial flows between the eurozone and the rest of the world. Despite the intense discussion of capital flows to emerging markets, they still receive only 10 percent of the global total. More surprisingly, emerging markets were net exporters of capital in 2006, investing more in foreign markets than foreigners invest in theirs. And contrary to conventional wisdom, the most volatile type of capital flow is cross-border lending and deposits, not foreign investments in equity markets.

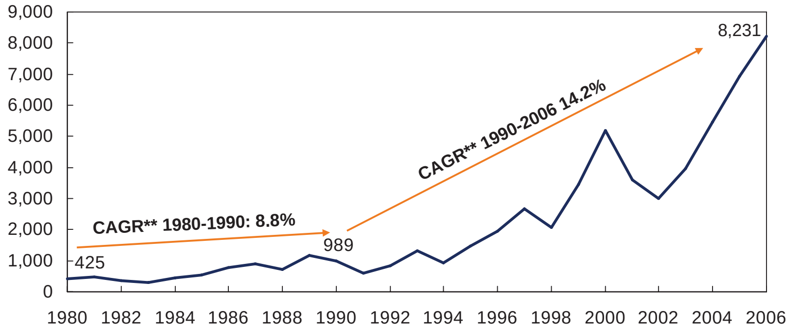
CROSS-BORDER CAPITAL FLOWS REACH $8.2 TRILLION IN 2006

Since 1990, global capital flows have grown faster than the value of world trade, world GDP, or the world's financial assets (Exhibit 2.2). In 2006, net new cross-border purchases of financial assets totaled $8.2 trillion—two-thirds of the value of world trade and $1.3 trillion more than the year before.[2] And the $8.2 trillion figure represents the net result of all the buying and selling of financial assets through the year. The daily churn of cross-border transactions is much greater, totaling an estimated gross volume of $145 trillion a year.

Exhibit 2.2

GROWTH IN CROSS-BORDER CAPITAL FLOWS

Total cross-border capital inflows*
$ billion, constant 2006 exchange rates



% of global GDP	4.7	3.5	3.7	5.6	4.5	5.2	3.8	3.9	7.1	7.0	15.3	8.1	13.1	17.2
% of global imports	23.1	17.2	18.1	31.5	24.9	27.4	21.1	20.6	34.8	30.6	58.5	32.4	48.5	62.1

* Due to a discrepancy in data collection, global capital inflows exceed recorded outflows by an average of $87 billion per year.
** Compound annual growth rate.
Source: McKinsey Global Institute Global Capital Flows Database

Several developments over the past 20 years have facilitated the flow of capital around the world. Advances in information and communications technology have enabled the creation of global banks and other financial intermediaries, allowing investors to send money around the world at the push of a button. The cost of conducting cross-border trades has fallen to a fraction of what it was ten years ago. At the same time, most countries have significantly liberalized the restrictions on capital flows, permitting more foreign investment in their financial markets and economies and allowing their own citizens and companies to invest abroad. Although many emerging markets, including China and India, still maintain some capital controls, the trend has been toward allowing more capital in and out of their countries.

The growth of large, sophisticated institutional investors and other new financial intermediaries has also contributed to the rise in cross-border capital flows. These investors—far more than individuals—seek investment opportunities

2 Throughout this chapter, we measure the growth over time excluding the impact of changes in exchanges rates between the dollar and other currencies.

globally. In 2006, McKinsey Global Institute (MGI) estimates that pension funds, mutual funds, and insurance companies around the world had $59.4 trillion in assets under management, nearly triple their size in 1995. Over the past five years, hedge funds and private-equity firms have also tripled in size, reaching $2.2 trillion in assets under management by the end of 2006.[3] Both of the these players are increasingly looking to foreign markets for growth, and they raise capital from wealthy individuals and institutions around the world, generating cross-border capital flows in the process.

Finally, rising trade surpluses and commodity prices have created new pools of wealth in the Middle East, Asia, and other emerging markets—much of which is then invested abroad.[4] Together, Asian nations and oil exporters had $1.8 trillion of total capital outflows in 2006.

EUROZONE, UNITED STATES, AND UNITED KINGDOM ACCOUNT FOR 80 PERCENT OF GROWTH IN GLOBAL CAPITAL FLOWS

Over the past ten years, just three regions—the eurozone, the United States, and the United Kingdom—accounted for nearly all of the growth in global capital flows (Exhibit 2.3). These three accounted for 80 percent of the growth in capital inflows and generated two-thirds of the growth in capital outflows.[5] Despite the public attention paid to capital flows into China, India, and other emerging markets, cross-border investing is still predominantly a developed-economy phenomenon.

Because of their importance, we look at the eurozone, United States, and United Kingdom in turn:

The countries of the eurozone—the 13 countries that share the common continental currency—together account for nearly half of the increase in global capital flows over the past ten years. Collectively, they are the largest recipients of global capital inflows and the largest source of capital outflows (Exhibit 2.4). Roughly half of the growth in eurozone capital flows is from cross-border capital flows within the eurozone. Nearly as important, however, has been growth in capital flows between the eurozone and the rest of the

3 See *The New Power Brokers: How Oil, Asia, Hedge Funds, and Private Equity Are Shaping Global Capital Markets*, McKinsey Global Institute, October 2007. Available online at www.mckinsey.com/mgi.

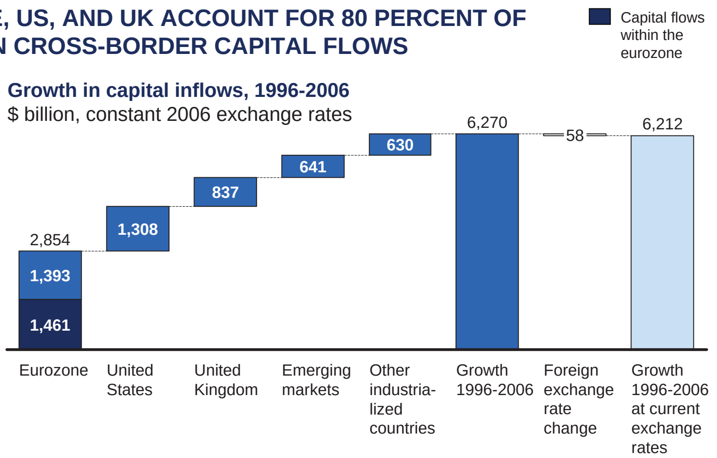
4 For more detail on petrodollars and Asian central banks, see *The New Power Brokers: How Oil, Asia, Hedge Funds, and Private Equity Are Shaping Global Capital Markets*, McKinsey Global Institute, October 2007. Available online at www.mckinsey.com/mgi.

5 The same pattern holds if one looks at a longer period of time—1990 to 2006, for instance—or just at the previous year, 2005–2006.

Exhibit 2.3

EUROZONE, US, AND UK ACCOUNT FOR 80 PERCENT OF GROWTH IN CROSS-BORDER CAPITAL FLOWS

Growth in capital inflows, 1996-2006
$ billion, constant 2006 exchange rates



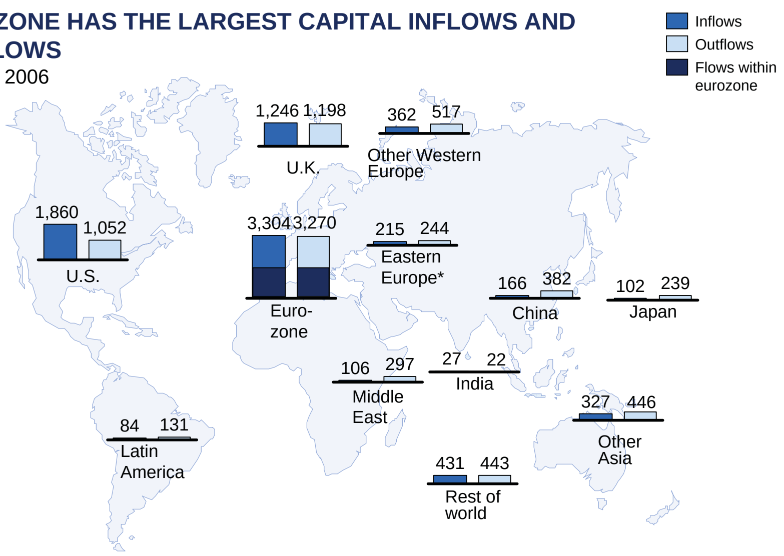
	Eurozone	United States	United Kingdom	Emerging markets	Other industrialized countries
Contribution to growth in inflows %	45.6*	20.9	13.3	10.2	10.0
Contribution to growth in outflows %	43.8*	10.0	12.4	20.2	13.6

* Capital flows within eurozone contributed 23.3% of growth in inflows and 22.2% of growth in outflows.
Source: McKinsey Global Institute Capital Flows Database

Exhibit 2.4

EUROZONE HAS THE LARGEST CAPITAL INFLOWS AND OUTFLOWS

$ billion, 2006

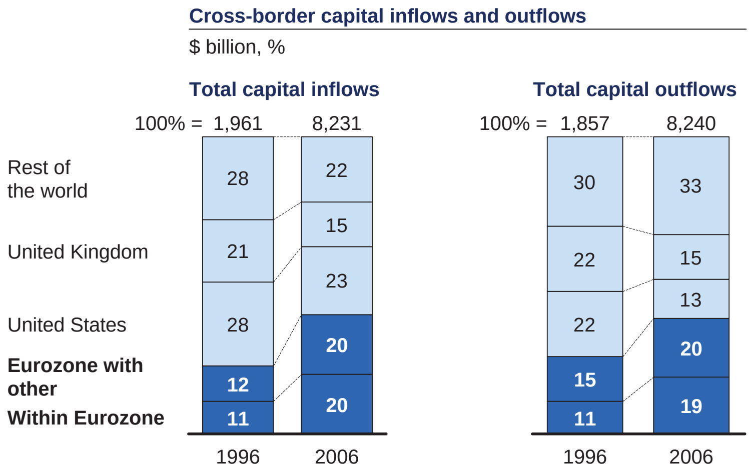


* Includes Russia.
Note: Outflows exceed inflows by $9 billion due to a discrepancy in data collection.
Source: McKinsey Global Institute Capital Flows Database

world, which increased almost seven times between 1996 and 2006 (Exhibit 2.5). Around 30 percent of capital flows from the eurozone went to the United Kingdom in 2006, reflecting the emergence of London as a financial hub for Europe. As financial markets in the eurozone mature, the euro is emerging as an international currency that challenges the position of the dollar (see *The euro rivals the dollar*).

Exhibit 2.5

THE EUROZONE IS A GROWING SHARE OF GLOBAL CAPITAL FLOWS



Source: McKinsey Global Institute Capital Flows Database

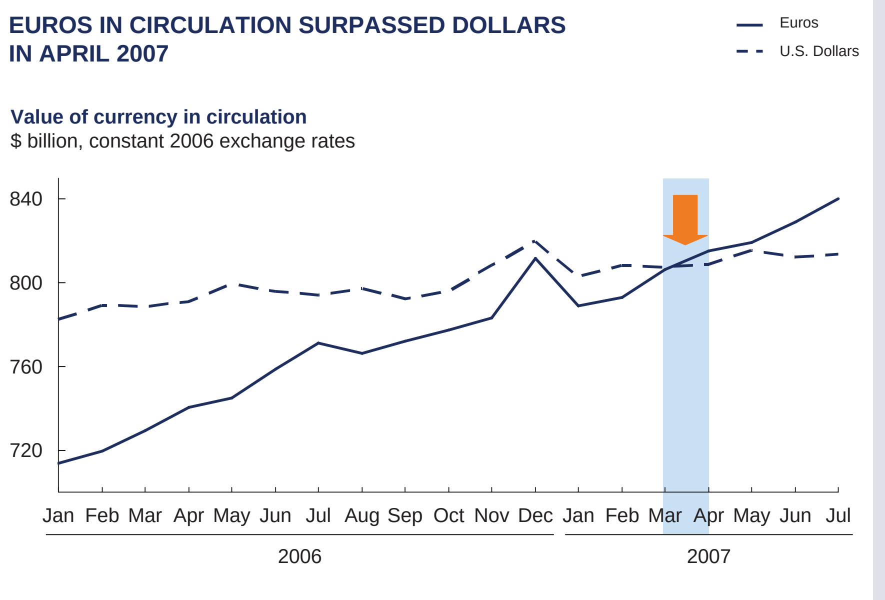
Despite its weak economic growth, France receives the largest capital inflows of any country in the eurozone, with $707 billion of new foreign investments in 2006, and it has the second-largest outflows ($632 billion). France's prominent position reflects the success of the Euronext stock exchange, based in Paris. Created in 2000, Euronext has grown quickly to become the largest stock exchange in the eurozone, with almost the same market capitalization as the London Stock Exchange ($3.7 trillion versus $3.8 trillion, respectively).

Luxembourg was the second-largest nexus of capital flows in the eurozone in 2006, followed by Ireland. Despite their small economies, both of these countries are main hubs for mutual funds in the eurozone, attracting investors from all countries and investing broadly in eurozone markets. More than 90 percent of mutual funds that attract investors from more than one eurozone country are domiciled in Luxembourg or Ireland, in part because of the flexible regulators there.

The euro rivals the dollar

While the euro's surge against the dollar generated headlines in late 2007, Europe's common currency quietly passed another milestone earlier in the year. In April 2007, for the first time, the value of euro notes in circulation surpassed the combined value of all the US dollars in wallets, piggybanks, and central bank vaults around the world (Exhibit). By August 2007, there were $840 billion of euro notes circulating around the world, compared with $814 billion in US dollars.

Exhibit



Source: European Central Bank, US Federal Reserve, International Monetary Fund

Some observers may argue that this simply reflects Europeans' preference for cash over plastic, or the growing use of euros to fund black-market activities around the world. (Indeed, the 500 euro note—favored by the underworld—is the most popular euro note.) But the euro's growing popularity is in large part a reflection of the rise of the area's financial markets. This marks another step in the euro's emergence as a rival to the dollar as a store of value, a tool of commerce, and a means of investment. No longer is there just one dominant currency.

As the euro reaches new heights against the US dollar, it may be hard to remember its early days as a currency weakling. Initially shared by 11 European countries, the euro slouched quickly after its launch January 1, 1999. Part of the euro's gain since then—to $1.47 on November 30, 2007—has been the flip side of the dollar's six-year slide.

But the euro also has taken off on its own. In 2003 the euro surpassed the dollar to become the most popular currency for international bond issues. Companies from Eastern Europe, India, and other emerging markets are increasingly choosing London and Luxembourg over New York to list their public stock offerings.

The US dollar is still the world's preferred reserve currency, the safest store of value for central banks and other large institutions around the world; central banks hold an estimated two-thirds of their reserves in greenbacks. But as the breadth and liquidity of euro financial markets grow, the euro may gain ground. Already, the euro has become the second most popular reserve currency, with a 25 percent share of global reserves since 2003, up from an 18 percent share in 1999. This share may rise as central banks and other institutions seek higher returns on their reserves and as China and other countries peg their currencies' values less to the dollar and more to baskets of currencies that give the euro a prominent role.

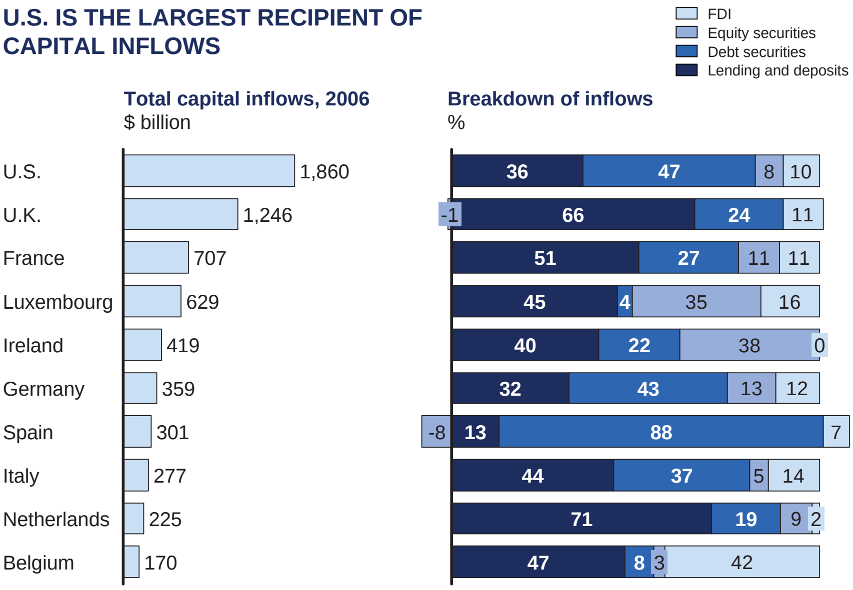
The United States continues to attract nearly 25 percent of global capital flows. Foreign investors purchased $1.9 trillion of US financial assets in 2006, an increase of $625 billion from the level in 2005 (Exhibit 2.6). Foreign purchases of debt securities accounted for nearly half the total. These purchases have lowered US interest rates and helped fund the country's large current account deficit.[6] The United States is the world's largest destination for foreign direct investment across countries and also receives substantial inflows of foreign lending and deposits, reflecting the globalization of banks and the deposits made by wealthy foreigners in US financial institutions (Exhibit 2.7).

The United States is also a large source of capital flows to other countries. US companies, households, pension funds, and other investors made net purchases of $1.1 trillion of foreign financial assets in 2006, and US companies were the world's largest source of FDI and equity investments (Exhibit 2.8). With foreign liabilities in low-yielding debt securities and foreign assets in high-yielding equity investments, the United States earns higher returns on its foreign investments than it pays on its foreign liabilities, helping it to finance its large net foreign debt.

6 For more information, see *The US Imbalancing Act: Can the Current Account Deficit Continue to Grow?*, McKinsey Global Institute, June 2007. Available online at www.mckinsey.com/mgi.

Exhibit 2.6

U.S. IS THE LARGEST RECIPIENT OF CAPITAL INFLOWS



Note: Some numbers due not add to 100% due to rounding.
Source: McKinsey Global Institute Capital Flows Database

Exhibit 2.7

TOP RECIPIENTS OF CAPITAL INFLOWS, 2006

Net capital inflows by type, $ billion, %

Foreign direct investment

		2006	Share of World
1	United States	181	14.0
2	United Kingdom	140	10.8
3	Luxembourg	98	7.6
4	France	81	6.3
5	Belgium	71	5.5
6	Canada	69	5.4
7	Germany	43	3.4
8	Hong Kong	43	3.3
9	Italy	39	3.0
10	Sweden	27	2.1
Top 10 countries		**792**	**61.3**

Equity securities

		2006	Share of World
1	Luxembourg	221	23.8
2	Ireland	161	17.4
3	United States	149	16.0
4	France	74	8.0
5	Japan	71	7.7
6	Germany	47	5.0
7	Taiwan	23	2.4
8	Netherlands	20	2.2
9	Hong Kong	16	1.7
10	Italy	14	1.5
Top 10 countries		**795**	**85.8**

Debt securities

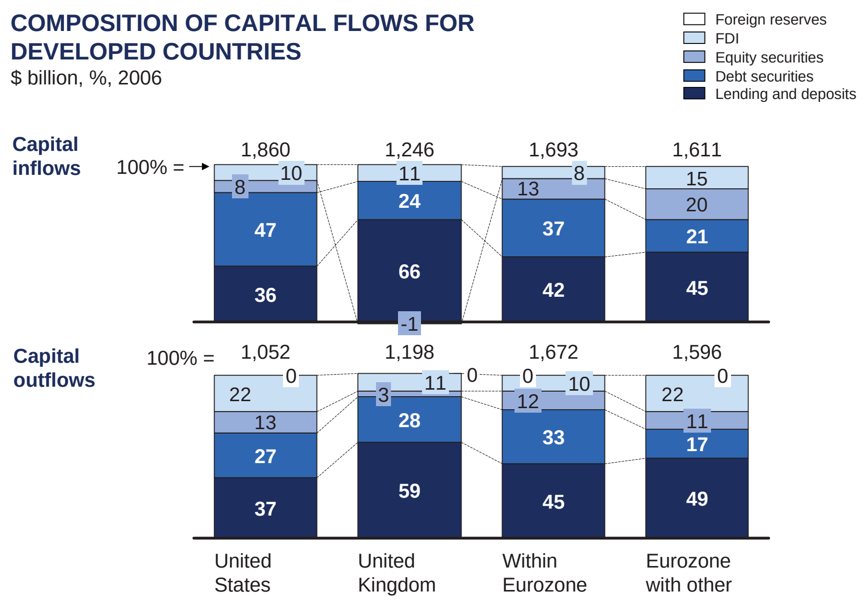
		2006	Share of World
1	United States	869	34.6
2	United Kingdom	297	11.8
3	Spain	265	10.5
4	France	192	7.6
5	Germany	154	6.1
6	Japan	127	5.1
7	Italy	102	4.0
8	Ireland	91	3.6
9	Australia	84	3.4
10	Netherlands	42	1.7
Top 10 countries		**2,222**	**88.4**

Lending and deposits

		2006	Share of World
1	United Kingdom	818	23.3
2	United States	662	18.9
3	France	360	10.3
4	Luxembourg	282	8.1
5	Ireland	168	4.8
6	Netherlands	159	4.5
7	Italy	123	3.5
8	Germany	115	3.3
9	Belgium	80	2.3
10	Norway	80	2.3
Top 10 countries		**2,846**	**81.3**

Source: McKinsey Global Institute Capital Flows Database

Exhibit 2.8



Source: McKinsey Global Institute Capital Flows Database

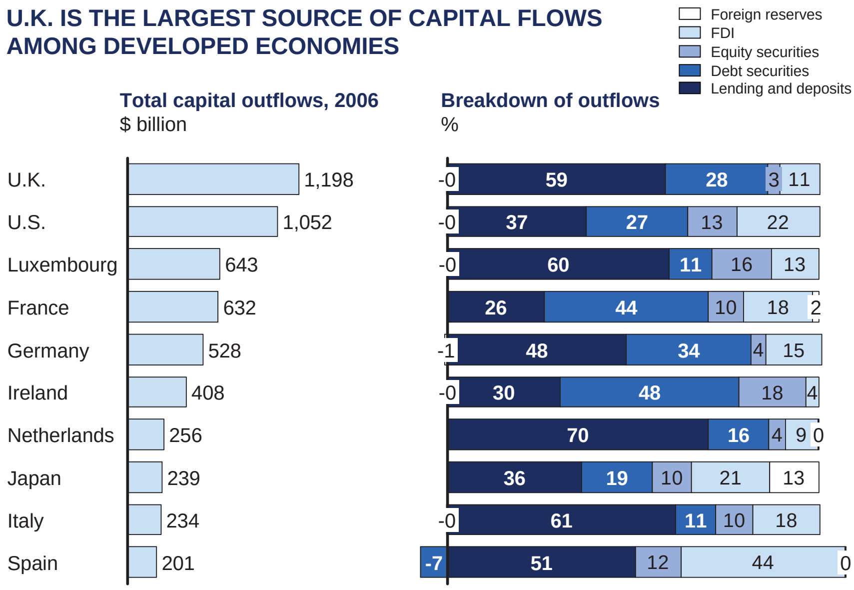
The United Kingdom is the third major source of global capital flows, reflecting the rise of London as a global financial hub, particularly for the eurozone. In 2006, the United Kingdom was the largest source of capital outflows across countries (Exhibit 2.9), and second only to the United States as a recipient of capital inflows. Two-thirds of UK capital inflows and outflows take the form of cross-border lending and deposits. This includes foreign deposits in London banks and with other asset managers, intrabank lending, and growth in syndicated lending in Europe, for which London is a hub. Many wealthy investors from the Middle East, Russia, and other regions use London as a financial center through which to channel investments in other countries.

EMERGING MARKETS: WHERE ARE THE CAPITAL FLOWS?

Since 1990, cross-border capital flows to emerging markets have grown at nearly twice the rate as capital inflows to developed countries, or 23.6 percent and 13.5 percent, respectively. In 2006, they reached a new height of $700 billion, or 6.4 percent of their GDP—surpassing their previous peak in the mid-1990s (Exhibit 2.10). Still, capital flows to emerging markets are a small part of the overall picture, accounting for only 10 percent of global capital inflows and 13 percent of outflows, less than emerging markets' share of global GDP or of financial stock.

Exhibit 2.9

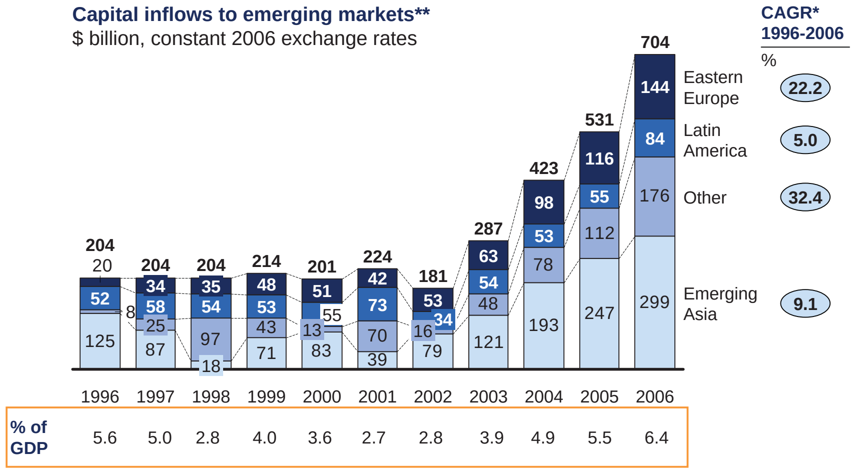
U.K. IS THE LARGEST SOURCE OF CAPITAL FLOWS AMONG DEVELOPED ECONOMIES



Note: Some numbers do not add to 100% due to rounding.
Source: McKinsey Global Institute Capital Flows Database

Exhibit 2.10

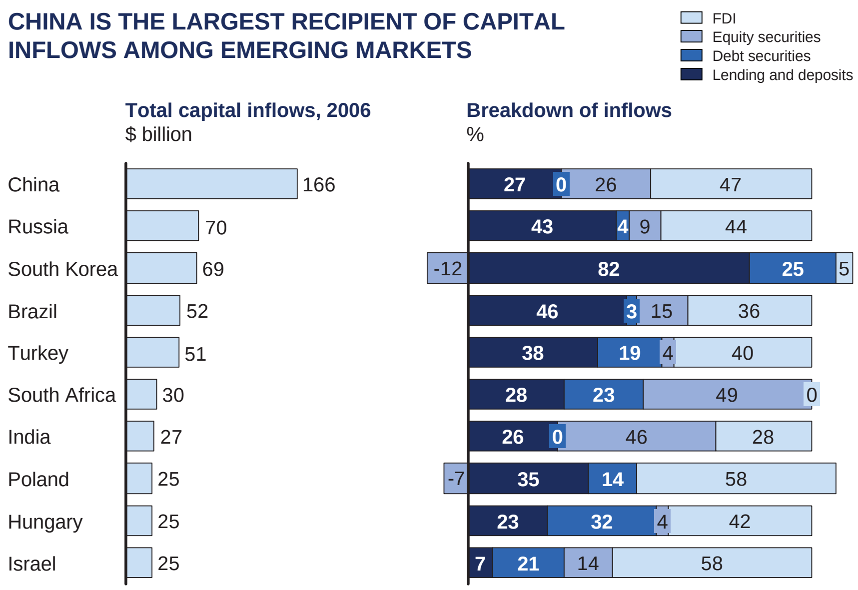
CAPITAL FLOWS TO EMERGING MARKETS REACH $700 BILLION IN 2006



* Compound annual growth rate.
** Eastern Europe includes Bulgaria, Croatia, Czech Rep., Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Rep., Slovenia, and Ukraine. Latin America includes Argentina, Brazil, Chile, Colombia, Mexico, Peru, Uruguay and Venezuela. Emerging Asia includes China, India, Indonesia, South Korea, Malaysia, Philippines, Taiwan and Thailand. Some numbers do not add due to rounding.
Source: McKinsey Global Institute Capital Flows Database

China is by far the largest player among emerging markets for both capital inflows and outflows. It received $166 billion of foreign investments in 2006, more than twice the amount received by the next largest recipient, Russia (Exhibit 2.11). Although FDI in China receives much attention, it accounted for less than half of total foreign investment in 2006. China also invested $383 billion abroad in 2006, nearly two-thirds of which came from foreign reserve asset purchases by China's central bank (Exhibit 2.12). Although still small in global terms, FDI by Chinese companies has also increased rapidly over the past five years, reaching $18 billion in 2006.

Exhibit 2.11



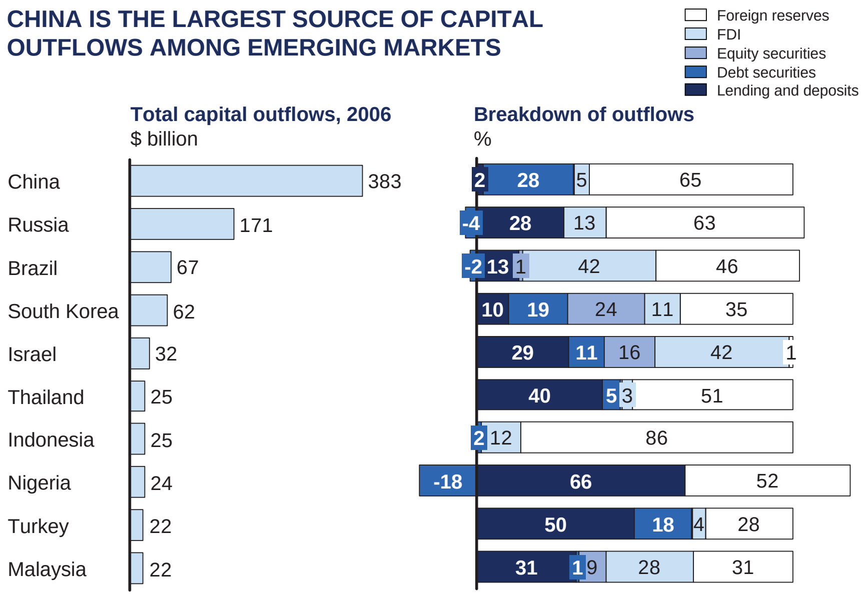
Note: Some numbers do not add to 100% due to rounding.
Source: McKinsey Global Institute Capital Flows Database

China's experience reflects a broader trend among emerging markets: they are increasingly becoming a source of capital as well as a destination for foreign investors. Total capital outflows from emerging markets reached a landmark $1 trillion in 2006. Central bank purchases of foreign reserves accounted for half of the total. Foreign direct investment from emerging-market companies grew to $139 billion in 2006, nearly twice the level of 2005 and six times the level five years earlier.

More astonishingly, emerging markets have become net providers of capital to the rest of the world. In contrast to the mid-1990s, when emerging markets generally ran current account deficits and were dependent on foreign capital inflows, many emerging markets in Asia and Latin America now have current account surpluses, due to soaring exports and rising commodity prices. In 2006, emerging markets as a group invested $332 billion more abroad than they received in foreign investment (Exhibit 2.13). Today, Eastern European countries are the only major emerging markets that run large current account deficits—reminiscent of emerging Asia and Latin America ten years ago.

Exhibit 2.12

CHINA IS THE LARGEST SOURCE OF CAPITAL OUTFLOWS AMONG EMERGING MARKETS



Note: Some numbers do not add to 100% due to rounding.
Source: McKinsey Global Institute Capital Flows Database

THE SURGE IN CROSS-BORDER LENDING REACHES $3.5 TRILLION

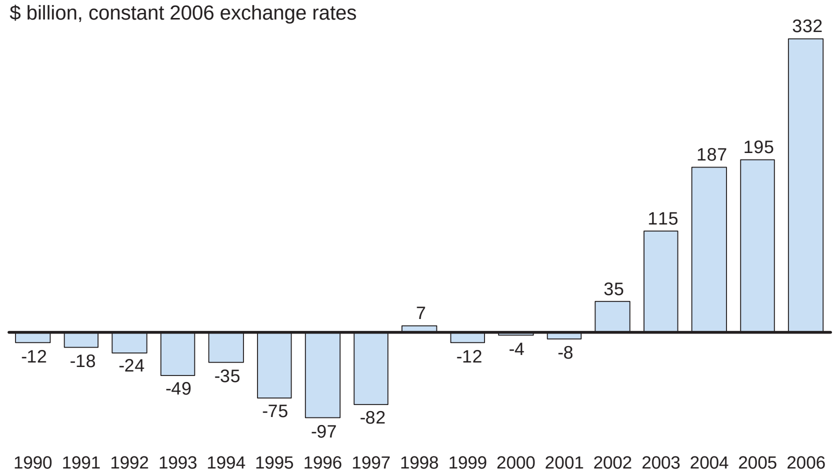
Another surprising trend has been rapid growth of cross-border lending and deposits, even amid a boom in debt and equity markets (Exhibit 2.14). Cross-border lending and deposits reached $3.5 trillion in 2006—$800 billion more than in 2005 and quadruple their volume in 2002. It is now the single largest type of capital flow.

More than any other type of capital flow, the growth in cross-border lending and deposits reflects the globalization of finance. The category includes not only traditional bank lending but also intrabank transfers between countries, deposits in offshore banks and financial centers by wealthy individuals, trade and supplier credit, lending by hedge funds and other financial institutions, and interest payments on previous loans. The rise of cross-border lending and deposit flows reflects myriad transactions in today's financial markets: deposits by wealthy oil investors in private banks in Switzerland, transfers by hedge funds in the Cayman Islands to fund currency trading in London, businesses in the Czech

Exhibit 2.13

SINCE 2002, EMERGING MARKETS HAVE BEEN NET PROVIDERS OF CAPITAL TO THE WORLD

Emerging market* net capital flows (capital outflows minus capital inflows)
$ billion, constant 2006 exchange rates

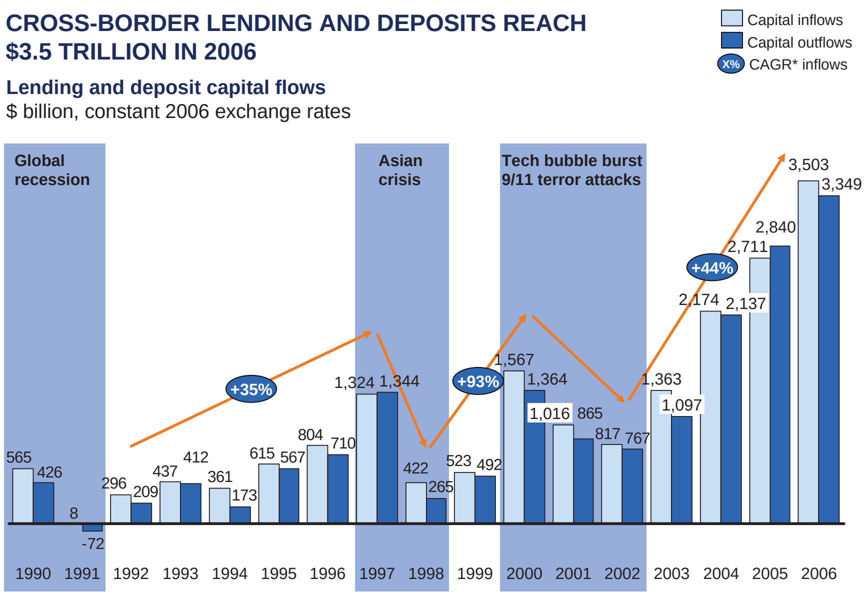


* Includes 34 emerging markets.
Source: McKinsey Global Institute Capital Flows Database

Exhibit 2.14

CROSS-BORDER LENDING AND DEPOSITS REACH $3.5 TRILLION IN 2006

Lending and deposit capital flows
$ billion, constant 2006 exchange rates



* Compound annual growth rate.
Source: McKinsey Global Institute Capital Flows Database

Republic borrowing from Austrian banks, German residents getting mortgages from a Swiss bank in Swiss francs, or Japanese investors investing in currencies from economies with higher interest rates.

Although cross-border lending has surged, it has been characterized by several sharp “boom-bust” cycles in the past, as Exhibit 2.14 clearly shows. These cycles appear to coincide with macroeconomic conditions and financial market turbulence, raising the question of whether cross-border lending will contract in the second half of 2007 following the credit market turmoil sparked by US subprime mortgage losses.

CROSS-BORDER DEBT AND EQUITY FLOWS HAVE DOUBLED SINCE 2002

Cross-border purchases of debt securities—including corporate bonds, financial institution bonds, asset-backed securities, and government bonds—are the second-largest type of global capital flow, reaching $2.5 trillion in 2006. Cross-border purchases of government bonds accounted for only one-third of the total; investors snapped up twice as many corporate bonds and other private debt securities. Even in the United States, foreigners purchased more private debt securities than government securities in 2006.

Investments in equity securities are the smallest type of cross-border capital flow, accounting for just 11 percent of the total in 2006. Still, they have quadrupled in size since their recent nadir in 2002, reaching $926 billion in 2006 (slightly less than 2005). Although the US, UK, and eurozone stock markets attracted 74 percent of equity inflows, foreign purchases of emerging-market equities approached $100 billion for the first time. The equity inflows received by emerging markets grew by nearly 40 percent in 2006, from $71 billion in 2005. This growth reflects not only the soaring yields of many markets but also the continued growth and deepening of the equity markets in many developing countries, their positive macroeconomic conditions, and continued capital account liberalization giving greater access to foreign investors. With financial systems that have long been dominated by banks, emerging-market equity markets are taking off.

FOREIGN DIRECT INVESTMENT—STILL BELOW ITS 2000 PEAK

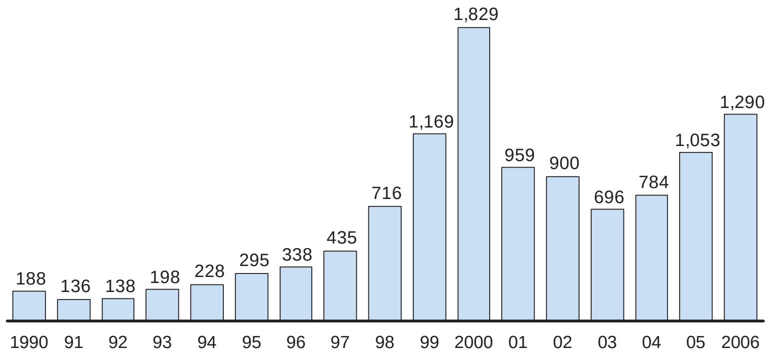
Foreign direct investment is the most visible type of cross-border investment, including companies’ decisions to move production offshore and global mergers and acquisitions. Hence, it is the form most often associated with globalization. Developed countries received around 70 percent of total global FDI inflows, or $926 billion in 2006, while emerging markets received $314 billion.

Despite growth over the past four years, foreign direct investment remains far below its peak in 2000 (Exhibit 2.15). In that year, global FDI reached $1.8 trillion, reflecting sky-high equity market valuations that gave companies around the world currency with which to acquire others. After the dot-com bubble burst, FDI fell to just one-third that level in 2003. It has grown since then, reflecting rising corporate profits and stronger balance sheets.

Exhibit 2.15

FOREIGN DIRECT INVESTMENT IS GROWING – BUT REMAINS BELOW ITS 2000 PEAK

Global foreign direct investment
$ billion, constant 2006 exchange rates



% of GDP	1.0	0.7	0.6	0.9	0.9	1.1	1.2	1.5	2.4	3.7	5.4	2.7	2.4	1.8	1.9	2.4	2.7

Source: McKinsey Global Institute Capital Flows Database

HOT MONEY: CROSS-BORDER BANK LENDING IS THE MOST VOLATILE TYPE OF CAPITAL FLOW

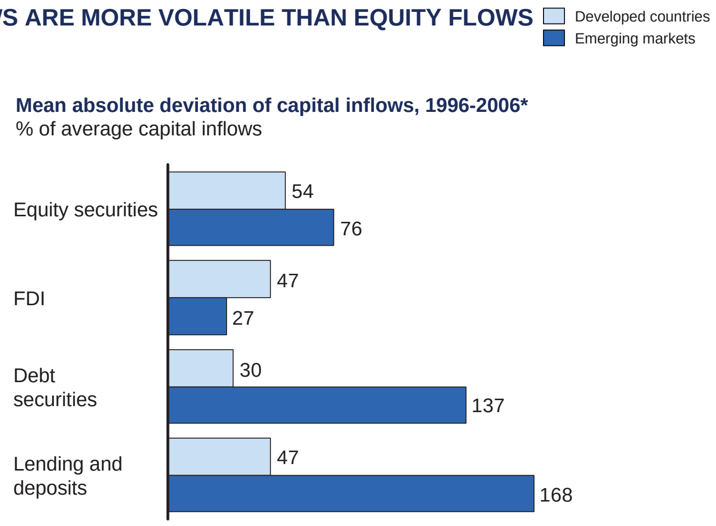
With the rise of cross-border capital flows comes the potential for increased risk as well. “Hot money” brought by foreign investors has been blamed for a long series of financial crises in emerging markets, starting with Latin America in the 1980s and including Mexico in 1994, emerging Asia in 1997, and Russia and Brazil in 1998. Capital flows, as Exhibit 2.2 clearly demonstrates, can vary sharply from one year to the next. A flood of liquidity in good times can quickly turn into an outflow at the first sign of trouble.

The Asian financial crisis of ten years ago illustrates this risk. In 1996, the five Asian countries hit by the crisis (Indonesia, Malaysia, the Philippines, South Korea, and Thailand) received a total of $47.8 billion in loans from foreign banks. Much of this credit was channeled through domestic banks, which had negligible lending standards and credit-assessment skills. After the Thai baht plummeted in July 1997, that capital inflow turned into a massive outflow of $29.9 billion as foreign banks reclaimed their money. Foreign capital inflows into equity and debt securities, meanwhile, fell by half but remained positive, meaning that foreigners were still purchasing more assets than they were selling. Banks, not hedge funds, were the real source of capital flow volatility in Asia in 1997 and Russia in 1998.[7]

Ten years later, we find that lending by foreign banks remains a more unstable type of foreign funding than investments in equity markets, bond markets, or foreign direct investment. One way to measure volatility is by the mean absolute deviation in capital flows from one year to the next, expressed as a percentage of average capital flows. This shows the average amount by which foreign capital inflows to a country change from year to year. By this measure, we see that cross-border lending flows to emerging markets are the most volatile type of capital flow, and that capital flows to emerging markets are more volatile than flows to developed markets (Exhibit 2.16). In developed countries, there is little difference in the amount that each type of capital flow varies each year, although equity purchases are slightly more volatile than other types of flows.

Exhibit 2.16

DEBT FLOWS ARE MORE VOLATILE THAN EQUITY FLOWS



* Measured as deviation from data filtered with Hodrick-Prescott filter to account for time series trend; based on sample of 34 emerging and 26 developed economies.

Source: McKinsey Global Institute Capital Flows Database

7 See Martin N. Baily, Diana Farrell, and Susan Lund, "The color of hot money," *Foreign Affairs*, March/April 2000.

The volatility of cross-border lending reflects the nature of the activity. Many people think of loans as long-term, project-based finance. In fact, cross-border lending often takes the form of short-term loans with maturities of a year or less. Today, 65 percent of all foreign bank loans have maturities of one year or less—and 55 percent of loans to emerging markets do. As long as economic growth prospects remain bright, lenders often roll over loans to borrowers. But as soon as financial turmoil appears on the horizon, they cut off the credit and reclaim their money.

The financial crises of the late 1990s showed how managing large inflows of foreign capital can be a challenge for emerging markets. Too much foreign capital pouring into underdeveloped financial systems can fuel asset price bubbles and credit binges. Moreover, inflows can cause the local currency to appreciate, harming exporters. To manage this problem, governments in emerging markets frequently intervene in currency markets to prevent rapid appreciation, accumulating large stocks of foreign reserve assets in the process.

But along with the risks, capital inflows can bring benefits. Foreign direct investment—the main form of capital inflows to emerging markets—has been shown to increase investment in a sector, spur competition among players, and raise productivity levels. A study by the McKinsey Global Institute found that FDI has a net positive impact in most industries and countries studied.[8] The end result is often lower prices and greater choice for consumers, as well as faster growth in the sector.

GROWING GLOBAL IMBALANCES

The growth of cross-border capital flows has begun to sever the link between a nation's domestic saving and the level of investment it can undertake. Although domestic savings and investment rates still track each other closely,[9] global capital flows allow some countries to invest and consume more than they produce, importing capital from other countries to cover the difference. Other countries in the world have more capital than they can absorb and invest in foreign assets. The difference between capital inflows and outflows gives a country its net position.

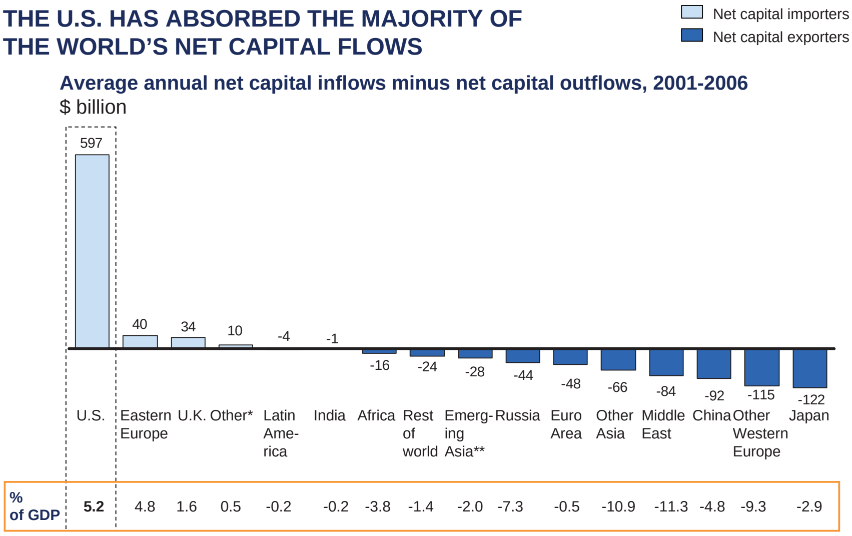
8 See *New Horizons: Multinational Company Investment in Developing Economies*, McKinsey Global Institute, October 2003. Available online at www.mckinsey.com/mgi.

9 See Martin Feldstein, "Monetary policy in a changing international environment: The role of capital flows," NBER working paper number 11856, National Bureau of Economic Research, Cambridge, MA, 2005.

Exhibit 2.17

THE U.S. HAS ABSORBED THE MAJORITY OF THE WORLD'S NET CAPITAL FLOWS

Average annual net capital inflows minus net capital outflows, 2001-2006
$ billion



* Includes Australia, New Zealand and Canada.
** Excluding China and India.
Note: Due to a discrepancy in data collection, global capital inflows exceed recorded outflows by an average of $80 billion per year.
Source: International Monetary Fund; McKinsey Global Institute Global Capital Flows Database

For the past five years, the United States has by far been the world's largest net consumer of foreign capital, absorbing at least 70 percent of the world's total since 2001 to fund its ever-growing current account deficit (Exhibit 2.17). It may be unprecedented, at least in modern times, that such a large economy has consistently absorbed such a large portion of the world's capital over an extended period of time.

On the other side of the equation are the world's exporters of capital. In 2006, oil-exporting countries as a group came close to matching Asia as the world's largest net suppliers of capital (Exhibit 2.18). Among individual countries, China was the world's largest exporter of capital, surpassing Japan, Germany, and Saudi Arabia (Exhibit 2.19). And, as we noted above, emerging markets as a group have become net suppliers of capital to rich countries—the opposite of what standard economic theory would predict.

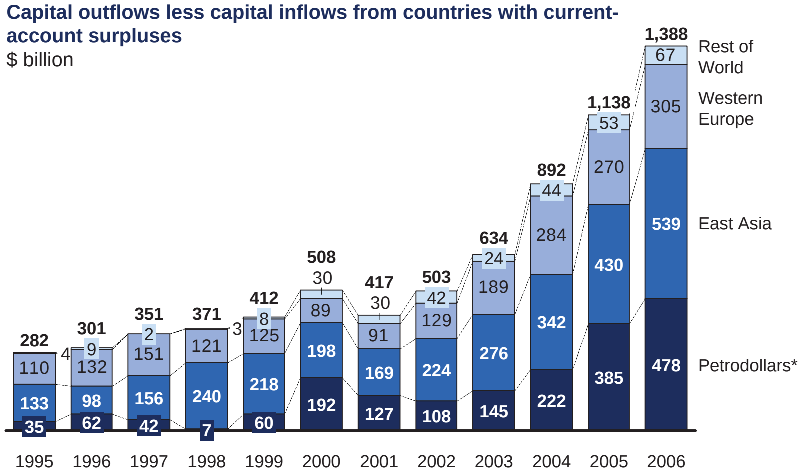
Many economists argue these global financial imbalances are unsustainable and that net capital inflows to the United States may subside. MGI's research on the topic suggests that the current pattern of net capital flows could in fact persist through 2012; however, if global investors reduce their demand for US assets, decreasing the flow of funds to the United States, a significant correction in US trade patterns and a sharp depreciation in the US dollar could follow. If such an adjustment occurs suddenly and sharply, the process could be painful for the US and world economies.[10]

10 For more, see *The US Imbalancing Act: Can the Current Account Deficit Persist?* McKinsey Global Institute, June 2007. Available online at www.mckinsey.com/mgi.

Exhibit 2.18

PETRODOLLARS AND EAST ASIA WERE THE LARGEST SOURCES OF NET CAPITAL OUTFLOWS IN 2006

Capital outflows less capital inflows from countries with current-account surpluses
$ billion



* Includes Algeria, Indonesia, Iran, Nigeria, Norway, Kuwait, Libya, Russia, Saudi Arabia, Syria, United Arab Emirates, Venezuela, Oman, Qatar and Yemen.

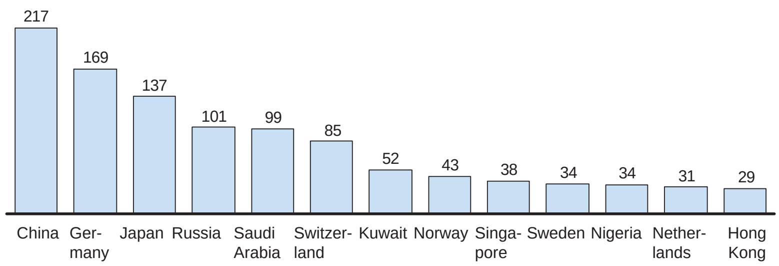
Note: Figures for 2006 reflect year-end actuals and differ slightly from earlier estimates.

Source: McKinsey Global Institute Global Capital Flows Database

Exhibit 2.19

IN 2006, CHINA, GERMANY AND JAPAN WERE THE LARGEST NET PROVIDERS OF CAPITAL TO THE WORLD

Total net capital flows (capital outflows less capital inflows), 2006
$ billion



	China	Germany	Japan	Russia	Saudi Arabia	Switzerland	Kuwait	Norway	Singapore	Sweden	Nigeria	Netherlands	Hong Kong
% of GDP	8.2	5.8	3.1	10.2	28.6	22.3	54.6	12.9	28.6	8.9	27.6	4.7	15.2
Total capital outflows $ billion	383	528	239	171	111	172	61	163	97	111	24	256	149

Source: McKinsey Global Institute Global Capital Flows Database

3. The shifting balance of power

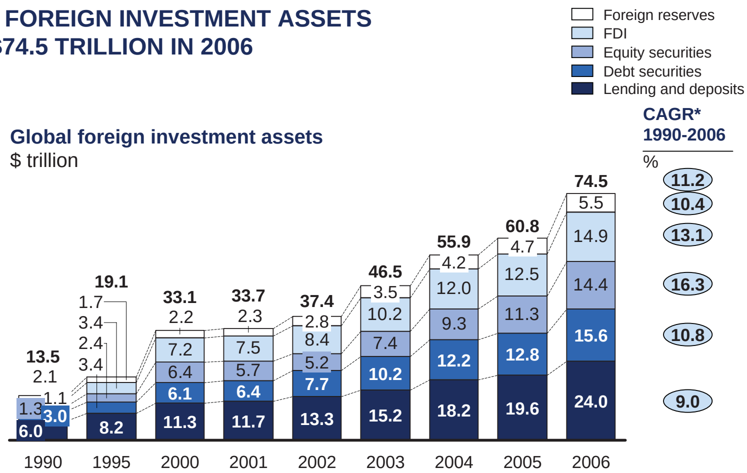
The global web of cross-border investment is growing. Chapter 2 described the growth in annual capital flows between countries. In this chapter, we show how these investments have added up over time. US companies set up operations in emerging markets, while China's central bank buys US Treasuries. Oil exporters invest their profits in US equities. European insurance companies acquire Latin American bonds, while Japanese households invest in higher-yielding currencies. By the end of 2006, the world's outstanding stock of such cross-border investments reached $74.5 trillion, its highest level in real terms in modern history (Exhibit 3.1). And the preliminary data indicate this total grew to another record level in 2007, even with the disruptions to US and European credit markets that year.

Around the world, investors are increasingly overcoming their traditional preference for keeping their savings in domestic markets. Foreign investment assets are growing faster than global GDP, trade, or total financial assets. Foreign investors now own more than one in three government bonds around the world, one in four equities, and one in five corporate bonds. We also see cross-border financial links between countries growing stronger, as more capital flows into longer-term foreign direct investments (FDI) and equities.

The United States continues to hold the most foreign assets of any single country, reflecting the huge size of its domestic financial market and its position at the forefront of cross-border investing. But the most rapid growth in cross-border investments has come from Europe and the United Kingdom, as their financial connections to each other and to other parts of the world increase. With growing Asian trade surpluses and rising oil prices, we also see new foreign investors emerging—namely, China and the GCC countries. In Asia, the financial links between the region's hubs—Hong Kong, Singapore, and Taiwan—and emerging Asian nations are expanding rapidly, while Japan remains shut out of Asia's financial integration.

Exhibit 3.1

GLOBAL FOREIGN INVESTMENT ASSETS REACH $74.5 TRILLION IN 2006



Internatl. financial depth % of GDP	1990	1995	2000	2001	2002	2003	2004	2005	2006
	63	65	105	107	114	127	135	137	155

* Compound annual growth rate.
Note: Some numbers do not add up due to rounding.
Source: McKinsey Global Institute Cross-Border Investments Database

This chapter provides a detailed examination of the international investments of countries. It highlights the growing financial ties between different regions, showing which countries are integrated players in global capital markets and which are being left on the sidelines. Here, we see the process of globalization at work.

GLOBAL FOREIGN INVESTMENTS REACH $74.5 TRILLION

As investors have ventured more boldly beyond their borders, the value of all the world's foreign-owned assets rose to $74.5 trillion in 2006. This includes the value of all foreign direct investment, foreign ownership of equity and debt securities, deposits at foreign banks and cross-border lending, and the value of global foreign exchange reserves of the central banks and monetary authorities.

International investments rose by $13.6 trillion, or 22 percent, in 2006, the largest absolute increase in international investments ever. Because we are measuring in dollars, the devaluation of the dollar against major currencies explains $2.9 trillion of the increase. Excluding this, the growth in real terms was $10.7

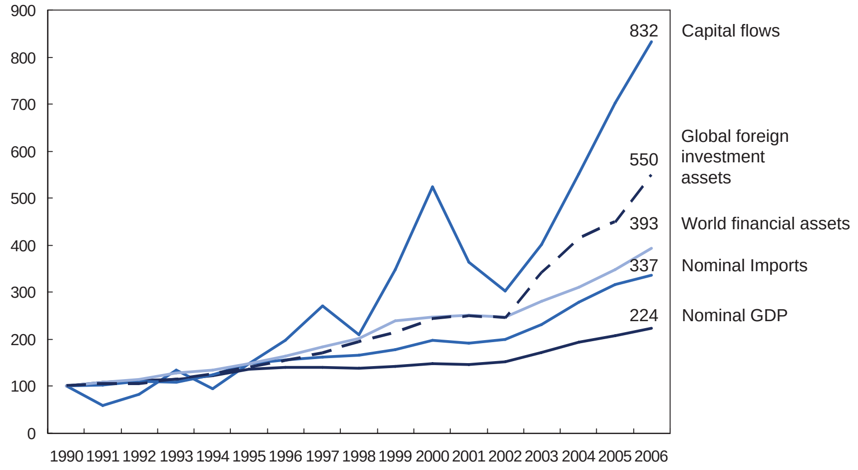
trillion. Cross-border investments now equal 155 percent of global GDP, up from 63 percent in 1990. And since 2001, foreign-owned assets have grown faster than all financial assets (Exhibit 3.2).

Exhibit 3.2

CROSS-BORDER INVESTMENT ASSETS HAVE GROWN FASTER THAN WORLD TRADE, GDP, AND FINANCIAL STOCK

Indexed growth of different economic measures, 1990-2006

%, 1990 = 100%, constant 2006 exchange rate



Source: McKinsey Global Institute analysis

THE WEB OF CROSS-BORDER INVESTMENTS IS GROWING

As global foreign investments rise, specific countries and regions are growing more financially intertwined with one another. To demonstrate this, we looked at the value of cross-border investments between particular pairs of economies or groups of economies over time. Not surprisingly, the financial ties among the United States, the United Kingdom, and Europe remain the largest. But we also see several notable developments in the pattern of cross-border investments around the world.

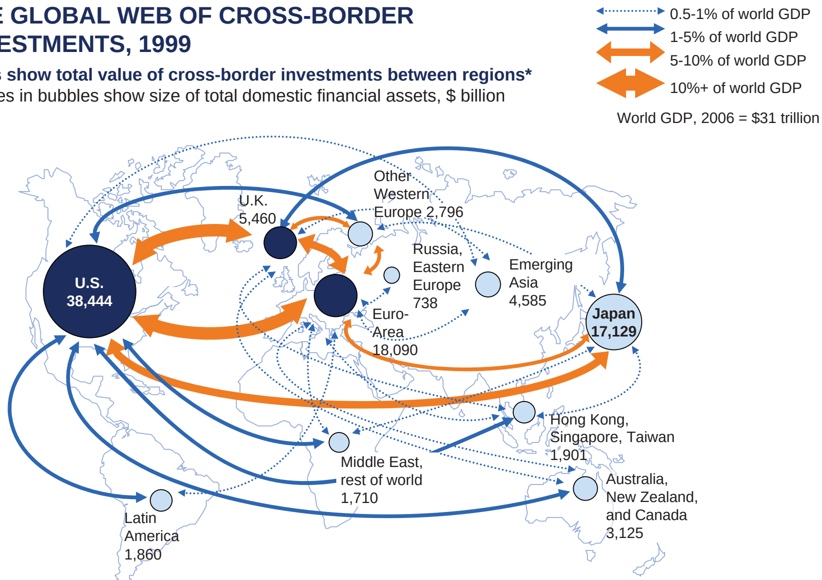
In 1999, the United States was the dominant hub in the global financial system (Exhibit 3.3). At the time, only 13 pairs of economies had cross-border investments worth more than 1 percent of global GDP, or roughly $300 billion (these are shown as lines on the exhibit). Of those, the United States was a partner in eight of them, and it was the only country that had significant cross-border investments with emerging markets.

By 2006, the number and size of cross-border investments around the world had expanded dramatically (Exhibit 3.4). The number of cross-border investments exceeding 1 percent of global GDP ($480 billion or more) had grown to 25. The

Exhibit 3.3

THE GLOBAL WEB OF CROSS-BORDER INVESTMENTS, 1999

Lines show total value of cross-border investments between regions*
Figures in bubbles show size of total domestic financial assets, $ billion



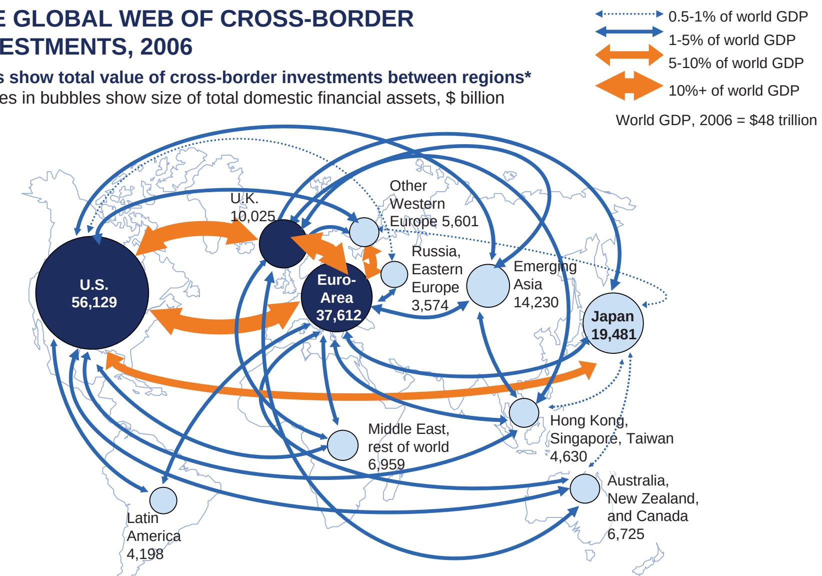
* Includes total value of cross-border investments in equity and debt securities, lending and deposits, and foreign direct investment.

Source: McKinsey Global Institute Cross-Border Investments Database

Exhibit 3.4

THE GLOBAL WEB OF CROSS-BORDER INVESTMENTS, 2006

Lines show total value of cross-border investments between regions*
Figures in bubbles show size of total domestic financial assets, $ billion



* Includes total value of cross-border investments in equity and debt securities, lending and deposits, and foreign direct investment.

Source: McKinsey Global Institute Cross-Border Investments Database

United States accounted for nine of these, and remained the world's largest single foreign investor, with $12.5 trillion in assets. But the eurozone and the United Kingdom had seen big increases in their financial ties to other parts of the world. The eurozone's major cross-border investment partners rose from just four regions in 1999 to ten in 2006, including virtually all regions of the world.

Japan, in contrast, saw little change in its financial connections to the rest of the world. As Exhibit 3.4 shows, by 2006 it still had no significant cross-border investments with emerging Asia and only relatively weak links to the other Asian financial centers of Hong Kong, Singapore, and Taiwan. Moreover, the size of Japan's cross-border investments with the other Asian hubs decreased in size relative to GDP from 1999 to 2006. Japan accounts for only 6 percent of the foreign investments in other Asian countries today. Its main cross-border investment relationships remain with the United States, United Kingdom, and Europe. In contrast, by 2006 Hong Kong, Singapore, and Taiwan had established significant cross-border investments with emerging Asian nations, with total investments equaling $590 billion. Equity and foreign direct investment account for 80 percent of these investments. In Asia, Japan is losing ground in its bid to become a regional financial center (see *Rising Hubs*).

Also notable in 2006 is that the rest of the world—largely the Middle East—emerged as a bigger player on the global map of cross-border investments. In 1999 only the United States had a significant link (1 percent of global GDP) to the Middle East and the rest of the world. By 2006, equally strong links to the United Kingdom and the eurozone had appeared. This reflects the surge in Middle Eastern foreign investment, fueled by the profits from rising oil prices since 2002.

FINANCIAL TIES BETWEEN COUNTRIES BECOME STRONGER

Since 1990, foreign investors have shifted more toward equity and foreign direct investments and away from foreign lending and deposits. As a result, the share of foreign investment assets represented by equity and FDI almost doubled during that time to nearly 40 percent (Exhibit 3.5).[1] By the end of 2006, the global value of foreign-owned equities and FDI totaled $29.3 trillion.

This trend reflects greater sophistication among investors and companies as they approach foreign markets, shunning simple deposit accounts and lending

1 The distinction between equity and foreign direct investments (FDI) is somewhat blurred. Purchases of equity that achieve a 10 percent or greater stake in a company are counted as FDI, even if the transaction has been through the purchase of publicly traded shares.

Rising hubs

New York has reigned for many decades as the world's largest financial center. And the city will likely hold on to its crown for a while, since the United States has the biggest capital markets and national economy. But New York faces growing competition as capital markets mature in other parts of the world. As money, wealth, and power move elsewhere, so do the deal-makers, financial engineers, and other types of highly skilled talent who seek a piece of the action.

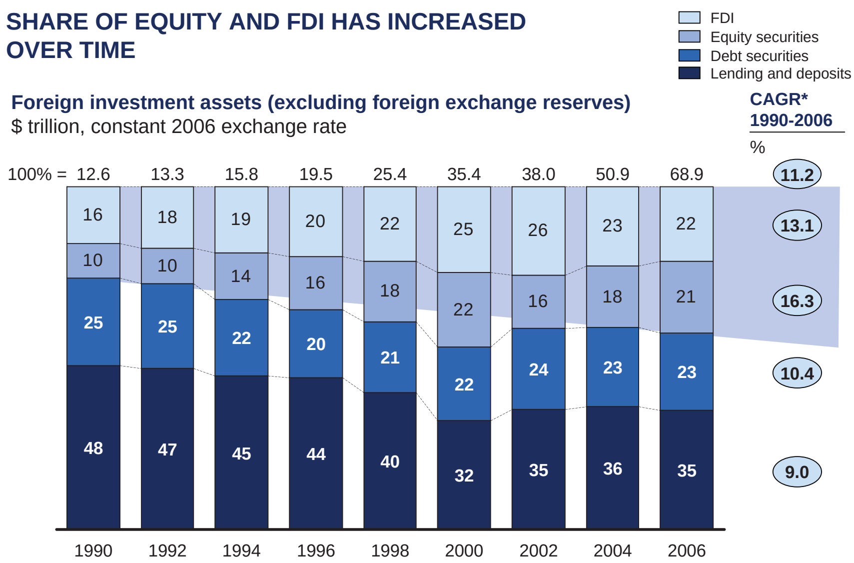
London has already become a successful challenger to New York and has become the key financial hub for the eurozone. It is the world's largest center for currency trading, and it issues more than a third of the world's derivatives, ranking just behind the United States' share of 41 percent. Hedge funds have proliferated in the city, and many wealthy individual investors from the Middle East, Russia, and other regions channel their money through London.

In 2006, for the first time, the funds raised by all initial public stock offerings in London exceeded New York's total (although New York will likely reclaim that title in 2007), while the value of London's IPOs by foreign companies was three times the value of those on US stock markets. And IPOs generate additional business, such as secondary trading, secondary public offerings, and the creation of derivative instruments tied to the original equity security. This activity serves as a magnet for talent, creating the critical mass of financial professionals with expertise, energy, and innovative instincts that define a financial hub.

Despite its growing economic power and regional trade ties, Asia has not developed a global financial hub, or even a clear regional financial hub. Tokyo, which boasts Asia's largest financial market, would be the obvious choice, but it has grown very slowly over the past 15 years. Moreover, Japan has relatively few cross-border investments in the region. By 2006, Hong Kong, Singapore, and Taiwan together had established total cross-border financial investments equaling roughly $500 billion with China and other emerging Asian nations—more than Japan. Hong Kong and Singapore have clear aspirations for becoming more important financial centers. However, although they are growing channelers of liquidity, they are not yet generators of financial innovation. Meanwhile, Shanghai, Mumbai, and other cities have stated their desire to become financial centers as well. The outcome of this competition in Asia remains to be seen.

for longer-term stakes in companies and in equity markets. It also represents a move toward deeper and more lasting financial commitments between countries, since equities and FDI are typically less liquid investments than deposits and short-term lending. The web of cross-border investments is thus growing not only broader but also stronger.

Exhibit 3.5



* Compound annual growth rate.
Note: Some numbers do not add to 100% due to rounding.
Source: McKinsey Global Institute Cross-Border Investments Database

EUROZONE ACCOUNTS FOR MOST GROWTH IN FOREIGN INVESTMENTS

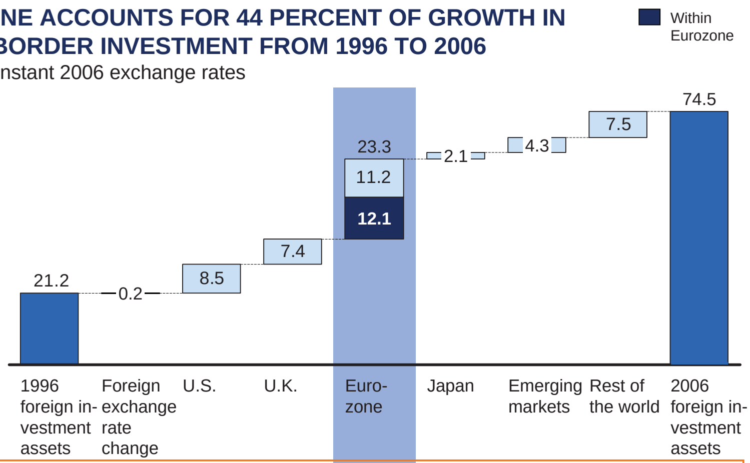
As we noted in chapter 2, eurozone investors, more than any other group around the world, have driven the growth in global foreign investments over the past ten years, contributing almost half of the total growth (Exhibit 3.6). This reflects growing cross-border investments between eurozone countries, as well as growing investments between the eurozone and other regions of the world, underscoring its emergence as a major player in global financial markets.

By the end of 2006, eurozone investors had $14.7 trillion in cross-border investments within the region, reflecting the increasing integration of its financial markets. Of the total, more than half—or $7.9 trillion—was in equities and debt securities. As a result, one of every three equities in the region is owned by an investor from a different eurozone country, as is one in five bonds. Foreign direct investment within the eurozone amounted to $2 trillion at the end of 2006—representing a smaller share of the total than in 1999. The flow of capital within the eurozone is spread widely. Although Germany and France are the largest sources and recipients of intra-eurozone investments, financial flows reach all countries (Exhibit 3.7).

Exhibit 3.6

EUROZONE ACCOUNTS FOR 44 PERCENT OF GROWTH IN CROSS-BORDER INVESTMENT FROM 1996 TO 2006

$ trillion, constant 2006 exchange rates



	Foreign exchange rate change	U.S.	U.K.	Eurozone	Japan	Emerging markets	Rest of the world	2006 foreign investment assets
CAGR* 1996-2006 %		12.0	13.2	17.0	6.0	19.0	23.9	13.4
Contribution to growth %	0.4	15.9	13.8	43.6	3.9	8.0	14.4	

* Compound annual growth rate.

Source: McKinsey Global Institute Cross-Border Investments Database

Exhibit 3.7

CROSS-BORDER INVESTMENT WITHIN THE EUROZONE

$ trillion, 2006

Sources		Share of total
Germany	3.1	21%
Luxembourg	2.5	17%
France	2.2	15%
Italy	1.6	11%
Belgium	1.4	9%
Netherlands	1.2	8%
Ireland	1.0	7%
Spain	0.9	6%
Austria	0.3	2%
Portugal	0.2	2%
Finland	0.2	1%
Greece	0.1	<1%
		$14.7 trillion = 100%

Recipients		Share of total
Germany	2.5	17%
France	2.2	15%
Italy	2.0	14%
Luxembourg	1.9	13%
Netherlands	1.9	13%
Spain	1.4	10%
Ireland	0.9	6%
Belgium	0.7	5%
Austria	0.5	3%
Portugal	0.3	2%
Greece	0.3	2%
Finland	0.2	1%
		$14.7 trillion = 100%

Source: McKinsey Global Institute Cross-Border Investments Database

In addition, eurozone investors had $14.5 trillion in foreign investments in the rest of the world—making the eurozone collectively a larger foreign investor than the United States. Of these investments, 75 percent are with the United States, the United Kingdom, and other Western European countries, and only 13 percent are with emerging markets. Across countries, France invests a much larger share of its foreign assets outside the eurozone than other countries, particularly Germany (63 percent and 45 percent, respectively).

The United Kingdom is also playing an increasingly important role in cross-border investments. After the United States, it has the second-largest stock of foreign investment assets and liabilities, at $10.4 trillion and $10.9 trillion, respectively. Roughly half of UK foreign investment assets and liabilities are with eurozone countries and another 25 percent are with the United States, reflecting London's growing role as a global financial center. Cross-border lending and deposits are the largest share of UK foreign investments and liabilities, a clear indication of the globalization of banking. Roughly one-quarter of UK foreign investments in other countries are in FDI.

THE WORLD'S NEW INVESTORS: CHINA AND THE GULF COUNTRIES

Although the industrialized countries have the largest foreign investment assets in the world, several smaller economies are gaining ground. Most notably, China and the countries of the Gulf Cooperation Council (GCC) have become significant foreign investors.[2] Indeed China's swelling trade surpluses and the GCC's rising oil profits have been largely recycled into foreign investment, making these countries net suppliers of capital to the world's markets.

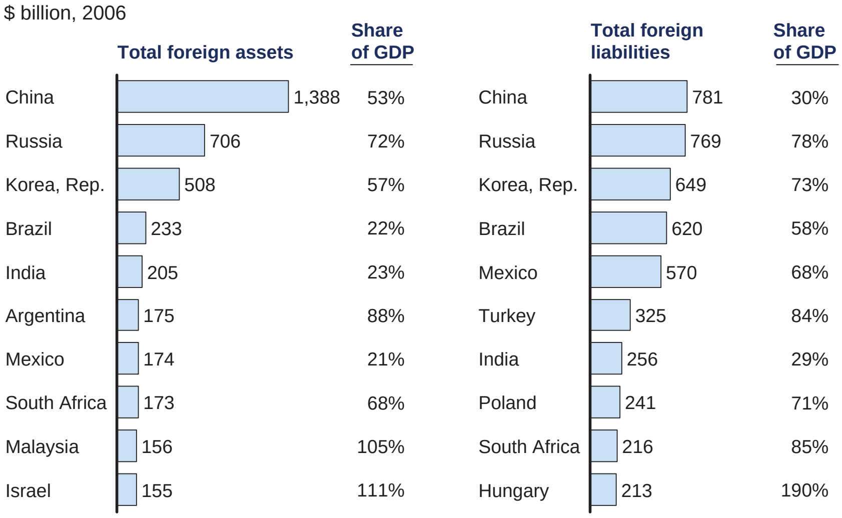
China has been a large investor in other countries for many years, with nearly twice as much foreign investment as the next largest emerging market (Exhibit 3.8). Its foreign investment assets have grown rapidly, reaching $1.4 trillion in 2006, up from $0.3 trillion in 2000. Nearly 80 percent of these assets are in the form of central bank reserve assets. With China's current account surplus reaching new heights year after year, its central bank has intervened in currency markets to protect the country's exporters from a rapid appreciation of the yuan, accumulating foreign reserve assets in the process. These amounted to $1.4 trillion by the middle of 2007. The central banks of other Asian nations have done the same (See *Asia's growing foreign reserve assets*). China's foreign direct investments in other countries, although still very small, have also grown rapidly. They rose from $26 billion in 2000 to $82 billion in 2007.

2 See *The New Power Brokers: How Oil, Asia, Hedge Funds, and Private Equity Are Shaping Global Capital Markets*, McKinsey Global Institute, October 2007. Available online at www.mckinsey.com/mgi.

Exhibit 3.8

CHINA HAS THE LARGEST FOREIGN INVESTMENT ASSETS AND LIABILITIES AMONG EMERGING MARKETS

$ billion, 2006



Source: McKinsey Global Institute Cross-Border Investments Database

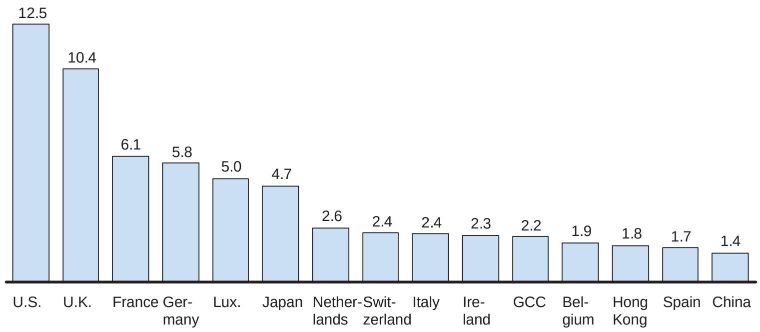
Despite the intense public interest in China's current and future overseas investments, its total to date is small compared with many other more developed economies that have been investing overseas for much longer. Spain, for example, is still a bigger investor in foreign markets than China (Exhibit 3.9).

Exhibit 3.9

U.S. IS THE LARGEST FOREIGN INVESTOR IN THE WORLD

Foreign investment assets, 2006

$ trillion



	U.S.	U.K.	France	Germany	Lux.	Japan	Netherlands	Switzerland	Italy	Ireland	GCC	Belgium	Hong Kong	Spain	China
Liabilities	15.1	10.9	5.9	5.1	4.9	2.9	2.6	1.9	2.4	2.3	0.4	1.8	1.4	2.4	0.8
Internatl. financial depth % of GDP	94	436	273	200	12,032	107	397	630	127	1,033	320	485	935	136	53

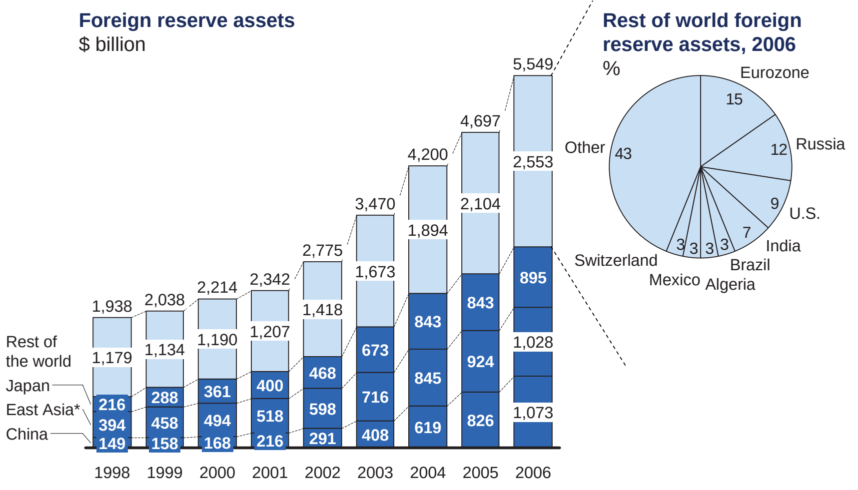
Source: McKinsey Global Institute Cross-Border Investments Database

Asia's growing foreign reserve assets

At the end of 2006, the foreign reserve assets of central banks and monetary authorities reached $5.5 trillion, an increase of $850 billion from 2005—and more than double their level in 2000 (Exhibit). Asia's central banks accounted for about half of the new purchases of reserve assets in 2006, led by China. At the end of 2006 they collectively held $3.1 trillion in reserve assets. This represents a very large pool of wealth concentrated in the hands of a few sovereign institutions and is far in excess of the amount needed to maintain balance of payment and exchange rate instability. As a result, governments in some countries, including China, Singapore, and South Korea, are shifting a portion of reserve assets into more diversified sovereign wealth funds—a move likely to make them increasingly powerful players in global capital markets in the future.[3]

Exhibit

ASIAN CENTRAL BANKS ARE BECOMING MAJOR PLAYERS IN GLOBAL CAPITAL MARKET



* Includes Bangladesh, Cambodia, Indonesia, Lao PDR, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, Vietnam, Hong Kong, South Korea, Malaysia, Singapore, Taiwan.
Source: McKinsey Global Institute Cross-Border Investments Database

The tripling of world oil prices since 2002, along with growing crude exports to China and other emerging markets, have put the GCC countries on the map as well. We estimate these six countries—Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates—had $2.2 trillion in foreign investment assets at the end of 2006, twice the amount they had in 2000. This includes

3 For more detail on the impact of Asian central banks in global capital markets, see *The New Power Brokers: How Oil, Asia, Hedge Funds, and Private Equity Are Shaping Global Capital Markets*, McKinsey Global Institute, October 2007. Available online at www.mckinsey.com/mgi.

the assets of the region's sovereign wealth funds, which account for around two-thirds of the total, as well as investments made by the region's central banks and wealthy individual investors.

As with China, however, it is important to keep the size of the Gulf's foreign wealth in perspective. No GCC country yet has foreign investment assets equal to the level of Canada, another oil exporter. Still, with oil prices likely to remain high in the near future, their foreign assets will undoubtedly grow.[4] As they do, more capital is likely to flow to Asia as Gulf investors seek long-term growth opportunities (see *The new silk road*).

The new silk road

The countries of the Middle East and Asia are increasingly forging new links with each other. The flow of goods, capital, and people between the oil-rich Persian Gulf states and the fast-developing nations of Asia has swelled dramatically since 2000. We call this "the new silk road"—the reincarnation of what was the world's dominant trade route during the Middle Ages, from the Middle East to China.

The volume of trade between the six members of the Gulf Cooperation Council and East Asia roughly quadrupled between 1995 and 2005. Since 2002, more than one in ten invested dollars from the GCC went into Asia—and this share is likely to grow in coming years.

The principal drivers of these new ties is Asia's huge and growing appetite for oil and Gulf investors' increasing interest in Asia as a source of long-term investment growth. Imports of Gulf oil by Asian nations (including India) are projected to rise at a rate of 3.7 percent annually until 2030, accounting for almost half of the world's increased demand for oil. By 2030, China will buy more than half of its oil from the Gulf region.

Non-energy investments between the two regions are also growing fast. Gulf countries are seeking long-term investments for their expanding wealth. Emerging markets will account for an increasing share of global growth—and Asia more than most. Already, Gulf sovereign wealth funds have invested in some of China's recent bank IPOs, and more investments will likely follow. Reflecting this trend, the number of direct flights between the Gulf states and China has grown more than sixfold since 2000, to 48 per week in 2006. In the years ahead, the new Silk Road could emerge as a significant corridor for global commerce and financial flows.

4 See forthcoming MGI research on the oil windfall for Gulf countries over the next 15 years, and the implications for global financial markets, in February 2008.

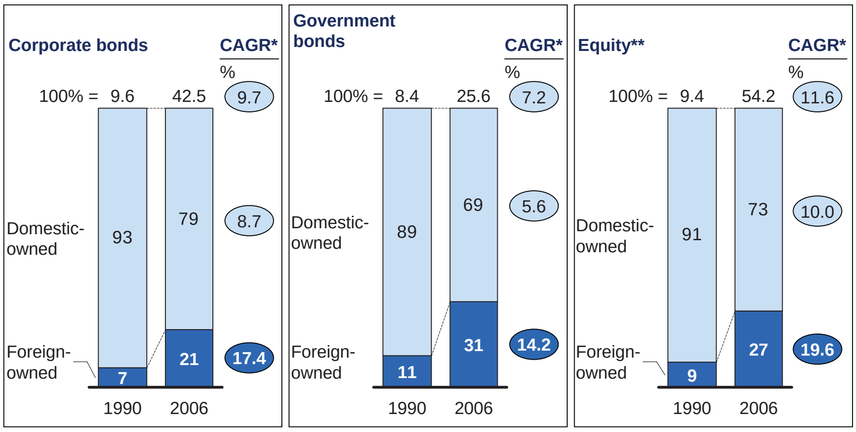
FOREIGN INVESTORS OWN ONE IN FOUR EQUITIES AND ONE IN THREE GOVERNMENT BONDS

As cross-border investments pick up speed, capital markets are at the leading edge of globalization. The numbers tell the story. In 1990, foreign investors owned less than one in ten equities worldwide. By 2006, they held more than one in four. The same pattern holds for government bonds and corporate bonds. Foreign ownership of government bonds increased from 11 percent in 1990 to 31 percent in 2006, and in corporate bonds from 7 percent to 21 percent (Exhibit 3.10).

Exhibit 3.10

MORE THAN 1-IN-5 CORPORATE BONDS, 1-IN-4 EQUITIES AND 1-IN-3 GOV. BONDS ARE OWNED BY A FOREIGN INVESTOR

Foreign-owned bonds and equities as % of total, 1990 and 2006
$ trillion, %

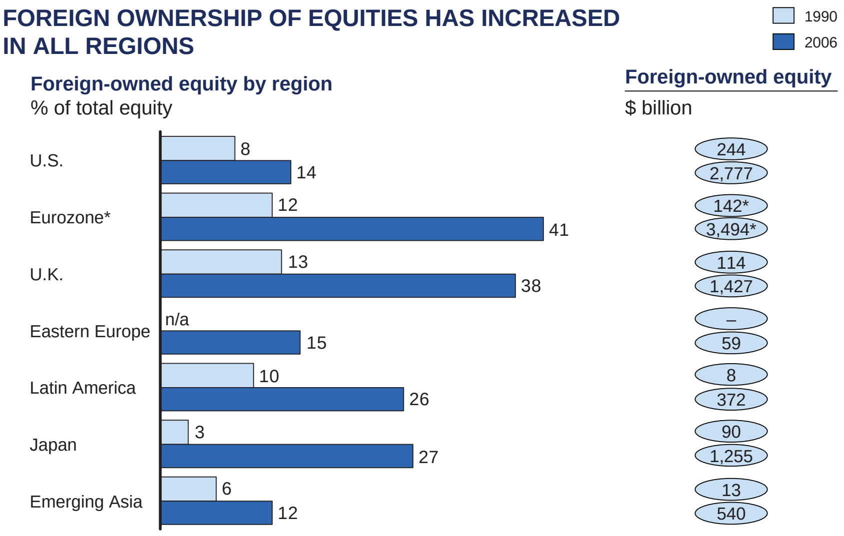


* Compound annual growth rate.
** Publicly-traded equity.
Source: McKinsey Global Institute analysis

The world's investors still show a notable "home bias," or preference to invest locally, but it is declining. And as they do more shopping abroad, their portfolios are becoming more diversified geographically. However, they also are becoming more vulnerable to the danger that events in one market will cause losses in another.

Foreign ownership of equities has increased across all regions (Exhibit 3.11). It is highest in the eurozone, where 40 percent of equities ($3.5 trillion) are owned by investors outside the region—and another $2.7 trillion are owned by other eurozone investors. The share of foreign owners of corporate and government bonds has also increased in most regions (Exhibit 3.12). The exceptions are Japan, emerging Asia, and Latin America, where foreigners account for a smaller share of the market, although their absolute holdings are larger than in 1990. This reflects growth in the domestic investor base for bonds in these regions.

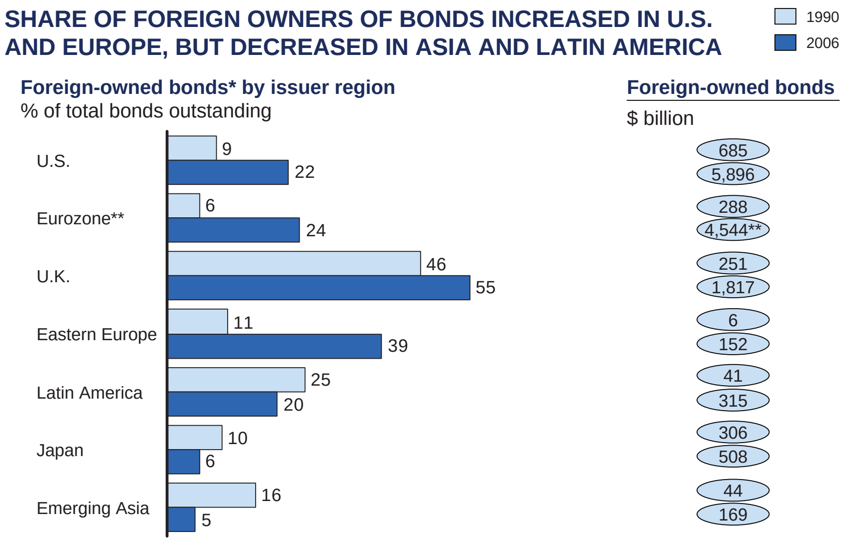
Exhibit 3.11



* Includes only investors outside the eurozone. In 2006, cross-border investors within the eurozone owned $2,682 billion, or another 31%, of total equities.

Source: McKinsey Global Institute analysis

Exhibit 3.12



* Includes debt securities issued by corporations and financial institutions, asset-backed securities, and government debt securities.

** Only investors from outside the eurozone. In 2006, cross-border investors within the eurozone owned $3,737, or 20%, of total debt securities.

Source: McKinsey Global Institute analysis

A LOOK AT THE WORLD'S DEBTORS AND CREDITORS

The difference between a country's foreign investment assets and its liabilities shows its net position. The world has both creditors, or net suppliers of capital to other countries, and debtors, or net importers of capital.

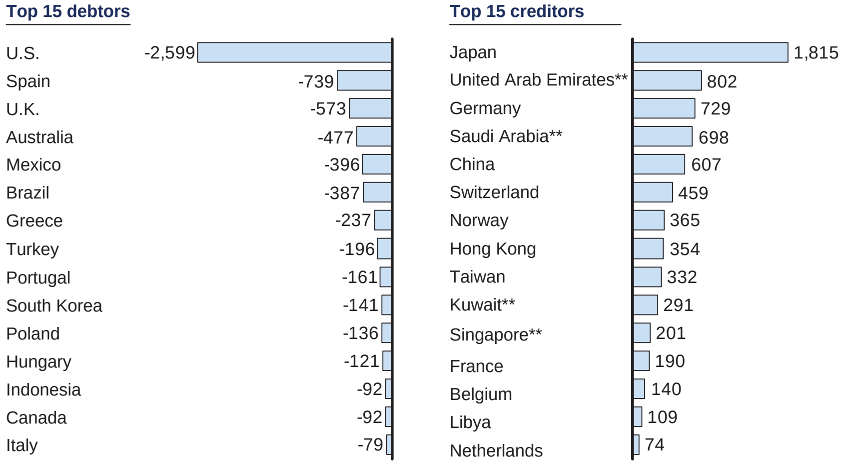
Japan remains by far the world's largest net creditor, with $1.8 trillion of net foreign assets in 2006 (Exhibit 3.13). This reflects years of persistent current account surpluses that have enabled the Japanese to invest abroad, amassing a total of $4.7 trillion of foreign investment assets. Nearly 40 percent of these are in foreign debt securities owned by private Japanese investors. Foreign lending by Japanese banks and foreign reserve assets of its central bank each account for about a fifth of the total. As shown on the map of cross-border investments, three-quarters of Japanese-owned foreign assets are invested in the United States or the eurozone; Japan's investments in emerging markets are small compared to those of eurozone countries or the United States.

Exhibit 3.13

THE WORLD'S LARGEST DEBTORS AND CREDITORS

Net international investment position by country, 2006*

$ billion



* Foreign investment liabilities less foreign investment assets.
** McKinsey Global Institute estimates.
Source: McKinsey Global Institute Cross-Border Investments Database

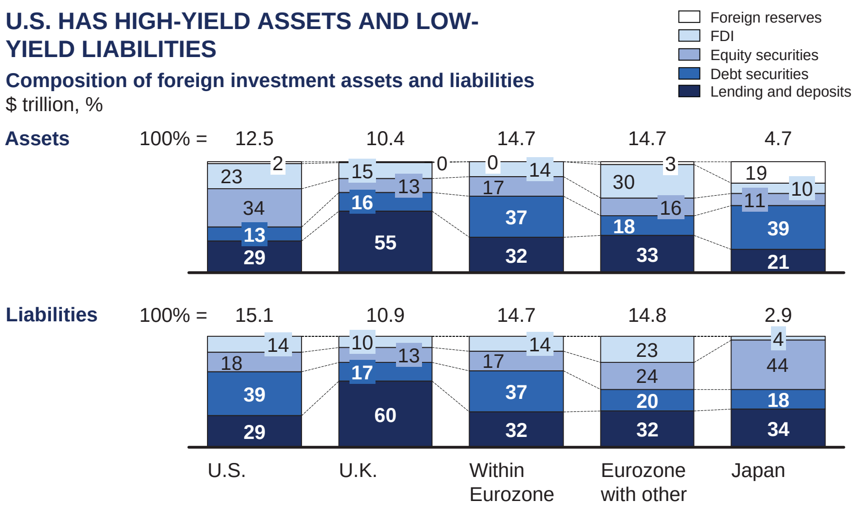
The Persian Gulf countries also show up as significant exporters of capital to the world, as does China. Based on our estimates, the United Arab Emirates is the world's second-largest net creditor, with $800 billion of net foreign assets. Saudi Arabia is fourth largest, with $700 billion of net foreign assets. Norway, Kuwait, and Libya, other oil exporters, also appear in the top 15 worldwide. China is the world's fifth-largest net creditor, with $600 billion of net foreign assets, and Hong Kong is eighth, with around $350 billion of net foreign assets.

The United States is the world's largest net foreign debtor, with net liabilities of $2.6 trillion at the end of 2006. The US net foreign debt actually is smaller than one would expect looking at the sum of past current account deficits. This is because foreigners own large amounts of relatively low-yielding debt securities, while US investments abroad are more heavily weighted toward higher-yielding equity and foreign direct investment (Exhibit 3.14). As a result, the United States has earned positive net foreign income for many years despite its net debt.[5]

Exhibit 3.14

U.S. HAS HIGH-YIELD ASSETS AND LOW-YIELD LIABILITIES

Composition of foreign investment assets and liabilities
$ trillion, %



	U.S.	U.K.	Within Eurozone	Eurozone with other	Japan
Internatl. financial depth % of GDP	94	436	139	139	107

Note: Some numbers do not add to 100% due to rounding.
Source: McKinsey Global Institute Cross-Border Investments Database

• • •

The result of these trends is a more globalized financial system. As capital flows more freely, borrowers have access to bigger pools of capital, but investors are more exposed to market tremors around the world. This was evident in 2007, as the effects of the US subprime mortgage crisis rippled through portfolios from Nevada to Norway to Japan, and are still being felt.

5 For more, see *The US Imbalancing Act: Can the Current Account Deficit Persist?* McKinsey Global Institute, June 2007. Available online at www.mckinsey.com/mgi.

Appendix: Technical Notes

In this appendix we provide more detail on some of the methodologies employed in this report. We discuss the following topics:

1. Measuring global financial assets
2. Data revisions to global financial assets in 2006
3. Defining cross-border capital flows
4. Data revisions to cross-border capital flows in 2006
5. Defining international investment assets and liabilities
6. Estimating the size of Gulf Cooperation Council (GCC) foreign investment assets

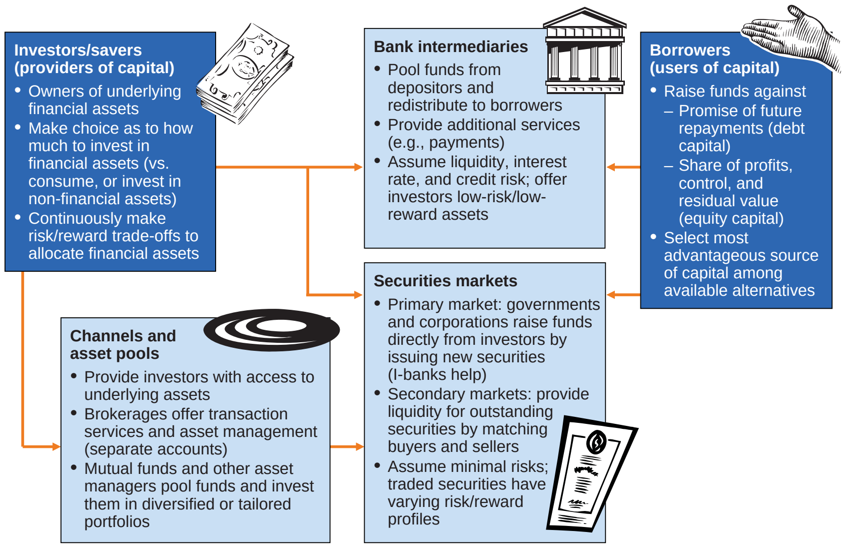
1. MEASURING GLOBAL FINANCIAL ASSETS

The global capital market can be defined in myriad ways depending on the research lens one selects, and there are multiple approaches to estimating its size. To offer a few examples, the market could be sized by trading or transaction volumes, by value of outstanding financial instruments, by sector, or by number of participants. For the purposes of our research, we broadly define the global capital market as the cumulative collection of markets where global capital supply is matched with global capital demand through bank and securities market intermediation (Exhibit A1).

Exhibit A1

FIVE MAJOR PARTICIPANTS IN THE GLOBAL CAPITAL MARKET (GCM)

SIMPLIFIED



To size the global capital market, we sum together the bank deposits, the market value of publicly traded equities, and the outstanding face value of debt securities for more than 100 countries around the world (Exhibit A2). This sum represents the amount of capital that is intermediated through banks and securities markets without double-counting.[1] We exclude securities that represent portfolios of these assets—for example, mutual funds, pension funds, and insurance companies—to avoid the double-counting of the securities in those portfolios. We also exclude the value of derivatives, since these are risk-shifting contracts that derive their value from movements in financial asset prices and are not a means of shifting capital from savers to borrowers.

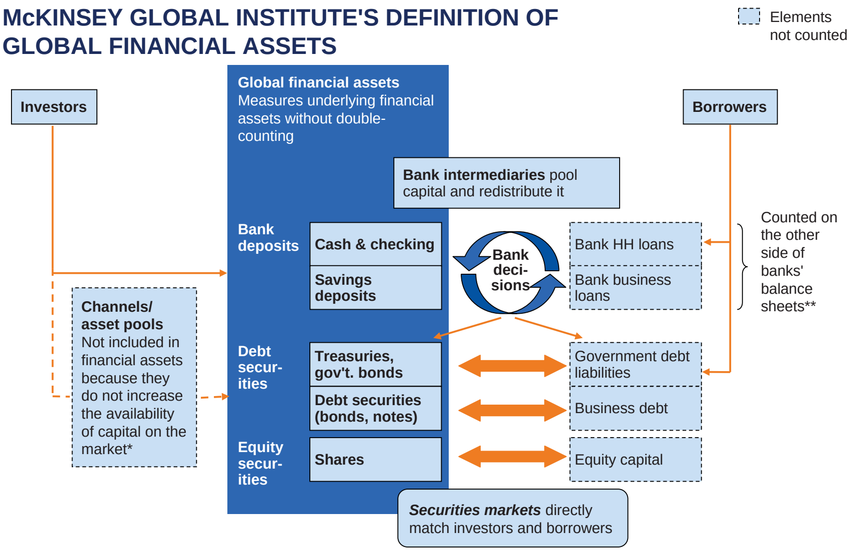
To measure the size of the global capital market, we have constructed a database built on the financial assets for more than 100 countries reaching back to 1990. For each country, our database contains data on the market value of the equities issued on its stock exchanges, excluding American Depositary Receipts (ADRs), which are tracked back to the exchange of the underlying stock, the outstanding face value of debt securities issued in the country, and the amount of private

1 This definition of financial assets differs from other approaches. For example, *Data Monitor* defines the GCM as the sum of outstanding debt securities and market value of equity, but excludes bank deposits. In contrast, academic research is often concerned only with the banking system and its bank deposits, since the securities markets play a relatively small role in developing countries.

bank deposits.[2] Debt securities are further divided into private and government. Private debt securities are issued by corporations and financial institutions, including agencies such as the government-sponsored enterprises (GSEs) in the United States.[3] We also include the outstanding value of asset-backed securities, such as mortgage-backed securities and other securitized assets. The central and local government and the central bank issue government debt securities. The database also contains GDP data for each country to allow us to calculate the value of financial assets relative to the size of the underlying economy.

Exhibit A2

McKINSEY GLOBAL INSTITUTE'S DEFINITION OF GLOBAL FINANCIAL ASSETS



* On the flip side, they do not represent more capital consumed.

** In reality, banks do invest in securities and use deposits to fund these investments; however, this would have only a minor effect on double-counting.

For aggregation purposes and comparability, all financial asset figures are at their nominal end-of-year values and are expressed in US dollars. Because the value of the dollar has been more volatile in recent years, we also have the option of using constant 2006 exchange rates. This gives us a more accurate picture of global financial-market growth trends, undistorted by movements in exchange rates. Similarly, GDP growth figures for different countries can be expressed at the market exchange rate each year, or at constant end-of-2006 exchange rates.

2 Because of data availability issues, our bank deposit figures also include a small amount of currency in circulation, which, strictly speaking, is not intermediated through the banks; however, our overall findings are not affected by this imperfection given the small amount of currency.

3 These include the Government National Mortgage Association (GNMA), Federal National Mortgage Association (FNMA), and Federal Home Loan Management Corporation (FHLMC).

We have drawn the data sets we use to construct the database from the best available sources in terms of their ability to provide data on a global basis. For many countries that have missing data (e.g., government debt in the Gulf Cooperation Council countries) or data that is different than what we are looking for (e.g., Japanese bank deposits), we obtain data directly from the country's central bank or stock exchange.

Alternative approaches to measuring the global capital market are possible. For instance, we could include the value of global real estate and other illiquid assets, which are an important component of household wealth and a means of saving. However, we do not include real estate because of the lack of data availability for the more than 100 countries in our database. To measure bank intermediation, we could include the value of bank loans outstanding rather than the value of bank deposits. This would make total global financial assets larger. We do not because of difficulty in measuring lending volumes for all countries. But because deposits form the basis for lending, trends in the two should be the same over the medium and long term.

2. DATA REVISIONS TO GLOBAL FINANCIAL ASSETS IN 2006

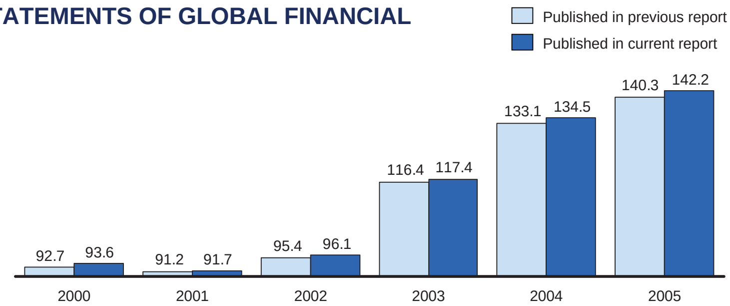
Each year, new data become available on financial assets around the world, and many countries restate previous years' figures. As this improved data become available, we update our database for past years. As a result of these changes, our previously reported figures for global financial assets have changed (Exhibit A3). The reasons for the changes are as follows:

¶ **New data become available:** Some countries have started reporting data to the sources we use to compile our global financial assets database. This was the case for bank deposits data in Norway. The International Monetary Fund (IMF) does not include Taiwan in its database, but the central bank of Taiwan started publishing bank deposits data that follows IMF's methodology. Leveraging local sources, we have been able to obtain the corporate bonds outstanding for Kenya, Morocco, and Tunisia and government bonds outstanding for Mauritius and Kenya.

¶ **Data restatements:** Several countries have restated their numbers in the sources we use to compile our database. For these countries we cross-checked with local sources to make sure that the methodology had not changed. If it had not changed we used the restated data. If the methodology changed we relied on local sources to override the numbers.

Exhibit A3

2006 RESTATEMENTS OF GLOBAL FINANCIAL ASSETS
$ trillion



	2000	2001	2002	2003	2004	2005
Total increase	0.9	0.5	0.7	1.0	1.5	1.9
• Due to newly available data	0.6	0.6	0.6	0.7	0.9	0.9
• Due to data restatements	0.1	-0.3	-0.1	0.0	0.3	0.7
• Due to new estimates	0.2	0.2	0.2	0.3	0.3	0.3
Countries with largest restatements	• US • Canada • Brazil • Korea • Taiwan	• US • Canada • Brazil • Korea • Taiwan • China	• US • Canada • Brazil • Korea • Taiwan	• US • Canada • Brazil • South Korea • Taiwan	• US • Canada • Brazil • Korea • Taiwan • China • Norway	• US • Canada • Brazil • Korea • Taiwan • China • Norway

Source: McKinsey Global Institute Global Financial Stock Database

¶ **New estimates:** Based on research we conducted since the publication of the last global capital markets report, we have found new data sources that we believe are more accurate than the internationally reported figures for several important variables. These data relate to the Gulf Cooperation Countries (GCC), China, Japan, eurozone, and Singapore.

The GCC countries have reported negligible levels of government bonds outstanding to international sources, even though government debt reached 100 percent of GDP for some countries. We have therefore replaced government debt figures with data from the *IMF Regional Economic Outlook: Middle East and Central Asia, October 2007* and estimated the share of government bonds to be 30 percent of total government debt based on expert interviews. We then took this set of numbers and replaced the much lower figures we previously had.

For China, we realized that the data history prior to 2006 of government bonds outstanding was inconsistently low compared with data from the People's Bank of China. Therefore, we adjusted the historical figures in our database to match the trajectory of historical figures provided by the Chinese government.

For Singapore's equity numbers, we have used the value from the Singapore stock exchange in 2006.

Through additional calculations based on the IMF's data, we are able to break down the eurozone deposits by country.

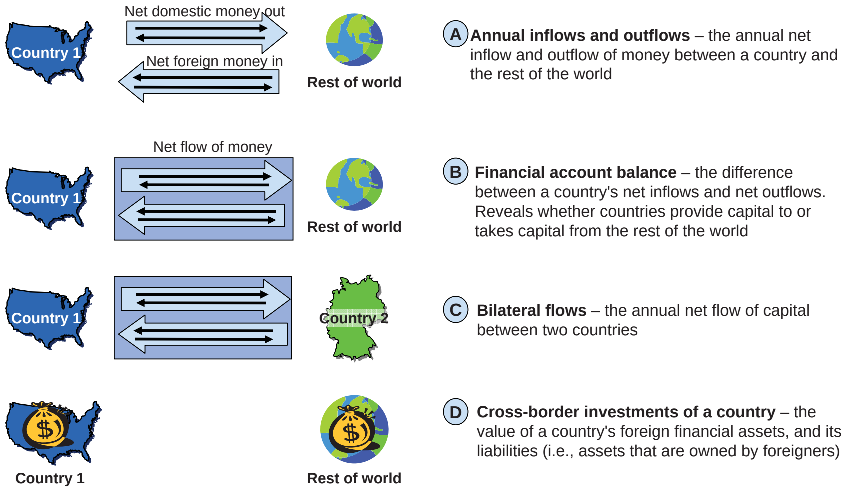
In 2006 Japan changed its methodology for computing money supply aggregates by including deposits from nonbanking institutions. This implied a restatement of $1.8 trillion for 2005 and of similar size for previous years. This new definition is not in line with MGI's methodology for defining global financial assets. Therefore, we left the data prior to 2006 unchanged. For 2006 onward, we will use numbers from the Bank of Japan to calculate Japan's deposits with banking institutions. We also exclude deposits in the nation's postal system, since 90 percent or more of these deposits have been used to buy Japanese government bonds; if we included the deposits, we would be double-counting.

3. DEFINING CROSS-BORDER CAPITAL FLOWS

Cross-border capital flows are defined as the annual net capital inflows and outflows between a country and the rest of the world (Exhibit A4).

Exhibit A4

MCKINSEY GLOBAL INSTITUTE'S DATA ON INTERNATIONAL CAPITAL FLOWS AND INVESTMENT POSITIONS



Net inflows are defined as the net new purchases made by foreigners of a country's domestic assets (or the sum of all new investments made by foreigners in a given year less the sales of previous investment assets). The four types of inflows include foreign direct investment (FDI), equity securities, debt securities, and lending and deposit flows. The components of net inflows are defined as follows, in accordance with definitions from the IMF:

- Foreign direct investment: Any capital transaction in which a nonresident acquires at least 10 percent equity share in a company in the resident economy. This includes purchases of publicly traded shares in a company, investments in private companies, and the creation of new foreign subsidiaries in the economy. It also includes commercial real estate purchases.

- Equity securities: Any capital transaction in which a nonresident acquires less than 10 percent equity share in a company in the resident economy.

- Debt securities: Any capital transaction in which a nonresident acquires a securitized debt instrument (e.g., bond or asset-backed security) from a domestic company or from the government, central bank, or other official agency, or from other investors.

- Cross-border lending and deposits: All capital transactions that are not FDI, equity, or debt transactions. The majority of these transactions are in bank deposits made by nonresidents; cross-border loans from banks, companies, or other financial institutions; and trade credits provided to suppliers. Both lenders and recipients could be banks, individuals, companies, or official agencies (e.g., monetary authorities).

Net outflows are the net new investments in foreign assets made by a country's residents, companies, and government. It includes all new investments made during the year minus previous investment assets that were sold. The five types of outflows are FDI, purchases of equity securities, purchases of debt securities, lending and deposit outflows (which are mainly lending, deposits, and trade credits), and foreign reserve asset purchases by the country's monetary authority.

The definitions for FDI, equity securities, debt securities, and lending/deposits are the same as with net inflows above. Foreign reserve purchases—which by definition do not exist for net inflows—are official purchases, generally made by a country's central bank or monetary authority, of foreign reserve currencies (such as the dollar, euro, and yen). These reserves are used to back the central bank's liabilities, for example, the local currency issued, and the various bank reserves deposited with the central bank, by the government or financial institutions. It includes not only foreign currencies but also treasury bills, other low-risk, liquid instruments, as well as gold, SDRs, and IMF reserve positions.

We define the financial account balance as the difference between a country's net inflows and its net outflows. It reveals whether a country is a net provider or net recipient of capital.

To aid our research, we have created a database that contains the annual capital inflows and outflows from more than 100 countries since 1990. This data is sourced largely from the IMF. We define annual net capital inflows and net capital outflows in accordance with the IMF definition of the financial account; however, we exclude sales and purchases of financial derivatives for the same reasons we exclude them from the global financial asset database.

Similar to the global financial asset database described above, all figures are nominal and expressed in US dollars at end-of-year values. We also have the option of using constant 2006 exchange rates to adjust for changes in the data resulting simply from exchange rate movements. Accordingly, all growth rates are nominal growth rates, but recorded at end-of-2006 exchange rates; thus, they reflect inflation, but not exchange rate shifts.

4. DATA REVISIONS TO CROSS-BORDER CAPITAL FLOWS IN 2006

Last year we reported that capital inflows totaled $6.1 trillion in 2005. We now report they totaled $6.9 trillion because of various data restatements. Largest among those were restatements by the Netherlands (with an increase of $260 billion), Japan (with an increase of $110 billion), Denmark (with an increase of $70 billion), Luxembourg (with an increase of $50 billion), Brazil (with an increase of $20 billion), Singapore (with an increase of $10 billion) and India (with an increase of $ 8 billion). More than half of the overall restatement came from debt inflows data, followed by lending and FDI, which each accounted for roughly 20 percent of the change (Exhibit A5).

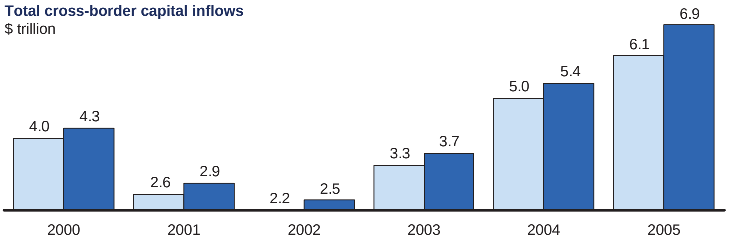
Also, we reported last year that capital outflows totaled $5.9 trillion. This year we report they totaled $6.8 trillion. This was almost exclusively driven by data restatements. The largest restatements were made by the Netherlands (with an increase of $170 billion), Japan (with an increase of $100 billion), Luxembourg (with an increase of $50 billion), Denmark (with an increase of $40 billion), Brazil (with an increase of $20 billion) and China (with an increase of $10 billion). More than 60 percent of the restatement came from debt outflows data, followed by lending and FDI outflows that each accounted for about 15 percent of the restatement (Exhibit A6).

Exhibit A5

2006 RESTATEMENTS OF CROSS-BORDER CAPITAL INFLOWS

Published in previous report
Published in current report

Total cross-border capital inflows
$ trillion



	2000	2001	2002	2003	2004	2005
Total increase	0.3	0.3	0.3	0.3	0.4	0.8
• Due to newly available data	0.0	0.0	0.0	0.0	0.0	0.0
• Due to restatements	0.3	0.3	0.3	0.3	0.4	0.8
Countries with largest restatements	• Netherlands • Japan • Sweden • Germany	• UK • Netherlands • Japan • Sweden • Hong Kong • Turkey	• Netherlands • Japan • Sweden • Hong Kong • Brazil	• Netherlands • Japan • Sweden • Hong Kong • Argentina	• Singapore • France • Netherlands • Japan • Sweden • India • Hong Kong	• Netherlands • Japan • Denmark • Luxembourg • Brazil • Singapore • India

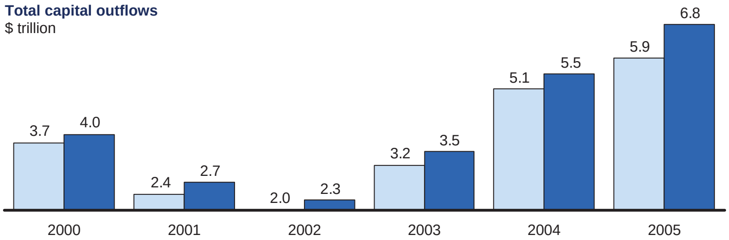
Source: McKinsey Global Institute Capital Flows Database

Exhibit A6

2006 RESTATEMENTS OF CROSS-BORDER CAPITAL OUTFLOWS

Published in previous report
Published in current report

Total capital outflows
$ trillion



	2000	2001	2002	2003	2004	2005
Total increase	0.2	0.3	0.3	0.4	0.4	0.9
• Due to newly available data	0.0	0.0	0.1	0.1	0.1	0.1
• Due to restatements	0.2	0.3	0.2	0.3	0.3	0.8
Countries with largest restatements	• Japan • Netherlands • Sweden • China	• Japan • Netherlands • Sweden • Hong Kong	• Japan • Netherlands • Sweden • Hong Kong	• Japan • Netherlands • Sweden • Hong Kong • Argentina	• Netherlands • Japan • France • Singapore	• Netherlands • Japan • Luxembourg • Denmark • Brazil • China

Source: McKinsey Global Institute Capital Flows Database

5. DEFINING INTERNATIONAL INVESTMENT ASSETS AND LIABILITIES

The term cross-border investments as used in this report includes foreign financial assets and liabilities. Foreign financial assets are foreign-issued financial assets owned by the households, companies, or government of the country. The five types of foreign financial assets correspond to capital outflows, as defined above. They are FDI, equity securities, debt securities, lending/deposits, and foreign exchange reserve assets owned by a country's central bank or other monetary authority (see Exhibit A4).

Foreign financial liabilities are financial assets that are issued by a country and owned by foreign investors. The four types of foreign liabilities are the same as the capital inflows defined above. They are FDI, equity securities, debt securities, and lending/deposits.

A country's net foreign asset position is its foreign assets less its foreign liabilities. This measures a country's level of net foreign debt (or credit).

To conduct this research we have created a database with the foreign assets and liabilities of more than 100 countries going back to 1990. We source the data on the international investment position largely from the statistics collected by the IMF. In accordance with our definition of capital flows and global financial assets we exclude financial derivatives from our database.

We augment the IMF data for some countries with our own estimates. We do so because some countries do not submit data to the IMF, and others appear clearly to be underreporting foreign financial assets. In those cases in which the IMF data were missing we relied on data from their central banks and from interviews with experts in the region. This was the case for Nigeria, Taiwan, India, Norway, Syria, and New Zealand.

In addition, based on related MGI research, we found that Singapore and the GCC countries are likely to underreport their foreign assets to the IMF.[4] We therefore adjusted the level by estimating a target net foreign investment position, which we defined as the sum of the ten previous years' current account balances.[5] Our estimation approach for the GCC countries is explained in detail in the next segment.

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4 See *The New Power Brokers: How Oil, Asia, Hedge Funds, and Private Equity Are Shaping Global Capital Markets*, McKinsey Global Institute, October 2007. Available online at www.mckinsey.com/mgi.

5 We follow a similar approach as P. Lane and G. Milesi-Ferretti, *The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities*, 1970–2004, IMF working paper WP/06/69, 2005.

Similar to the global financial asset database described above, all figures are nominal and expressed in US dollars at end-of-year values. We also have the option of using constant 2006 exchange rates to adjust for changes in the data resulting simply from exchange rate movements. Accordingly, all growth rates are nominal growth rates, but recorded at end-of-2006 exchange rates; thus, they reflect inflation, but not exchange rate shifts.

6. ESTIMATING THE SIZE OF GULF COOPERATION COUNCIL (GCC) FOREIGN INVESTMENT ASSETS

The publicly available data on the foreign investment assets of the countries of the Gulf Cooperation Council is unlikely to be accurate.[6] The best source is the International Monetary Fund's Balance of Payments database, which relies on figures reported by the central governments of each country. Based on that database, supplemented with data from local sources, the total net foreign assets of the countries of the GCC in 2006 would be $824 billion.[7] This includes only data from Bahrain, Kuwait, Oman, and Saudi Arabia; much of the data for the United Arab Emirates and Qatar is missing.

But this figure is very low in comparison with other sources of data. If we add together the current account surpluses that the GCC states have run over the past three years, for instance, we reach a figure of approximately $348 billion—nearly half of the figure reported to the IMF. In order to take a longer-term view, we added up the GCC's current account surpluses since 1973 and applied a growth rate equivalent to the annual rate of return on six-month US Treasury bills (a very conservative assumption). This exercise yielded a total of some $2.2 trillion in foreign assets in 2006—about four times the officially reported figure. Moreover, the publicly estimated figure for the GCC's largest sovereign wealth fund, the Abu Dhabi Investment Authority, alone may have more foreign assets than the figure from the IMF data.

MGI therefore decided to create its own "bottom-up" estimate of GCC foreign investment assets. There are three principal components to this estimate:

¶ **Assets of sovereign wealth funds:** Based on reports from the press, academic literature, and global banks, we developed an estimate of the foreign investment assets of the main sovereign wealth funds and other

6 The countries of the Gulf Cooperation Council are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates.

7 We calculate the estimated 2006 figure as 2005 reported foreign assets plus 2005 net capital outflows (i.e., current account surpluses).

government investment funds in the region. We then, in work for an earlier report, conducted interviews with experts on Middle East financial markets, among them leaders of the Financial Institutions Practice in McKinsey's Middle East office and an investment banker with a Saudi investment bank. This methodology yielded a total of $1.6 trillion of foreign assets for sovereign wealth funds in the GCC.[8]

¶ **Central bank foreign reserve assets:** We used the IMF's data to record foreign reserve assets for each country of the GCC. Because we do not have better information, we take these figures as reported. This yields $50 billion in foreign assets.

¶ **Privately held wealth:** In GCC countries, private wealthy individuals also invest a significant share of their assets abroad. To arrive at a figure for 2006, we took the 2005 wealth from the Merrill Lynch/Cap Gemini World Wealth report and calculated the growth of this base by taking into account national GDP forecasts as well as expert estimates of regional savings and tax rates. We then cross-checked our estimate with that of Forbes' Arab wealth list, which finds that the top ten Arab ultra-high-net-worth individuals represent roughly 30 percent of total ultra-high-net-worth investable assets. This was in line with our findings of $700 billion to $900 billion of private wealth in the GCC. We then applied an expert estimate of the onshore-offshore split of these private investments (25 percent onshore, 75 percent offshore). This yields $0.6 trillion in offshore private wealth in the GCC.

Using this methodology, we find that GCC foreign investments total $2.2 trillion at the end of 2006.

To calculate the historic foreign assets, we obtained a ratio between what each country reported to the IMF and our estimates. This ratio was then applied to the data going back to 1990. To check for consistency of the GCC foreign investments with GCC cross-border capital flows, we calculated the implicit asset appreciation based on the countries' changes in foreign wealth over time and cross-border capital outflows.

8 For more detail on the GCC foreign wealth and asset allocation, see the forthcoming MGI report on the GCC oil windfall in February 2008.

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