McKinsey Global Institute

Mapping the Global Capital Market
Third Annual Report

January 2007

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The McKinsey Global Institute, founded in 1990, is an independent economics think tank within McKinsey & Company whose primary purpose is to undertake original research and develop substantive points of view on critical economic issues facing businesses and governments around the world.

We seek to help business leaders and policy makers understand the evolution of the global economy, improve performance and competitiveness, and provide a fact base for decision making at both the national and international level.

MGI's work is a unique combination of two distinct disciplines: economics and management. Economists often have limited access to the practical problems facing senior managers, while senior managers often lack the time and incentive to look beyond their own industry to the larger issues of the global economy.

Led by MGI Director Diana Farrell, each research project includes a team of McKinsey consultants from around the world who serve 6- to 12-month assignments before returning to client work. Our research teams work with a number of leading economists, including Nobel laureates, who serve as McKinsey Global Institute Academic Advisors. Martin Baily, a senior fellow at the Institute of International Economics and former Chairman of President Clinton's Council of Economic Advisors, is currently an MGI senior advisor.

The Global Institute is based in San Francisco and has a presence in Washington, D.C., New York, London and Shanghai.

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Alexander Maasry

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Preface

This report provides the third annual update of the McKinsey Global Institute's (MGI) 2004 report on the global capital market, *$118 Trillion and Counting: Taking Stock of the World's Capital Markets.* That report, the culmination of a year-long research effort working in collaboration with our colleagues in McKinsey offices around the world, was devoted to understanding the growth and evolution of the world's financial markets. It resulted in the creation of a unique proprietary database of the financial assets of more than 100 countries since 1993.

This current release focuses on trends in the global capital markets in 2005, the most recent year for which data is available for all asset classes and countries. It also includes some of the key findings from a new MGI research project on cross-border capital flows.

Susan Lund, a senior fellow at MGI based in Washington DC, worked closely with me to lead the research on this current update. Alexander Maasry, an MGI fellow, provided essential support, along with Moira Sofronas, a knowledge professional in McKinsey's North American Knowledge Center, and Tim Beacom, MGI's dedicated research and information specialist.

Moreover, we would like to thank Janet Bush for her editorial support; Rebeca Robboy and Kim Brooks, MGI's external communications managers; and Deadra Henderson, MGI's practice administrator.

Our aspiration is to provide a fact base for better decision making and contribute to the public debate on the evolution of the global capital market, its role in global economic integration, and its implications for business leaders, investors, and policy makers. As with all McKinsey Global Institute projects, this work is independent and has neither been commissioned nor sponsored in any way by any business, government, or other institution.

Diana Farrell
Director, McKinsey Global Institute
January 2007

Mapping the Global Capital Market Third Annual Report

World financial markets continued to grow and become more liquid in 2005, as the stock of global financial assets reached $140 trillion—more than three times global GDP. With a few qualifications, this bodes well for the world's economies, since deeper financial markets typically provide better access to capital; improved pricing and efficiency; and better allocation of risk.

There were several notable developments in global financial markets during 2005. First was the continuing rapid growth in eurozone financial markets. Collectively, they added $3.3 trillion of financial assets, mostly in equities and debt securities. The eurozone is clearly emerging as a greater force in the global financial landscape. Another key development was that, for the third straight year in a row, equities accounted for the largest share of growth in global financial markets, outpacing debt. Japan had the world's largest single equity market gain, with an increase of $1.5 trillion. But unlike equity market growth in the late 1990's, increased earnings, rather than higher P/E ratios, drove most of the growth in 2005.

These are some of the findings of the third annual update of the McKinsey Global Institute's proprietary capital-markets database, which tracks the financial assets of more than 100 countries since 1993.[1] A new feature that we are introducing this year is a second proprietary database, which tracks cross-border capital flows.[2] As the world's capital markets become increasingly integrated, financial institutions and investors routinely move millions of dollars of assets around the globe. As a result, cross-border capital flows and foreign holdings of financial assets are soaring. In 2005, global cross-border capital flows topped $6 trillion, a new record and more than double their level in 2002. Our data—the first comprehensive and fully standardized available—shows that, worldwide, foreign investors hold one in four outstanding bonds and one in five equities.

In this report, our first seven findings relate to the global financial stock, and the next five to global cross-border capital flows.

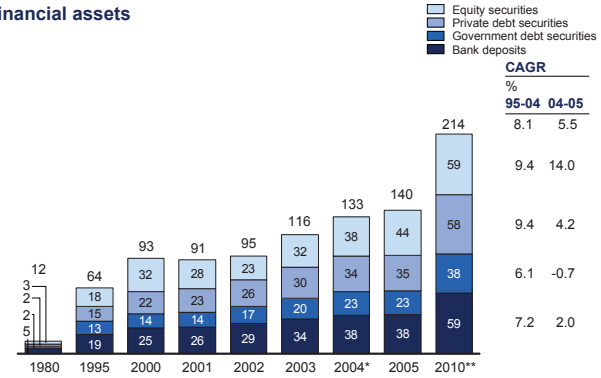
1 For more detail, see the original MGI report, *$118 Trillion and Counting: Mapping the Global Capital Market,* available for free online at www.mckinsey.com/mgi.

2 We will publish our full findings on capital flows in spring 2007.

$140 trillion and still growing

The value of total global financial assets—including equities, government and corporate debt securities, and bank deposits—expanded to $140 trillion by the end of 2005, an increase of $7 trillion from a year earlier.[3] Just four areas—the United States, the United Kingdom, the eurozone, and Japan—account for more than 80 percent of the total. The United States continues to be the largest market, with $50 trillion of assets, and the eurozone is second, with nearly $30 trillion of financial assets. Japan ranks third with $19.5 trillion. The UK market has less than $8 trillion of 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, whereas, in China, nearly three-quarters of its more than $5 trillion in financial assets are held as bank deposits. India's financial system is significantly smaller, with $1.4 trillion in assets, but is more balanced.[4]

Global financial assets
$ trillion



	1980	1995	2000	2001	2002	2003	2004*	2005	2010**	95-04	04-05
Nominal GDP $ trillion	10.1	29.4	31.7	31.6	32.8	36.9	41.4	44.5	63.3	4.2	7.5
Depth (FS/GDP), %	109	218	292	289	290	315	322	316	338		

* Our 2004 figure dropped from $136 trillion to $133 trillion due to restatement of data by individual countries.
** Extrapolation off of 2005 base, with components grown at 2000-05 CAGRs.
Source: McKinsey Global Institute Global Financial Stock Database

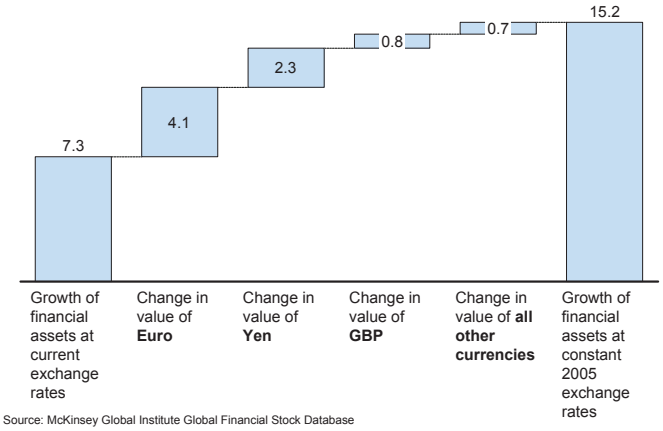
3 In our last annual update, the global financial stock stood at $136 trillion at end-2004. However, subsequent restatement of some national statistics has lowered this figure to $133 trillion, with equity and bank deposits explaining 97 percent of the downward revision.

4 For more on China and India's financial systems, see two recent MGI reports, *Putting China's Capital to Work: The Value of Financial System Reform* and *Accelerating India's Growth through Financial System Reform*. Both are available at www.mckinsey.com/mgi.

Exchange-rate movements distort growth picture

Between 2004 and 2005, the global financial stock grew by $7 trillion compared with growth of $17 trillion between 2003 and 2004. But was growth in 2005 actually so much slower than the previous year? No. Most of the difference in growth reflects changes in the value of the US dollar against major currencies over the course of the year.[5] As the dollar exchange rate appreciated in 2005, financial-stock growth in other countries appeared to be less when converted into dollars. Indeed, measured with constant exchange rates, growth in the global financial stock was $15.2 trillion in 2005. If we were to apply the 2005 exchange rate to the global financial stock at end-2004, it would have been $125 trillion, not $133 trillion. In the past, MGI has reported global financial-stock figures in current US-dollar terms because of the dominance of US financial markets and the dollar's role as the world's reserve currency. However, other regions are now growing in importance and the value of the dollar has been more volatile in recent years. For this reason, this year we are also using constant 2005 exchange rates, which we believe gives us a more accurate picture of global financial-market trends, undistorted by movements in exchange rates.

Impact of exchange rates on growth of world financial assets
$ trillion, 2004-2005



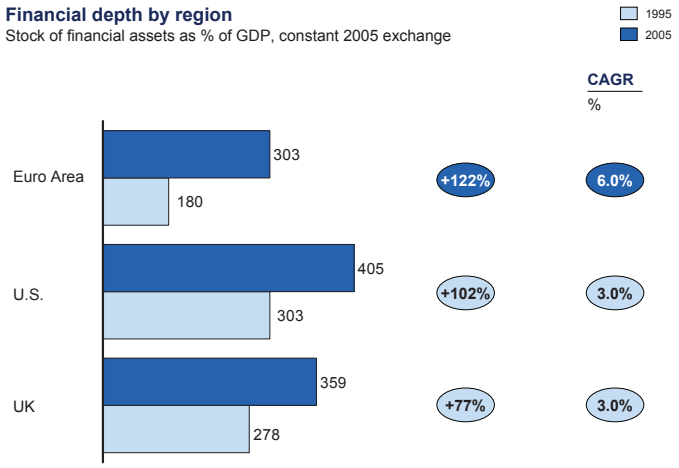
Source: McKinsey Global Institute Global Financial Stock Database

5 The strengthening of the dollar against the euro accounted for 52 percent of difference in 2005 growth between constant dollar and market exchange rates; against the yen for 29 percent; the British pound for 10 percent; and other currencies for 9 percent.

Eurozone gains ground

Eurozone financial markets added $3.3 trillion of financial assets in 2005,[6] boosting their financial depth (measured by the ratio of financial assets to GDP) to more than three times the eurozone's combined GDP. Although this is still lower than the financial depth of the traditional financial hubs of the United States and the United Kingdom, the eurozone's financial depth has grown at a rate of 6 percent annually over the last ten years, twice the pace of their Anglo-Saxon rivals. Growth in financial assets in 2005 was spread across eurozone countries, although France, Spain, Germany, the Netherlands, and Italy gained the most. Just as important, the eurozone's financial markets are seeing a shift away from banking, which has traditionally been more important than equity and bond markets: equities and corporate debt accounted for nearly three-quarters of the region's growth in financial assets in 2005. As eurozone financial markets grow and mature, they are becoming an increasingly important part of the global financial landscape. The roles that major countries and regions play in the global capital market are clearly in flux.

Financial depth by region
Stock of financial assets as % of GDP, constant 2005 exchange



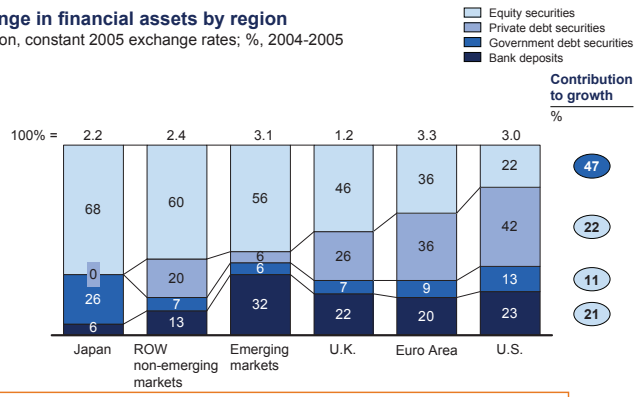
Source: McKinsey Global Institute Global Financial Stock Database

6 This is measured at the constant year-end 2005 exchange rate.

Equities drive recent growth

Equities accounted for nearly half of growth in global financial assets in 2005, increasing by $7.1 trillion. Although Japan had the largest single gain in equity markets, with an increase of $1.5 trillion, equities' growth was broad-based. The eurozone saw its stock of equities increase by $1.2 trillion; the United States by $650 billion; and the United Kingdom by $550 billion. Equities also accounted for more than half of emerging markets' growth in financial assets—with growth of $2.2 trillion. As we've noted in previous reports, debt was the main contributor to overall growth in the global financial stock after 1993, but this mainly reflected the decline in equity-market values in the late 1990s—2005 was the third straight year that equities were the largest contributor to growth of global financial assets.[7] Our analysis shows that, while some individual markets may have overheated, the vast majority of equity-market increases worldwide were due to increased earnings and new issuance, not increased P/E ratios. In the United States and the eurozone, earnings accounted for all the growth, as total market P/E ratios declined slightly; earnings growth also accounted for most of the rise in the Japanese market.

Change in financial assets by region
$ trillion, constant 2005 exchange rates; %, 2004-2005



	Japan	ROW non-emerging markets	Emerging markets	U.K.	Euro Area	U.S.
Depth (FS/GDP) %	427	172	169	359	303	405
CAGR (93-05) %	4.7	9.7	16.4	8.5	9.1	8.5

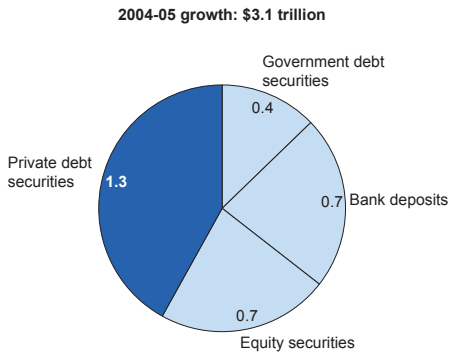
Note: Some numbers do not add to 100% due to rounding.
Source: McKinsey Global Institute Global Financial Stock Database; Global Insight

7 Equities accounted for 41 percent of total growth in 2004 and 53 percent in 2003.

The US private-borrowing binge

The surprise element in US debt markets in 2005 was not the well-established story of growing US-government debt—up $400 billion during the year—but the rapid expansion in private-debt securities. US private debt increased by $1.3 trillion, accounting for three-quarters of total growth in US debt. Mortgage-backed securities and money-market instruments gained the most, the former reflecting the strong US housing market. In addition, the issue of US asset-backed securities hit a record due to high levels of home-equity lending, which was then securitized. The United States was not alone in its corporate-borrowing spree. Worldwide, corporate-debt securities posted the second-largest growth after equities, increasing by $3.3 trillion. Just over half of this growth came from international debt issues, which rose $1.7 trillion, or 15.5 percent.

Sources of growth in U.S. financial stock
$ trillion

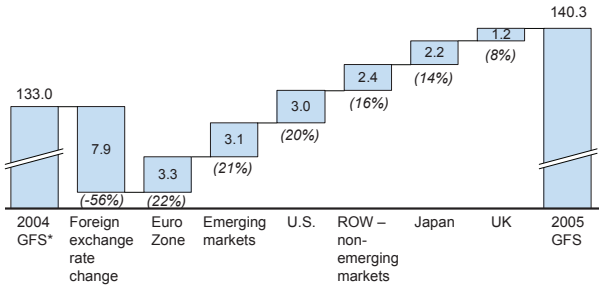


Source: McKinsey Global Institute Global Financial Stock Database

Regionally balanced financial-stock growth

The geographic distribution of growth in world financial assets was remarkably even in 2005. The eurozone was the largest regional contributor to growth, with 22 percent of the total; the United States weighed in with 20 percent of total growth, or $3.0 trillion; and, taken as a group, emerging markets accounted for 21 percent of growth, or $3.1 trillion.[8] Given the small size of emerging-market financial systems—with just $15 trillion in assets—it is notable that their growth was nearly equal to that of the eurozone, and larger than growth in the United States, by far the world's largest financial market. Emerging markets now account for 14 percent of global financial assets, up from just 7 percent a decade ago.[9] Japan accounted for 14 percent of global financial-market expansion in 2005, a healthy contribution after five years of low or non-existent growth. The United Kingdom accounted for 8 percent, and the rest of the world for 16 percent.

Contribution to financial stock growth by region
$ trillion, constant 2005 exchange rates; (% of growth)



	Euro Zone	Emerging markets	U.S.	ROW – non-emerging markets	Japan	UK
2004 GFS $ trillion	26.6	15.1	47.6	11.8	17.3	6.7
Growth rate 2004-05 %	12.6	21.0	6.3	20.3	12.6	17.8

* 2004 GFS is $2.8 trillion less than last year's reported number due to revisions in figures published by countries.
Source: McKinsey Global Institute Global Financial Stock Database

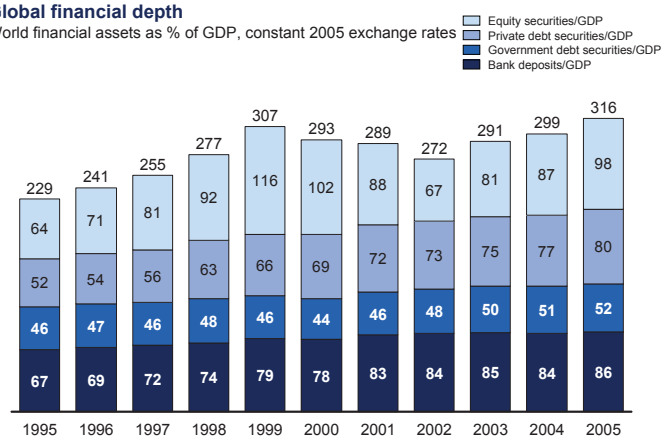
8 Among emerging markets, growth was widespread. China gained the most, with growth of $800 billion. Eastern Europe gained $700 billion, as did emerging Asia (excluding China and India). Latin America gained $500 billion, and India added $300 billion. The remaining $100 billion was spread across Africa and the Asia-Pacific region.

9 Over the last decade, 44 percent of emerging market growth in financial stock has been in bank deposits, 32 percent in equities, and 24 percent in government and private debt.

Steadily deeper

Financial depth is an important measure of the development of world financial markets. The value of financial assets can be many times larger than GDP because it reflects predicted future returns and growth. In 1980, the global financial stock was roughly equal to world GDP. By 1993, it was double the size, and, by the end of 2005, it had risen to 316 percent—or more than three times world GDP. 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 increased opportunities for sharing risk. However, financial deepening can sometimes be due to unhealthy increases in government debt or to asset-price bubbles. During the late 1990s, global financial depth increased due to very high equity-market valuations that then declined in subsequent years. Excluding the equity-bubble years of 1998-2000, however, we see a constant upward trend in world financial depth. In 2005, depth increased by 16 percentage points, exceeding its previous high in 1999. Nearly 70 percent of the deepening came from growth in the stock of equities, which, as we have noted, was largely due to higher corporate earnings rather than increases in P/E ratios.

Global financial depth
World financial assets as % of GDP, constant 2005 exchange rates

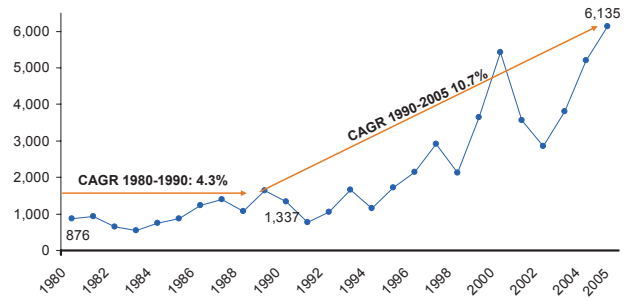


Note: Some numbers do not add up due to rounding error.
Source: McKinsey Global Institute Global Financial Stock Database

Global cross-border capital flows—a new record

In 2005, worldwide cross-border capital flows, which include foreign purchases of equity and debt securities, cross-border lending, and foreign direct investment (FDI), increased to more than $6 trillion, the highest level ever. Since 1990, cross-border capital flows have grown 10.7 percent annually,[10] outpacing growth in world GDP (3.5 percent), trade (5.8 percent), and financial stock (8.7 percent). Advances in technology and the deregulation of financial markets around the world have enabled this growth and given rise to a growing class of global investors. Although investors in most countries still show a marked preference for financial assets of their home country, roughly one in four debt securities and one in five equities today is owned by an investor outside the local issuing market—for instance, a US investor buying Thai equities, or a German investor buying US bonds. National financial markets are increasingly integrating into a single global market for capital.

Total cross-border capital flows
$ billion, 2005 constant $ and constant foreign exchange



% of global GDP	4.6	3.4	3.6	5.5	4.4	5.0	3.7	3.8	6.5	6.0	14.2	7.2	12.1	13.9

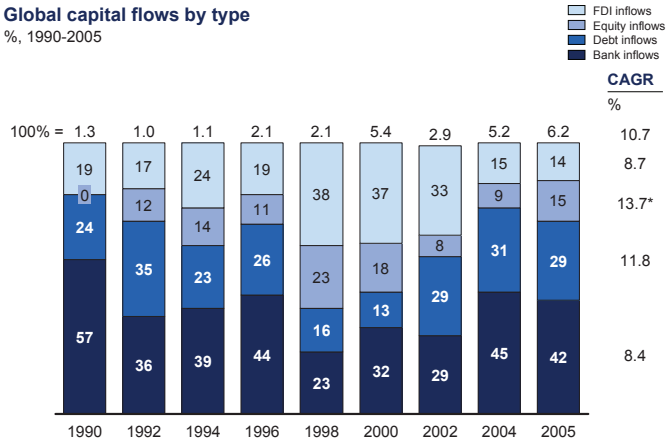
Source: McKinsey Global Institute Capital Flows Database

10 Measured at constant 2005 year-end exchange rates.

Debt-capital flows are the largest type

Although equities contributed most to growth in the stock of world financial assets in 2005, the driving force behind record cross-border capital flows were loans and debt securities, which together accounted for nearly three-quarters of total capital flows. Cross-border lending – including loans between both banks and non-financial institutions – was the largest component, accounting for 42 percent of the total. Since 2002, foreign lending volume has tripled, with $2.6 trillion of net new loans in 2005 alone. The second-largest type of capital flow was cross-border investment in debt securities with 29 percent of the total, or $1.8 trillion. An estimated 25 percent to 30 percent of this money went into government debt worldwide, while the remainder was invested in corporate debt. Despite the public attention given to cross-border mergers and acquisitions and FDI, these were the smallest component of total flows with just 15 percent, or $900 billion, in 2005. This was less than half their peak in 2000 and only marginally higher than their level in 1998.

Global capital flows by type
%, 1990-2005

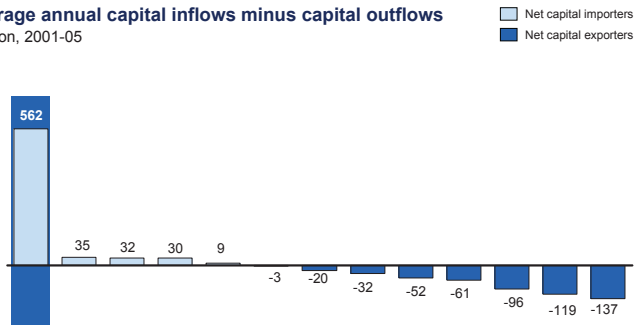


* CAGR 1991-2005, as value = ~0 in 1998
Note: Some numbers do not add up due to rounding error
Source: McKinsey Global Institute Capital Flows Database

United States absorbs 85 percent of global capital flows

Over the past four years, the United States has absorbed an average of 85 percent of total global capital flows, or over $500 billion each year, to fund its budget deficit. Asia and Europe are the world's largest net suppliers of capital, followed by Russia and the Middle East. Due in part to the oil revenues of the latter two regions, together they have had larger net capital outflows than the eurozone in recent years. Since 1999, emerging markets have also been net exporters of capital to rich countries as their central banks aggressively grow foreign-exchange reserve assets. This trend is not just about China, with some $1 trillion in foreign reserves—India, Russia, Korea, Malaysia, Thailand, and Brazil, to name a few, are also net suppliers of capital to the global market. Economists debate whether this phenomenon is sustainable. Some argue that it is not; others say it mainly reflects the underdevelopment of financial systems and infrastructures in emerging markets, and anemic domestic demand in Europe and Japan[11].

Average annual capital inflows minus capital outflows
$ billion, 2001-05



	U.S.	Eastern Europe	U.K.	Aus-tralia-Pacific	Latin America	Africa	Canada	Russia	Middle East	Euro Area	Other Western Europe	Japan	Other Asia
%of GDP	5.0	3.5	1.8	4.9	0.4	-1.6	-2.1	-6.6	-5.1	-0.7	-8.9	-2.8	-3.4

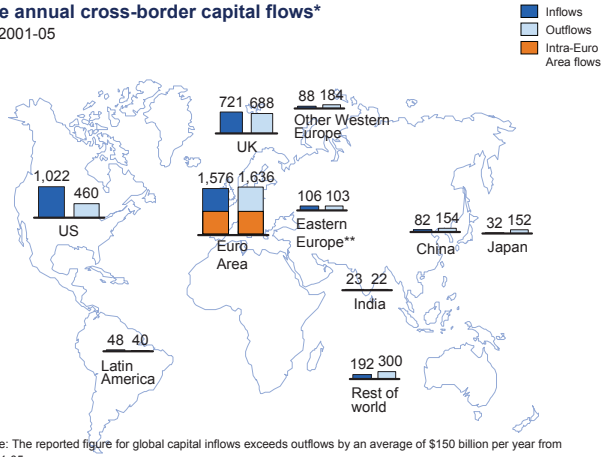
Note: Total net inflows exceed net outflows by ~$1 trillion due to data inconsistency - capital outflows are harder to track than capital inflows for the individual reporting countries.
Source: McKinsey Global Institute Global Capital Flows Database

11 See, for instance, Carmen Reinhart and Kenneth Rogoff, "Serial default and the "paradox" of rich-to-poor capital flows," *American Economic Review*, 2004, Vol. 94. No. 2, pp. 53-58; or Michael P. Dooley, David Folkerts-Landau and Peter M. Garber, "The revived Bretton Woods system: The effects of periphery intervention and reserve management on interest rates and exchange rates in center countries," 2004, NBER Working Paper No. 10332, Cambridge MA: National Bureau of Economic Research.

Most capital flows are between three financial hubs

Eighty percent of global capital flows are between three regions: the United States, the United Kingdom, and the eurozone. The United States plays the role of the world's financial intermediary, receiving mainly debt inflows but sending out equity and FDI outflows. Its capital inflows and outflows totaled roughly $1.5 trillion in 2005. Capital flows between the eurozone and the rest of the world were the same size. (In addition, cross-border capital flows within the eurozone totaled $1.7 trillion). Despite its relatively small domestic financial market, the United Kingdom is also an important global financial intermediary, particularly for cross-border bank lending. Its total inflows and outflows amount to $1.4 trillion each year. In contrast, despite having the world's third-largest financial market, Japan is strikingly isolated. Its capital flows are smaller even than those of China, despite the fact that China's stock of financial assets is only one-quarter the size of those of Japan.

Average annual cross-border capital flows*
$ billion, 2001-05

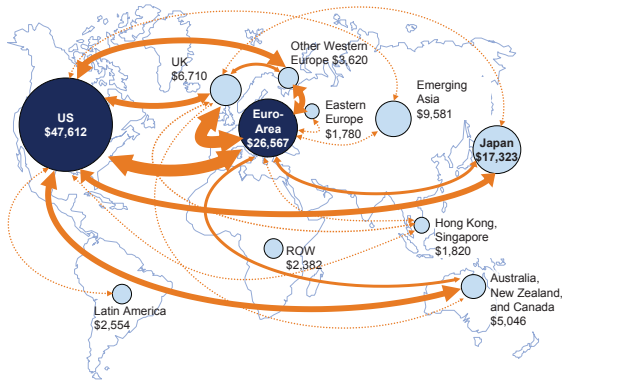


* Note: The reported figure for global capital inflows exceeds outflows by an average of $150 billion per year from 2001-05
** Includes Russia
Source: McKinsey Global Institute Capital Flows Database

A growing web of capital flows

Although cross-border capital flows remain concentrated between the world's financial hubs, money is increasingly flowing to and from other smaller parts of the global landscape as well. Since 1990, capital inflows to emerging markets have grown twice as fast as inflows to developed countries. Latin America and Eastern Europe have developed significant capital-flow links with the United States and the eurozone respectively. Perhaps more surprising is the fact that Asian countries have the largest links not with Japan or Hong Kong, but with the United States, the United Kingdom, and the eurozone, underscoring the lack of an integrated Asian financial market.

Map of cross-border financial holdings, 2004*
Figures in bubbles show size of total domestic financial assets 2005, $ billion



* Includes cross-border equity, debt, lending and foreign direct investment.
Source: McKinsey Global Institute Capital Flows Database

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