

Mapping global capital markets: Fifth annual report

October 2008



McKinsey Global Institute

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Preface

Mapping global capital markets: Fifth annual report is the latest research by the McKinsey Global Institute (MGI) 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 these data, we see the process of financial globalization at work.

Susan Lund, a senior MGI fellow based in Washington, DC, worked closely with me to provide leadership on this project. Oskar Skau, a McKinsey consultant from the Stockholm office, managed the project team. The team included Charles Atkins, an MGI research analyst from the San Francisco office; Jan Philipp Mengeringhaus, a McKinsey consultant from the Munich office; Moira S. Pierce, a senior research analyst at the North American Knowledge Center; Manish Sharma, a senior research analyst with the Global Economics team at the McKinsey Knowledge Center in India; and Nell Henderson, an MGI senior editor in Washington, DC. Tim Beacom, an MGI knowledge operations specialist in Washington, DC, provided essential research support.

We would also like to thank Rebeca Robboy, MGI's external relations manager, and Deadra Henderson, MGI's operations coordinator, for their important support of this project.

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

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Mapping global capital markets: Fifth annual report

Global capital markets are in extreme flux as we present our fifth annual look at their growth and evolution. The financial crisis that began in mid-2007 escalated sharply in September 2008, causing steep losses in both equity and private debt markets and a dramatic restructuring of many major financial institutions. As we write this report in October 2008, it remains uncertain how the ongoing financial market turbulence will play out. This report, however, provides a comprehensive map of global capital markets in the early stages of the crisis, before the more recent upheaval. This includes our latest data through the end of 2007, as well as a detailed look at certain financial developments through the third quarter of 2008.

Our research draws on three proprietary McKinsey Global Institute (MGI) databases that cover the financial assets, cross-border capital flows, and foreign investments of more than 100 countries since 1990. Using these data, we are able to highlight several key findings. Among these, global capital markets overall expanded rapidly in 2007, with equities driving financial asset growth worldwide, most dramatically in emerging markets. The total value of private debt securities outstanding also rose in 2007, though it has been hard-hit by the credit crisis in 2008.

We also explore several longer-term trends. We see that emerging market financial systems continued to expand rapidly in 2007. Although developing countries represented just 20 percent of global financial assets, they accounted for nearly half of the financial asset growth in 2007. China's financial markets surpassed those of Germany, the United Kingdom, and France to become the world's third largest, after the United States and Japan, although the rankings have likely changed in 2008. Growth was also widespread across other emerging markets.

Additionally in 2007, companies were able to raise huge sums of capital outside of the hubs of New York and London. As more markets gained scale and liquidity, capital flowed to new financial centers, from Madrid to Mumbai and from São Paulo to Shanghai. Companies in these markets were increasingly raising funds from both foreign and domestic investors.

In this report, we do not examine the roots of the current crisis or predict its outcome. Instead, we analyze how the crisis affected parts of the US private debt market through September 2008, and we provide insights into the broad long-term trends shaping global capital markets.

FINANCIAL ASSETS AT \$196 TRILLION

Global capital markets grew strongly in 2007, slightly below the pace of 2006 but still faster than the historical trend—likely marking the recent peak for equity and private debt markets.

The total value of the world's financial assets—including equities, private and government debt, and deposits—climbed in 2007 by \$29 trillion in nominal terms to \$196 trillion, an increase of 18 percent (Exhibit 1). However, because we measure in dollars, the sharp depreciation of the dollar against major currencies explains \$9 trillion, or almost a third, of this increase (Exhibit 2). At constant exchange rates, financial assets rose \$20.4 trillion, a gain of 12 percent—higher than the 9 percent compound annual growth rate since 1990. Throughout the rest of this paper, unless otherwise noted, we express all figures at the exchange rates as of the end of 2007 to exclude the effect of dollar depreciation.

The world's financial markets also continued to grow faster than GDP in 2007, a process called financial deepening. Global financial depth, or the ratio of financial assets to GDP, rose to 359 percent in 2007 from 345 percent the year before. With the exception of government debt, all asset classes grew deeper.

While the United States, Japan, and Western European economies have historically had the deepest financial markets, recent gains in financial depth have been widespread. Back in 2000, only 11 markets had financial assets exceeding 350 percent of GDP. By the end of 2007, this figure reached 25, including some developing countries, such as China and South Africa (Exhibits 3a-b).

Deeper financial markets are generally beneficial because they provide borrowers with broader access to capital, offer more efficient pricing, and increase opportunities for portfolio diversification and risk sharing. Sometimes,



Note: Some numbers do not sum due to rounding.

Note: In constant 2007 exchange rates, growth in 2006 was \$20.2 trillion (13%) compared with \$20.4 trillion (11.6%) in 2007.

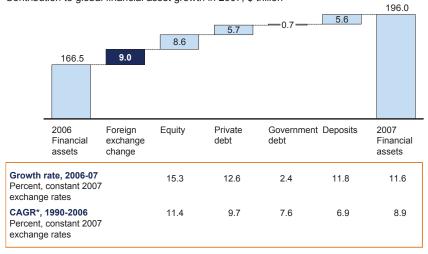
* Compound annual growth rate in current exchange rates.

Source: McKinsey Global Institute Global Financial Assets Database

Exhibit 2

The dollar's depreciation explains \$9 trillion of the growth in global financial assets in 2007

Contribution to global financial asset growth in 2007, \$ trillion



Note: Some numbers do not sum due to rounding.

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

Exhibit 3a

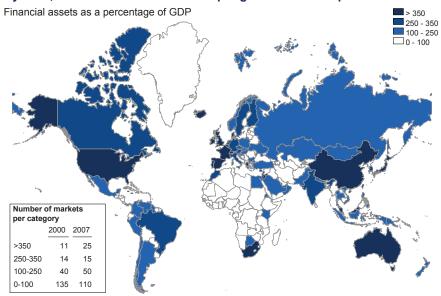
In 2000, 11 markets had financial depth greater than 350 percent



Source: McKinsey Global Institute Global Financial Assets Database

Exhibit 3b

By 2007, 25 markets had financial depth greater than 350 percent

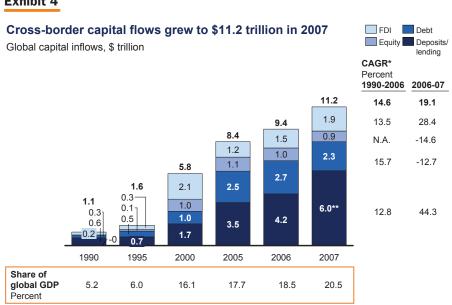


Source: McKinsey Global Institute Global Financial Assets Database

however, financial deepening is the result of unhealthy increases in government debt levels or asset market valuations-either of which can lead to painful corrections. The current sharp correction in the US and European private debt markets is one stark example.

Accompanying financial asset growth in 2007 was an acceleration in total crossborder capital flows, which include foreign direct investment (FDI), purchases and sales of foreign equities and debt securities, and cross-border lending and deposits. Total global capital flows rose to \$11.2 trillion (Exhibit 4). That was a 19 percent increase over the previous year, higher than the post-1990 compound annual growth rate. Deposits and lending together are the largest type of capital flow and were the fastest-growing in 2007. This primarily reflects the globalization of financial intermediaries, such as banks and other financial institutions, hedge funds, private equity funds, and insurance companies. (See sidebar: The surge in cross-border lending.) These cross-border lending flows are likely to decline as the credit crisis continues, reflecting the evaporation of interbank liquidity. FDI also increased in 2007, but flows into portfolio equities and debt securities fell very slightly, reflecting a decline in US outflows.

Exhibit 4



Note: Some numbers do not sum due to rounding. All figures expressed in 2007 exchange rates.

Compound annual growth rate. \$2.9 trillion currency & deposits, \$2.7 trillion lending, and \$400 billion other inflows (e.g., trade credits).

Source: McKinsey Global Institute Global Capital Flows Database

The surge in cross-border lending

Over the past five years, cross-border lending and deposits together have been the fastest-growing component of global capital flows, rising from just above \$900 billion in 2002 to \$6 trillion by the end of 2007.

The growth of this type of capital flow, more than any other, reflects the globalization of finance and financial intermediaries. Banks increasingly fund their liquidity needs through global markets rather than just national ones. Banks are the source of 80 percent of cross-border lending outflows and are the recipients of 80 percent of inflows. Other types of financial institutions—hedge funds, insurance companies, private equity funds, and off-balance-sheet vehicles—account for a large share of the remainder. This growth in flows between banks and other financial institutions around the world helps spread risk, but it also increases the ways financial contagion can spread through global markets.

Cross-border lending and deposits are the most volatile type of capital flow. Based on data from the Bank for International Settlements, we estimate that 65 percent of cross-border loans worldwide are for maturities of less than one year. Loans of short duration can be withdrawn quickly if banks experience liquidity problems or sense increasing risk—the so-called hot money that contributed to the 1997 financial market crises in Asia.*

Globally, cross-border lending has experienced three distinct boom-and-bust cycles since 1990, with sharp declines following the economic and financial turmoil in 1990–91, 1997–98, and 2000–02. If this historical pattern continues, cross-border lending flows are likely to retreat in 2008, reflecting the drying up of interbank liquidity as the credit crisis unfolds.

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

As capital flows have increased, so has foreign ownership of financial assets. The value of all foreign investments—the sum over time of the net annual flows, adjusted for changes in asset values—grew to \$92.6 trillion in 2007, an increase of 13 percent over the previous year. We see cross-border investments have grown faster than world trade, GDP, or total financial assets since 1990. Today, one in four equities, one in four private debt securities, and one in three government bonds worldwide is owned by a foreign investor.

2007 MARKED A TURNING POINT IN PRIVATE DEBT GROWTH

Before the credit crisis erupted in mid-2007, private debt was among the financial worlds' fastest-growing asset classes. Private debt assets—bonds, securitized debt instruments, and other forms of debt traded in financial markets—grew 10 percent annually in developed markets from 2000 through 2007. At the time of this writing, however, growth has slowed sharply and private debt markets are in upheaval. Issuance in several sectors of the market has completely dried up. The US government has assumed control of US mortgage finance giants Fannie Mae and Freddie Mac. Major investment banks have disappeared, been acquired, or become commercial banks. The future of credit and debt markets is uncertain.

In 2007, the total outstanding value of private debt assets worldwide grew to \$50.5 trillion, an increase of 13 percent from the year before. But this pace largely reflects the sizzling growth of the first half of the year—the peak of the boom. For example, the US private debt market, which accounts for almost half the world's total, grew at a 13 percent annualized rate in the first six months of 2007. That was in line with the pace of growth in 2006 and above the trend rate from 1990 through 2006. Private debt in the world's five largest markets except Germany all grew at robust rates in the first half of 2007.

Private debt issuance began to slow with the start of the credit crisis in August 2007. For a closer look, we examined private debt issuance in the United States, although we see similar trends in Europe. Issuance in some segments of the US market, such as mortgage-backed securities issued by banks and other forms of asset-backed securities, plummeted after the crisis began. However, the bulk of the debt market—comprising corporate bonds, commercial paper, and debt securities issued by Fannie Mae and Freddie Mac—remained largely unaffected by the crisis through the end of the year.

¹ Nearly all of this growth, 92 percent, occurred within the developed economies, while just 8 percent took place in emerging markets. We measure debt levels at face value. The market value of many debt securities has dropped during the credit crisis.

The credit crisis has worsened over the course of 2008, intensifying severely in September and affecting all segments of the US market. By the end of September 2008, issuance of mortgage-backed securities by banks had virtually collapsed—having dropped 99 percent from precrisis levels; likewise with the issuance of high-yield corporate bonds, which declined by 91 percent (Exhibit 5).2 New issuance of asset-backed securities, investment-grade bonds, and asset-backed commercial paper had also declined significantly, and the cost of such debt has increased sharply (Exhibit 6).3 In all, issuance of debt securities was \$1 trillion lower in the third guarter of 2008 than in the second quarter of 2007, a 28 percent decline. This fall reflects the sharp drop in investor demand, as well as shrinking demand for credit as corporations scaled back investment in anticipation of an economic downturn. The volume of commercial paper outstanding had held up through September, though these instruments were being issued at much shorter maturities and at higher cost than before the crisis. In late October, the US Federal Reserve began buying up corporate commercial paper at longer-dated maturities to support that market.

Overall, credit remains far tighter than before the crisis. It is both higher priced and harder to obtain. The hardest-hit categories of debt—securities linked to mortgages or consumer debt—accounted for much of the growth in private debt over the past several years. Given the severe disruptions in these markets, how private debt markets will evolve in the coming years remains very uncertain.

EMERGING MARKETS, DRIVEN BY EQUITIES, ACCOUNT FOR NEARLY HALF OF THE GROWTH IN GLOBAL FINANCIAL ASSETS

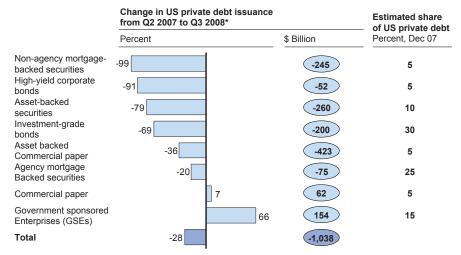
Developing countries' financial assets surged in 2007. Although these countries—located mostly in emerging Asia, Eastern Europe, Latin America, the Middle East, and Africa—held a mere 20 percent of global financial assets, they accounted for almost 50 percent of the growth (Exhibit 7). Collectively, their financial assets grew to \$38 trillion in 2007, a 35 percent increase over 2006—and almost five times the growth rate of mature markets.⁴

² This excludes mortgage-backed securities issued by the government-sponsored enterprises Fannie Mae and Freddie Mac.

³ Issuance of collateralized debt obligations (CDOs) has also fallen sharply. Because CDOs are securities backed by pools of bonds, loans, and other assets, our figures do not include them as a separate category of private debt to avoid double counting.

⁴ This report uses a broader definition of emerging markets than our previous reports, as it now includes more countries in the Middle East and Africa. Using our previous narrower definition, emerging markets' assets grew from \$23.6 trillion in 2006 to \$34.8 trillion in 2007 (at current exchange rates).

Credit crisis has caused major disruptions to US private debt issuance



^{* 3}Q 2008 issuance estimated for investment-grade and high-yield bonds, mortgage-backed securities and commercial paper by extrapolating July and August data for September. 2Q data for government sponsored enterprises and asset-backed securities.

** Volume outstanding numbers used for commercial paper since short maturity.

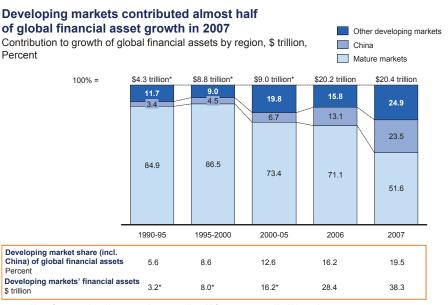
Source: Securities Industry and Financial Markets Association; Federal Reserve; Bank for International Settlements; McKinsey Global Institute analysis

Exhibit 6

Funding costs for all sectors of the US economy May 1, 2007 Sept 26, 2008 have risen dramatically Difference Options-adjusted corporate bond spreads (OAS)* Basis points above same-maturity Treasuries; pre-crisis and today Increase in OAS*. 5/1/07 - 9/26/08 Basis points Brokerage 822 899 Financials 90 Finance 536 626 93 Banks 532 625 132 Textile 296 428 79 Machinery 115 Media 256 105 80 228 308 Gas & electric 80 205 286 utilities 80 Industrials 169 248

* Options-adjusted spreads are calculated as a single figure for all maturities and all ratings; in this case, finance, banks, industrials, and gas & electric utilities are taken as a straight average OAS of AAA, AA, A and BBB bonds.

Source: Merrill Lynch Indexes; McKinsey Global Institute analysis



Note: Some numbers do not sum due to rounding. All figures expressed in 2007 exchange rates.

* Average data for each 5-year period. Source: McKinsey Global Institute Global Financial Assets Database

Equities are far and away the biggest driver of financial asset growth in emerging markets, accounting for 72 percent of the increase in 2007 and 58 percent since 2002 (Exhibit 8). Across emerging markets, equities surpassed deposits for the first time in 2007 to become the largest asset class in developing countries. (See sidebar: *Emerging markets' new financial development path.*)

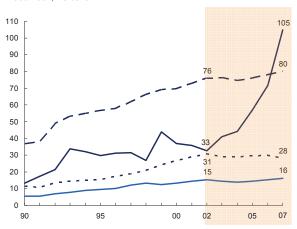
Part of this equity growth reflects the growing number of huge initial public offerings by companies—some of them state-owned—in emerging markets. Examples in 2007 include China CITIC Bank Corp Ltd., which raised \$5.9 billion; Brazil's Bovespa stock exchange (\$3.7 billion); and Indian real estate developer DLF (\$2.3 billion). Overall, companies in emerging markets accounted for more than half the funds raised by IPOs globally in 2007, up from 15 percent in 2000.

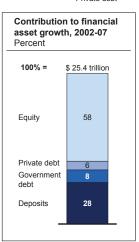
But rising equity valuations have also played a role in the boom. Price-earnings ratios climbed over the past five years in emerging markets (Exhibit 9). The P/E ratios for China's domestic stock index reached levels around 50 at the market's peak in October 2007—twice the level at which shares of the same company

Since 2002, equities have been the main driver of financial deepening in developing markets



Value of asset classes in developing markets as share of GDP 1990-2007, Percent



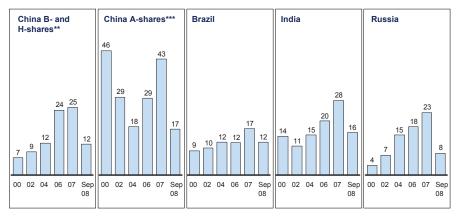


Source: McKinsey Global Institute Global Financial Assets Database

Exhibit 9

Price-earnings ratios of emerging markets rose through 2007, but some have fallen significantly in 2008

Price-earnings ratios*



- * P/E figures are taken from Datastream index, which includes only a subset of total shares.

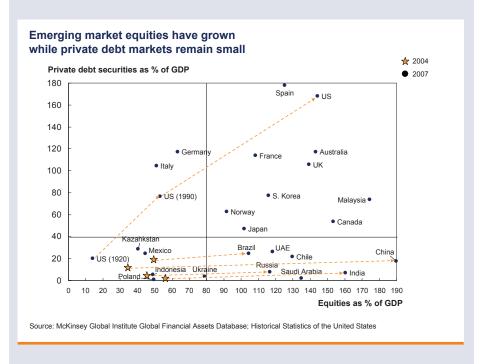
 ** Includes B-shares listed in Shenzhen and Shanghai as well as H-shares listed in Hong Kong; these shares are denominated in US dollars and are available to foreign investors.

 *** Includes A-shares listed in Shenzhen and Shanghai; a small number of registered qualified foreign institutional investors (QFII) is able to invest in A-shares according to fixed quotas per investor Source: Datastream; McKinsey Global Institute analysis

Emerging markets' new financial development path

The emerging markets' current path of financial system development has differed from that of the United States and other mature economies. In the mature economies, bank lending was followed by the simultaneous development of bond and equity markets. In some European countries, such as Germany, debt markets are still significantly larger than equity markets.

However, in emerging markets, equity markets have developed scale and depth while markets for corporate bonds and other debt securities remain shallow and underdeveloped (see exhibit). Private debt securities equaled just 16 percent of GDP in emerging markets in 2007, while equities were more than six times as large, at 105 percent of GDP. In developed economies, by comparison, private debt assets were roughly equal to equities in 2007, at around 125 percent of GDP.



Today, South Korea and Malaysia are the only emerging market economies where private debt markets show significant depth. Corporate bond markets are unlikely to flourish in other developing economies without significant legal and financial reforms. Among the key elements needed are effective legal systems for enforcing creditors' rights and handling bankruptcy proceedings; credit rating agencies; institutional investors to boost demand for debt securities; and a liquid market for government debt securities of varying

maturities to provide a benchmark for pricing private debt (as the US Treasury "yield curve" does in the United States).

It remains an open question whether other developing countries will undertake the needed reforms. But failure to do so will entail costs. Equity is a relatively expensive means of raising capital, since investors demand higher returns. In addition, without debt instruments as an option, companies rely heavily on bank loans and thus remain vulnerable to liquidity shortages and other bank system risks. Finally, the dearth of fixed-income products significantly limits the portfolio diversification options for savers, particularly institutional investors, such as pension funds and life insurers.

were valued in Hong Kong.⁵ However, we have seen significant equity market corrections in 2008, partly connected to the events surrounding the credit crisis. From the end of 2007 through September 2008, equity markets in China and India had each declined by 50 percent, and Russia's had fallen by 47 percent.⁶

When we analyze the emerging markets by country, China stands out as the biggest engine of growth in 2007. China's total financial assets grew by 56 percent in 2007, surpassing Germany, the United Kingdom, and France to become the world's third-largest national financial market. As recently as 2002, China's financial market was just the seventh largest in the world. These rankings may well change again in 2008 as market corrections continue.

But China is not the only story: Double-digit financial asset growth rates were widespread throughout emerging markets in 2007 (Exhibit 10). The financial assets of Brazil, Russia, and India—the other so-called BRIC countries—have all grown by 20 percent or more annually for the past five years.⁷ Benefiting from

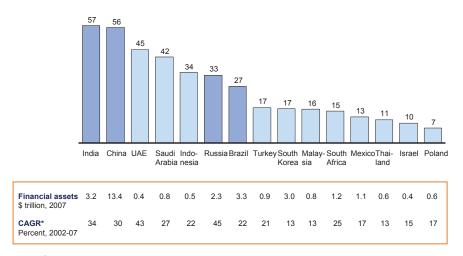
⁵ Chinese companies can issue different types of shares for different investors, with very different valuations. The A-shares are available to Chinese domestic investors (and, since 2003, to a very limited number of foreign investors) and typically have the highest P/Es, reflecting strong demand from local investors and limited investment options for domestic savers. B-shares and H-shares are open to foreign investors and are valued at lower levels. For these shares, P/Es peaked at 25 at the end of 2007, as shown in Exhibit 9.

⁶ We use Morgan Stanley Capital International (MSCI) indexes to measure equity markets' performance. For China, the MSCI Broad China ex Hong Kong index includes H-shares, A- and B-shares, and so-called red chips, which are shares of companies that are incorporated in Hong Kong but that operate primarily in mainland China and have significant government ownership. Indexes are denominated in US dollars.

⁷ The term "BRIC" comes from a 2001 Goldman Sachs report that looked at the future growth of Brazil, Russia, India, and China.

Rapid financial asset growth is widespread in developing markets

Growth of financial assets in the 15 largest developing financial markets*, 2006-07 BRICs" Percent



^{*} Compound annual growth rate, constant 2007 exchange rates Source: McKinsey Global Institute Global Financial Assets Database

then-soaring oil prices, financial markets in the United Arab Emirates and Saudi Arabia grew at annual rates above 40 percent in 2007. Across regions, emerging Asia's financial assets (which include those of China and India) have increased 25 percent annually from 2002 through 2007; Latin America's have climbed 20 percent; and Eastern Europe's (which include those of Russia and Turkey) have grown 27 percent.

We expect that in the years to come, developing countries will continue to account for a growing share of global financial assets. This reflects their higher GDP growth rates, significant infrastructure investment needs, and often high savings rates.

BEYOND THE HUBS: MOST OF THE LARGEST IPOS OCCURRED OUTSIDE NEW YORK AND LONDON

Some US policy makers have expressed concern in recent years about whether New York is losing its share of financial market activity to London. But this zero-sum mind-set misses the bigger story: Through 2007, the two cities have shared the growth in activity with other capital markets around the world.

At this writing, the continuing financial crisis has severely depressed new equity and debt issuance around the world. But through 2007, the deepening and maturing of global capital markets enabled more companies to raise large sums at home—a trend that should resume once markets stabilize. Of the 20 largest IPOs in 2007, just four were listed in New York or London, and one of those was a dual listing in Moscow and London. The rest were scattered around the world: five companies listed in Hong Kong and/or Shanghai; three listed in São Paulo; two listed in Madrid.⁸ Others listed in Dubai, Bogota, Mumbai, and elsewhere (Exhibit 11). And the sums raised were substantial, ranging from the \$2 billion raised by Bank of Beijing in Shanghai to the \$8 billion raised by Russia's VTB Group in Moscow and London. In contrast, in 2002, ten of the 20 biggest IPOs were listed in New York or London.

This shift did not mean that New York and London were handling less activity, as measured by the total dollar value of IPOs. On the contrary, the value of IPOs fully or partly listed in these two cities grew 12 percent annually from 2001 through 2007 (Exhibit 12). But the total value of IPOs elsewhere grew nearly three times as fast in the same period. We do not see this as a negative development for New York and London; they remain global financial centers and benefit from increased economic and financial development in other parts of the world.

The dispersion of IPOs is an indication of deeper structural shifts in financial markets around the world. One is easier access to foreign capital. As we noted previously, cross-border capital flows have risen rapidly as companies and wealthy global investors sought opportunities abroad. And capital has reached a more diverse set of markets than ever: Capital flows into emerging markets increased by more than one-third in 2007, to \$2.1 trillion, and have almost doubled since 2005. Among emerging markets, China had the largest capital

⁸ In 2007, several large Chinese companies with listings in Hong Kong also listed A-shares in Shanghai. These are not included here because they are not technically IPOs. A total of \$37 billion was raised by these companies during the year, with PetroChina's \$9 billion listing the biggest.

Of the top 20 IPOs in 2007, only 4 listed in New York or London

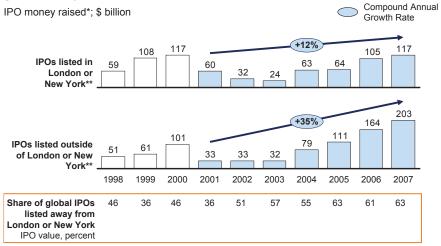
Top 20 IPOs in 2007*, money	raised, \$ billion	Nationality of issuer	Stock exchange of issuance
VTB Group	8.0	Russia	London / Moscow
Iberdrola Renovables	6.6	Spain	Madrid
China CITIC Bank	5.9	China	Hong Kong / Shanghai
China Railway	5.9	China	Hong Kong / Shanghai
Criteria CaixaCorp	5.1	Spain	Madrid
Blackstone	4.8	United States	New York
Dubai Ports World	4.2	UAE	Dubai
China Pacific Insurance	4.1	China	Shanghai
Bovespa Holding	3.7	Brazil	São Paulo
Bolsa de Mercadorias & Futuros	3.4	Brazil	São Paulo
Eurasian Natural Resources	3.0	Kazakhstan	London
Sony Financial Holdings	3.0	Japan	Tokyo
MF Global	2.9	United States	New York
Ecopetrol	2.8	Colombia	Bogota
Tognum	2.7	Germany	Frankfurt
Nyrstar	2.5	Belgium	Brussels
Redecard	2.4	Brazil	São Paulo
DLF	2.3	India	Mumbai / NSE India
Industrial Bank	2.0	China	Shanghai
Bank of Beijing	2.0	China	Shanghai

^{*} We exclude Chinese listings in Shanghai of companies previously listed in Hong Kong. Pure Chinese A-share IPOs are included.

Source: Dealogic; McKinsey Global Institute analysis

Exhibit 12

Since 2001, IPO activity outside of New York and London has grown nearly three times faster than in those two hubs



Source: Dealogic; McKinsey Global Institute analysis

^{*} Deal value in current exchange rates. We exclude Chinese listings in Shanghai of companies previously listed in Hong Kong. Pure Chinese A-share IPOs are included.

** Dealogic makes reference to one or more exchanges per IPO recorded. If New York and/or London (or exchanges domiciled in these cities) are mentioned, the IPO is considered a New York or London IPO.

inflows in 2007, but many other countries shared in the windfall. Qatar and Russia experienced the fastest growth in capital inflows in 2007, with Qatar's soaring 188 percent and Russia's 162 percent.⁹

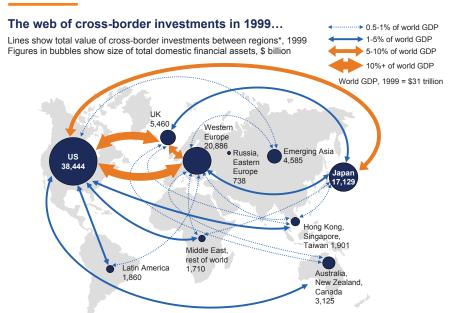
Foreign investors supplied much of the capital raised in emerging market IPOs in 2007. Foreigners contributed more than 75 percent of the capital raised in the ten largest IPOs in Brazil, for example, and foreign institutional investors provided 42 percent of the capital raised in India's top ten IPOs.

As international capital flows have increased over time, the global web of cross-border investment has grown larger and more complex. The United States continued to hold the most foreign assets and foreign liabilities of any single country in 2007, reflecting its large domestic financial market and investor base, as well as its integration with other financial systems. But the financial links between other countries and regions have grown rapidly. To illustrate this, we look at the value of cross-border investments between pairs of countries or regions since 1999. Worldwide, we see foreign investment assets increasing from \$34.9 trillion in 1999 to \$92.6 trillion in 2007. This reflects robust growth in cross-border investments between most regions of the world, most notably the United Kingdom and the rest of Western Europe, and between them and other parts of the world (Exhibits 13a-b).

But there was more fueling the shift in IPO listings than hungry foreign investors searching abroad for equity shares. Economic expansion also fueled the growth of the companies' domestic capital markets in recent years. Households with rising incomes saved more and put their money in bank deposits, stocks, bonds, and other financial assets. Companies financed expansion by selling equities or bonds. Governments financed construction of roads, airports, and other infrastructure by issuing bonds. In China, personal financial assets of retail investors increased by more than 140 percent from 2002 through 2007. In India, these assets almost tripled during the same period. Thus, growing liquidity enabled companies to raise capital in markets all over the world at lower cost, and in their own currency. That, in turn, spurred demand by companies to do so. These domestic trends may be slowed or interrupted temporarily if emerging market economies suffer downturns but should pick up again as economies recover and expand over time.

⁹ In 2007, China restated upward its past capital inflows by a substantial amount—an average of \$261 billion per year for 2002–07. China also restated upward its capital outflows, by an average of \$276 billion per year over that period. The restatements occurred mainly in lending and deposits, and to a far lesser extent in other asset classes.

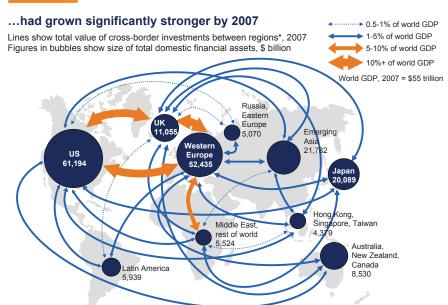
Exhibit 13a



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

Source: McKinsey Global Institute analysis

Exhibit 13b



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

Source: McKinsey Global Institute analysis

* * *

The credit crisis that began in mid-2007 continues to strain debt and equity markets, affecting financial institutions, investors, and borrowers around the world. The full implications are uncertain. But the current turmoil is part of a broader story of capital market evolution that MGI will continue to follow.

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