



\$118 Trillion and Counting:

Taking Stock of the World's Capital Markets



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Preface

This report is the end product of a year-long project by the McKinsey Global Institute (MGI), working in collaboration with our colleagues in McKinsey offices and practice groups around the world. This project is the latest in a decade-long series of MGI research efforts on the global capital market, which have produced a best-selling book—*Market Unbound* by Lowell Bryan and Diana Farrell (1996)—several widely discussed articles and reports, and ongoing dialogues with governments, financial institutions, and opinion leaders.

The global capital market is an integral part of MGI's research agenda focused on informing the transition to a global economy. Among the three most important types of markets—those for capital, products, and labor—the global capital market is the farthest along the road to true global integration (marked by the operation of an international law of one price) and the one of the three that could best stake a claim to being an independent, motive force. The global capital market is thus a critical driver of growth and wealth creation.

Tim Shavers, a senior expert with MGI and McKinsey's Strategy Practice, worked closely with me to provide leadership to this project and to MGI's other research efforts on the global capital market. Aneta Marcheva Key, an engagement manager in our Global Financial Institutions Practice based in San Francisco, managed the project team, playing a critical role in structuring the analysis, overseeing the research, and crafting this report. The full-time project team included: Ravi Arulanantham, a senior associate from the Cleveland office;

Maria McClay, a business analyst from the New York office; and Luka Repansek, a fellow associate from the Zagreb office. Essential research support was provided by Tim Beacom, MGI's dedicated research and information specialist, and Moira Sofronas, a knowledge professional in McKinsey's North America Knowledge Center. The team also collaborated with MGI fellows conducting research on related issues in the global capital market: Sacha Ghai, an engagement manager in our Global Financial Institutions Practice based in Toronto; Ezra Greenberg, a senior knowledge professional and leader in the Firm's North America Knowledge Center; Piotr Kulczakowicz, a senior knowledge professional in McKinsey's Strategy Practice based in Washington, D.C.; Carlos Ocampo, a knowledge professional in McKinsey's Brussels Knowledge Center; and Yoav Zeif, a senior associate from the Tel Aviv office. Terry Gatto, my executive assistant, and Denise Augenblick, our team assistant, provided critical administrative support.

We have benefited enormously from the extensive and thoughtful input received from our Academic Advisory Board members. Our board included Martin Baily, senior advisor to MGI and senior fellow at the Institute for International Economics and formerly chief economic advisor to President Clinton; Richard Cooper, professor of international economics at Harvard University; and Ken Rogoff, professor of economics and public policy at Harvard University and former chief economist at the International Monetary Fund. While building upon the methodologies and findings developed by MGI over the past decade, this project tackled new approaches and issues as well. We are heavily indebted to our advisors for their excellent contributions in helping develop our approach and conclusions.

The project was conducted under my direction, working closely with McKinsey colleagues around the world. As always, the findings and conclusions draw from the unique perspectives that our colleagues bring to bear on the issues and countries researched here. These perspectives are a product of intensive client work with the world's leading firms and financial system players, and offer a powerful window on the evolution of the global capital market. As with all MGI projects, this work is independent and has neither been commissioned nor sponsored in any way by any business, government, or other institution.

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.

Diana Farrell
Director, McKinsey Global Institute
February 2005

Executive Summary

Money makes the world go around. The global capital market has never been larger, more dynamic, or more diverse—nor its power greater to shape the wealth of nations. Understanding how the global capital market is evolving is essential for CEOs and CFOs raising capital, financial institutions seeking to shape the market, policy makers tasked with regulating it, and investors seeking to profit from it.

To develop such an understanding, the McKinsey Global Institute conducted an in-depth research effort into the global capital market and created a comprehensive database of the financial assets of more than 100 countries since 1980. Together, these assets comprise the *global financial stock*, or financial capital available for intermediation. Several key findings emerge.

First is the sheer size and breadth of the market. We calculate that the global financial stock now totals more than \$118 trillion and is on pace to exceed \$200 trillion by 2010. Just as important, the global financial stock has grown faster than world GDP, indicating that financial markets are becoming deeper and more liquid. The lion's share of this growth in the global financial stock has come from a rapid expansion of debt—a trend with both positive and negative implications, as we discuss in this report.

We also find that the roles of major countries and regions are in flux. The United States boasts nearly 40 percent of global financial stock and continues to act as the hub of the global capital market. Europe, however, is catching up, gaining market share and depth as the European Union expands and a pan-European

financial system develops. Meanwhile, Japan is fading fast, while China rises rapidly in importance. Across countries and regions, cross-border capital flows and holdings of financial assets continue to grow rapidly, linking individual financial markets together and creating an increasingly integrated global capital market, with the US dollar and US markets at its core.

We briefly outline these findings below. Readers interested in our detailed findings and analyses are directed to the global and regional chapters of this report. Those interested in our analytic approach and sources are directed to the introduction, appendix, and bibliography at the end of this report.

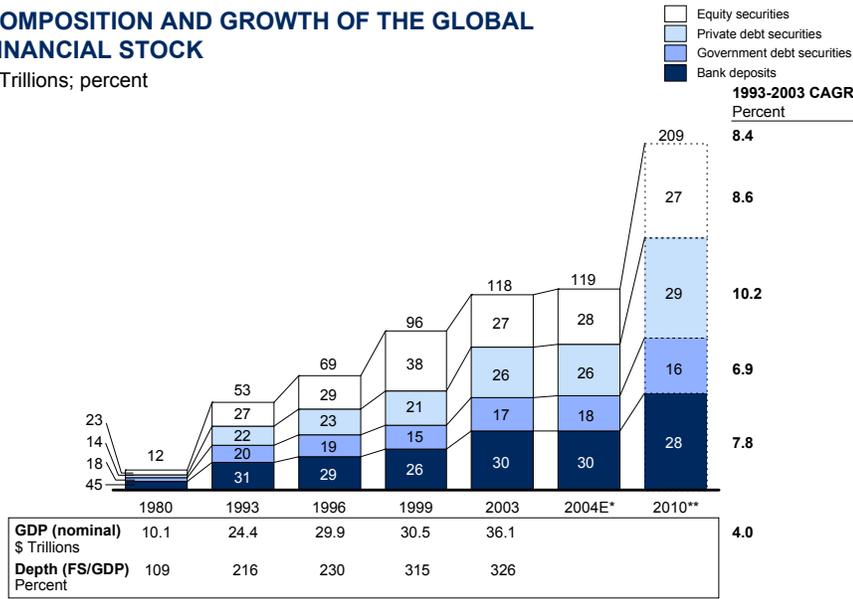
\$118 TRILLION AND COUNTING—GLOBAL FINANCIAL STOCK NOW THREE TIMES THE SIZE OF WORLD GDP AND GROWING FASTER

1. The total value of the global financial stock—including bank deposits, government and private debt securities, and equities—now stands at \$118 trillion, up from \$53 trillion in 1993 and just \$12 trillion in 1980. Simple extrapolations would have the market exceeding \$200 trillion by 2010 (Exhibit 1).
2. An important measure of the global capital market's development is its *depth*, or the ratio of the global financial stock to the size of the underlying global economy, as measured by world gross domestic product (GDP). Over the last twenty years, the depth of the global capital market has tripled: the global financial stock is now roughly three times the size of world GDP, while in 1980 the two were the same size.
3. Financial deepening appears likely to continue for the foreseeable future. The global financial stock has grown faster than the underlying economy over the long term—since at least 1980 when our data series begins. Moreover, there are no apparent near-term limits to continued deepening: the deepest countries—the US and the UK, for instance—continue to grow deeper, while many fast-growing economies—India and the countries of Eastern Europe, for instance—have the potential to deepen much further as their financial systems develop.

Exhibit 1

COMPOSITION AND GROWTH OF THE GLOBAL FINANCIAL STOCK

\$ Trillions; percent



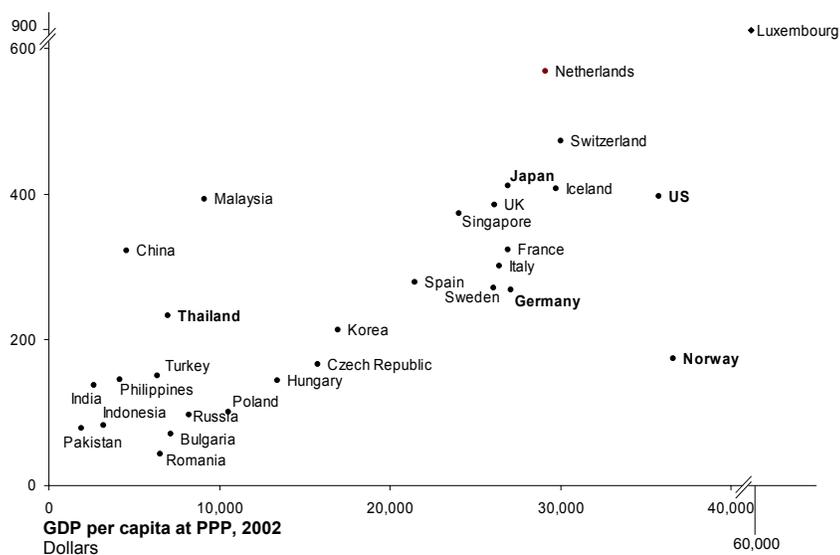
* Based on latest available data: September 2004 for equities, March/June 2004 for debt, June 2004 for bank deposits
 ** Extrapolation off of 2003 base, with components grown at 1993-2003 CAGRs
 Note: 2004E shares do not add to 100% due to rounding error
 Source: McKinsey Global Institute Global Financial Stock Database; World Federation of Stock Exchanges; Merrill Lynch; Global Insight

- Financial deepening is usually beneficial, giving households and businesses more choices for investing their savings and raising capital, and enabling more efficient allocation of capital and risk. However, financial depth alone does not indicate the strength of an economy. For instance, the financial depth of the Netherlands is twice that of Italy, although both countries have similar GDP per capita. Germany and Thailand, on the other hand, have similar financial depth at very different income levels (Exhibit 2).
- Nor does financial depth always mean a healthier financial system. The US and Japan offer a striking contrast: financial deepening has been driven in the US by increased private sector intermediation, but in Japan by rapid growth in government debt in the face of stagnant equity and private debt markets—a potentially unhealthy displacement of private sector intermediation by government debt, postponing liabilities to future generations. Deepening in other large markets, such as the UK and the eurozone, falls somewhere in between these two cases (Exhibit 3).

Exhibit 2

WEAK LINK BETWEEN FINANCIAL DEPTH AND WEALTH

2003 Financial stock
Percent of GDP

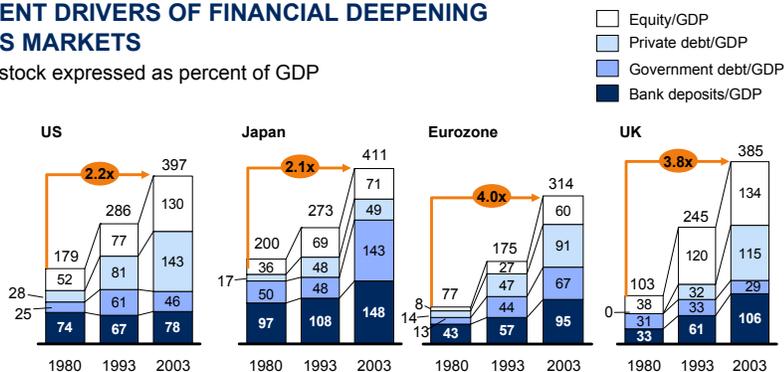


Source: McKinsey Global Institute Global Financial Stock Database; World Bank

Exhibit 3

DIFFERENT DRIVERS OF FINANCIAL DEEPENING ACROSS MARKETS

Financial stock expressed as percent of GDP



1980-2003 change	US		Japan		Eurozone		UK	
	Absolute*	Relative	Absolute*	Relative	Absolute*	Relative	Absolute*	Relative
Equity/GDP	78	36	35	17	52	22	96	34
Private debt/GDP	115	53	32	15	77	33	115	41
Government debt/GDP	21	10	93	44	54	23	-2	-1
Bank deposits/GDP	4	2	51	24	52	22	73	26
FS/GDP	218	100	211	100	237	100	282	100

* In percentage points: e.g., the US depth for 2003 was 397 and for 1980 was 179, yielding a 218-point increase
Note: Some numbers do not add up due to rounding error
Source: McKinsey Global Institute Global Financial Stock Database; Merrill Lynch; Global Insight

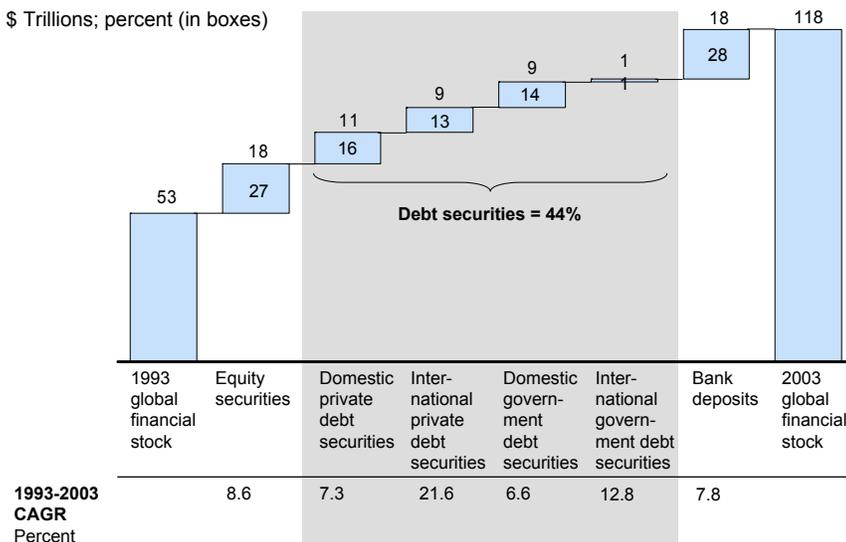
DEBT, DEBT, AND MORE DEBT—GLOBAL FINANCIAL STOCK SHIFTING AWAY FROM BANK DEPOSITS AND TOWARD DEBT SECURITIES

- Private debt securities are the largest component of the global financial stock and the fastest growing. Together with government debt, they account for nearly half of the overall growth in global financial assets between 1993 and 2002 (Exhibit 4). At the same time, *international* issues of private debt, while still small, have grown nearly three times as fast as *domestic* issues (20 percent versus 7 percent), reflecting the increasing globalization of capital as companies seek funding outside their domestic borders. Growth in private debt markets is a positive development for companies, and opens the door for further securitization of assets in the global capital market.

Exhibit 4

DEBT SECURITIES HAVE CONTRIBUTED 44% OF GLOBAL FINANCIAL STOCK GROWTH SINCE 1993

\$ Trillions; percent (in boxes)



Note: Increases do not add up to \$118 trillion and 100% due to rounding error
Source: McKinsey Global Institute Global Financial Stock Database

- The role of government and private debt securities in explaining the overall increase in debt varies across geographies. Increases in government debt account for all of the growth of debt in Japan, and nearly all in Italy and France. In contrast, growth of private debt securities is the primary factor in the UK. The United States and Germany, meanwhile, have seen relatively

even increases across three classes of debt: private, government, and asset-backed securities (ABS). ABS growth is driven by mortgages, and the US is at the forefront of the trend, with \$5.3 trillion of its \$9.9 trillion in mortgages packaged into securitized assets. In the future, other forms of consumer credit will increasingly be pooled and securitized, suggesting significant potential for future growth in this market.

3. Bank deposits have, since 1980, grown more slowly than the *tradable* asset classes (debt and equity securities). As a result, there has been a striking shift within the global financial stock from *bank intermediation* to market intermediation and from *non-tradable* bank loans to *tradable* debt and equity securities. In 1980, bank deposits were the dominant asset category, accounting for fully 45 percent of the global financial stock; today this share is just 30 percent. This shift toward tradable instruments is an important enabler of the continued integration of the global capital market.
4. Equities have grown faster than the overall financial stock over the long run, but with considerable year-to-year volatility: in 1999, with equity markets soaring, equities were briefly the largest asset class in the global financial stock with a 38 percent share—by 2003 this share had fallen back to 27 percent. Over the past decade, growth in equities has occurred through a combination of new issues, earnings growth, and increases in the price-to-earnings (P/E) ratio, with significant differences across countries. In the US, P/E increases since 1980 have been a meaningful source of equity stock growth, while in Europe growth has come mainly through increased earnings. Moreover, in the US, IPOs are a significant source of financial stock growth, while in Europe most newly floated shares come through privatizations.

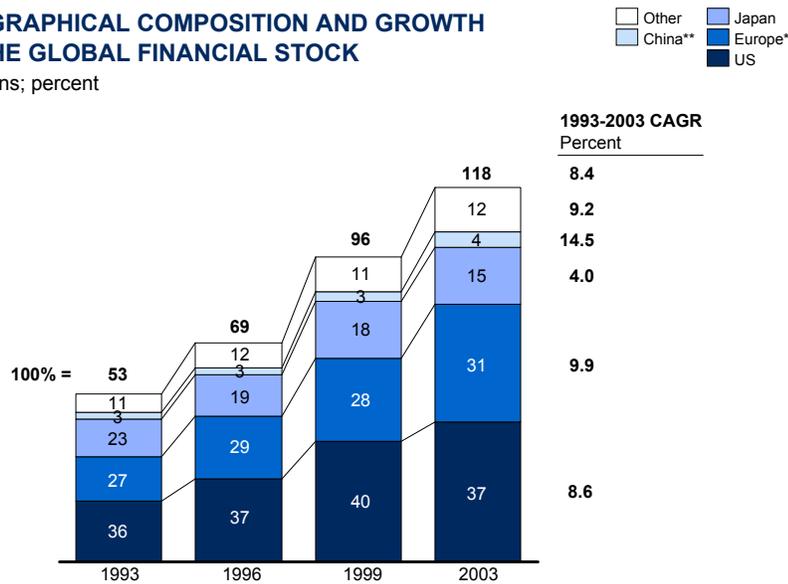
ROLES OF COUNTRIES AND REGIONS IN THE GLOBAL CAPITAL MARKET ARE IN FLUX

1. Three markets account for more than 80 percent of the world's financial stock: the US, Japan, and Europe. The United States plays a dominant role, with 37 percent of the global financial stock. With the creation of the euro, however, European financial markets are integrating and gaining share. Japan's financial markets, by contrast, are becoming less important in the global financial system, while China's are growing very fast. Financial markets

Exhibit 5

GEOGRAPHICAL COMPOSITION AND GROWTH OF THE GLOBAL FINANCIAL STOCK

\$ Trillions; percent



* Europe includes the UK, the eurozone (Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, and Spain), Switzerland, Sweden, Denmark, Norway, and Eastern Europe
 ** China also includes Hong Kong and Macao
 Note: 2003 shares do not add to 100% due to rounding error
 Source: McKinsey Global Institute Global Financial Stock Database

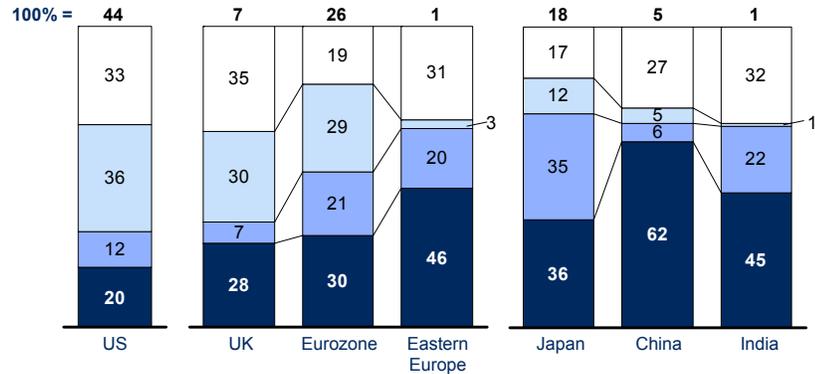
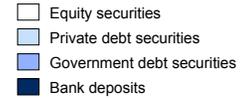
in the rest of the world—including India, Singapore, and Latin America—remain tiny in the global context (Exhibit 5).

- There are stark differences among these markets. The US market is dominated by private debt and equity markets. In Europe, by contrast, banks play a larger role in finance, although European debt capital markets are growing quickly. Asian financial markets are relatively isolated from each other and display important differences. Japan has the region's largest financial stock, but is slow-growing. China's financial stock is among the fastest-growing in the world but remains heavily reliant on bank intermediation—a concern given the fragility of China's banking system (Exhibit 6).
- Patterns of financial asset growth vary across geographies. In the US, initial public offerings of small companies are a significant source of equities growth, as are increases in P/E ratios. In Europe, by contrast, increases in earnings and newly floated shares from privatizations of state-owned firms explain most equity growth. In Japan, a huge expansion of government debt is the only meaningful source of financial stock growth, while the stock of

Exhibit 6

COMPOSITION OF FINANCIAL STOCK, 2003— THREE REGIONAL STORIES

\$ Trillions; percent



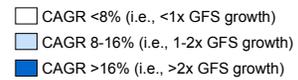
Depth (FS/GDP)	397	385	314	99	411	323	137
Percent							
CAGR	8.6	11.3	9.8	19.3	4.0	14.5	11.9
Percent							

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

Exhibit 7

REGIONAL VARIATION IN FINANCIAL STOCK GROWTH, 1993–2003

CAGR, percent



	US	UK	Eurozone	Eastern Europe	Japan	China	India
Equity securities	11	8	12	56	0	13	11
Private debt securities	11	21	11	26	0	18	0
Government debt securities	2*	5	8	17	12	28	14
Bank deposits	7	13	9	14	3	14	12

* The US Government debt securities stock grew much faster in 2002 (8%) and 2003 (11%)
Source: McKinsey Global Institute Global Financial Stock Database

equities and private debt securities has actually declined. In China, although bank deposits account for two-thirds of the financial stock, debt securities show the fastest growth (Exhibit 7).

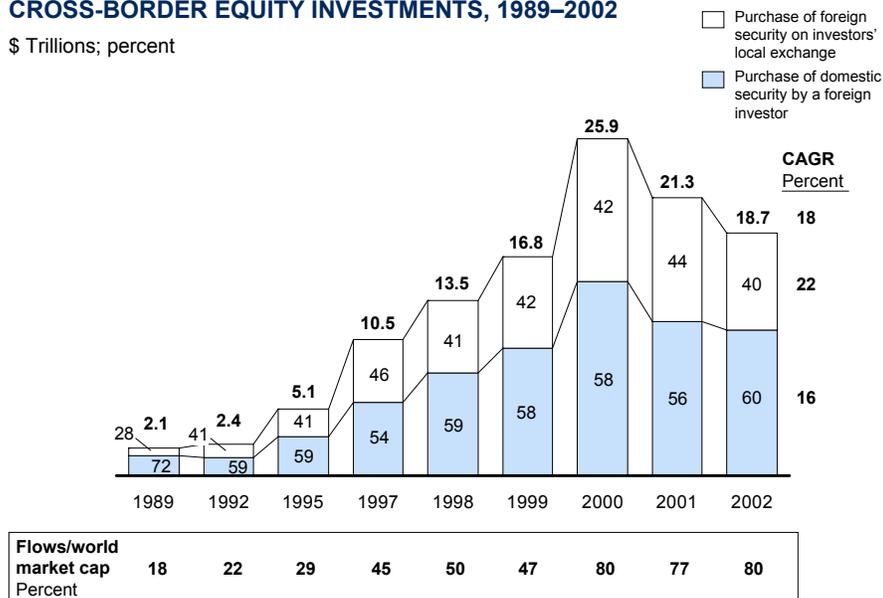
THE US DOLLAR AND US MARKETS REMAIN AT THE HUB OF A RAPIDLY INTEGRATING GLOBAL CAPITAL MARKET

1. With a few exceptions, it is no longer accurate to think in terms of national financial markets. Instead, individual markets are becoming increasingly integrated into a single global market for funding, as cross-border holdings of financial assets and cross-border flows of capital grow. For example, today foreigners hold 12 percent of US equities, 25 percent of US corporate bonds, and 44 percent of Treasury securities, up from 4 percent, 1 percent, and 20 percent, respectively, in 1975. Since 1989, cross-border equity flows have grown nearly tenfold, at 18 percent per annum. These flows now equal 80 percent of global equity market capitalization, up from just 18 percent in 1989 (Exhibit 8). This growth is clear evidence that despite the financial

Exhibit 8

CROSS-BORDER EQUITY INVESTMENTS, 1989–2002

\$ Trillions; percent



Source: CrossBorder Capital; S&P Emerging Markets Factbook

crises and anti-globalization backlash of recent years, the global capital market continues to integrate and develop.

- US markets remain at the core of this rapidly integrating and evolving global capital market. The lion's share of the world's cross-border capital flows are intermediated through US financial markets. The US is, by a wide margin, the largest destination market for cross-border equity flows from virtually every major country across the world. The UK comes in at a distant second, while Japan and continental Europe are smaller still (Exhibit 9).

Exhibit 9

CROSS-BORDER EQUITY FLOWS, 1999

Percent of investments from a given market going to a foreign market



Investor from	Investing to											Total \$ Billions
	US	UK	Neth.	Japan	Germ	France	Switz.	Spain	Italy	Scand.*	ROE**	
US	n/a	30	5	11	3	3	2	1	2	5	4	4,689
UK	21	n/a	13	7	13	13	6	4	1	6	3	5,667
Netherlands	28	23	n/a	3	9	11	3	1	4	3	9	285
Japan	69	8		n/a	1		2	1	1		-1	270
Germany	21	6	12	17	n/a	13	9	3	6	4	2	808
France	57	6	10	2	10	n/a	2	1		1	5	634
Switzerland	47	13	5	5	7	10	n/a	1	1	2	2	530
Spain	29	15	10	13	3	4	2	n/a	3	2	3	69
Italy	39	11	3	18	3	8	2	1	n/a	1	2	218
Scandinavia*	20	14	1	2	1	1	1		1	50	2	272
ROE**	38	3	27	13	1	6		1	1	1	3	462
Canada	82	4			1	6	1				1	209
Australia	63	8		4		8		1	1	1		35
Hong Kong	29	24	2	18		5	3	1	1	1	1	93
Singapore	46	11	1	15		4	5	1	1			85
Rest of world	89											2,504

* Sweden, Norway, Finland, and Denmark

** Rest of Europe: Austria, Belgium/Luxembourg, Greece, Ireland, Portugal, Turkey

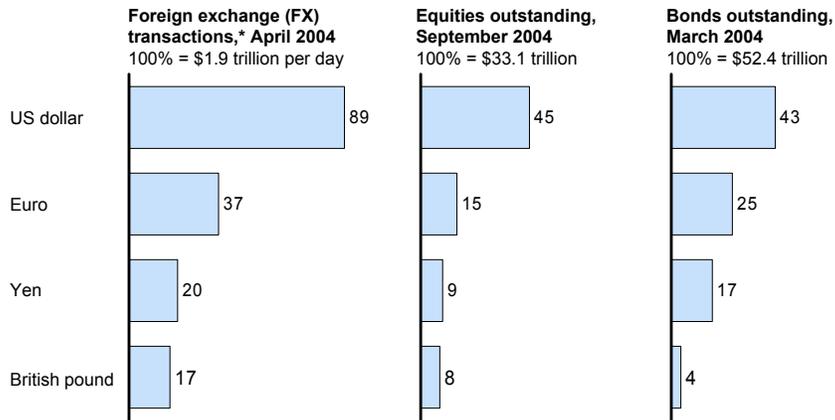
Source: Cross-Border Capital (unpublished data)

- Despite the recent decline in the value of the US dollar and growing talk of the euro replacing it as a global reserve currency, the dollar continues to dominate global finance. It is the world's most heavily traded currency and the preferred currency for issuing equities and bonds. Many other countries, including China and Malaysia, have tightly linked their domestic currencies to the US dollar. Although the euro is gaining notice among the world's central bankers, it is a long way from matching, let alone surpassing, the role of the dollar in international finance (Exhibit 10).

Exhibit 10

PREFERRED EXCHANGE CURRENCY FOR FINANCIAL PRODUCTS

Percent



* Because there are two currencies in a single FX transaction, the potential total is 200%; the share of other currencies comprise the remaining 37%
Source: McKinsey Global Institute Global Financial Stock Database; Federation of World Stock Exchanges; Bank for International Settlements (BIS)

1. Global Findings

Our report informs a longer-term, aggregate view of how the global capital market (GCM) is evolving across geographies and asset classes, and draws insights from the striking cross-regional contrasts we observe. We have analyzed the evolution of the global financial stock (GFS) since 1980.

In a nutshell, three cross-cutting themes come out of our research on a global level. First, the growth in the global financial stock far outpaces the growth in underlying GDP, resulting in financial deepening; while the global financial stock was similar in size to the world's GDP in 1980, today it is more than three times larger. We think that financial deepening is largely beneficial, but that depends on the specific forces in each country. Second, debt securities are the most important asset class in the global financial stock. They hold the largest share of GFS and have been steadily expanding over time. Within debt securities, the relative role of private and government securities varies across geographies; for example, government debt is a relatively small share of the US's and the UK's financial stock, but dominates Japan's. Third, the roles of the different regions in the GCM are shifting, reflecting the profound contrasts in size, composition, growth, and degree of integration. The US maintains a unique role in the GCM and bolsters its dominance in private debt and equity securities. Europe is integrating fast and is gaining global share across all asset classes. Japan is diminishing its global role in all assets but government debt, which has driven most of Japan's growth in financial stock. Lastly, China is now a force in the global capital market—while still relatively small overall, it controls a meaningful share of the global bank deposits.

This chapter illuminates our global level findings; it is organized in these sections:

1. Key findings
2. Context
3. Overall size, growth, and financial depth of the global financial stock
4. Asset composition of the global financial stock
5. Integration and regional composition of the global financial stock.

Subsequent chapters take an in-depth view of individual regions.

Interpretation of Our Results

We define financial stock as the sum of equity securities, private and government debt securities, and bank deposits. Thus, a financial stock represents the capital that is intermediated through the securities markets and the banking system in a given economy.

Two important distinctions underlie the findings in this report: intermediation by markets versus banks, and government debt securities versus other asset classes.

1. Market intermediation versus bank intermediation (also tradable versus non-tradable instruments)

The stock of equity and debt securities represents the degree of *market intermediation* in an economy, since they are the instruments used by the financial market to directly match up those who want to invest money with those who want to raise capital. Because equity and debt securities may be traded on the markets, we often refer to them collectively as *tradable instruments* (although depending on their liquidity and turnover, some securities may not be actually traded).

In contrast, the stock of bank deposits represents the degree of *bank intermediation* in an economy, since bank deposits are the capital that the banking system channels from savers to borrowers (simplistically speaking,

bank deposits fund bank lending). Since capital intermediated through the banks is less easily transferable than stocks or bonds, we refer to bank deposits as *non-tradable*.

In general, governments have greater ability to regulate the banking sector than they do the financial markets. Thus, the degree of government control over the financial system bears an important relation to the extent of bank intermediation.

Note: Our bank deposit numbers include a small amount of currency in circulation that does not conform to the definition of bank intermediation; however, it has minimal impact on our findings.

2. Government debt securities versus other asset classes

Equity securities, private debt securities, and bank deposits (which fund bank loans) are the main classes of instruments for intermediating capital between borrowers on one hand and investors and savers on the other. As these three elements of the financial stock increase, the economy becomes more efficient at allocating capital to its best use.

Government debt securities are quite different. They function more as an instrument to redistribute taxes across generations than as a means to allocate capital from savers to borrowers. Although a well-developed market for government debt securities supports the development of a private debt securities market, government debt does not *directly* help firms to raise capital and grow.

The distinction between government debt and the other asset classes is not always clear cut. For example, in some developing countries the government may direct bank lending, support bank balance sheets, control corporate activity, or guarantee corporate debt. In such cases, a portion of bank deposits and corporate debt may be a disguised form of government debt.

Because of such differences across asset classes, cross-regional comparisons are meaningful only when the size of a financial stock is understood relative to its *composition*. For example, a large financial stock dominated by government debt securities is a sign of a high degree of future generation liabilities, rather than a sign of more efficient capital allocation.

1. GLOBAL KEY FINDINGS

The global capital market continues to grow and deepen, driven largely by private debt. It is becoming more liquid and integrated, but striking differences exist across regions.

- **The GCM continues to grow and deepen.** The global financial stock has vastly expanded and in 2003 reached an unprecedented magnitude of \$118 trillion, up from \$12 trillion in 1980, and \$53 trillion in 1993.¹ Further, its growth outpaces the growth in world GDP. While in 1980 the global financial stock was roughly equal in size to world GDP, by 2003 it had grown to more than three times the size of world GDP. Financial depth—defined as the ratio of GFS to GDP—has grown across all major asset classes, especially private ones, in a process that accompanies economic market development.
- **Private debt securities contribute most to this growth.** Private debt securities are the largest asset class within the GFS and are growing faster than equity securities and bank deposits. In contrast, government debt securities are the smallest GFS asset class (17 percent of GFS) and have grown the slowest since 1993.
- **The global financial stock is becoming increasingly liquid.** The share of bank deposits in the GFS has shrunk since 1980 from 45 percent to 30 percent, while the share of tradable instruments—debt and equity securities—has increased.
- **The GCM continues to integrate.** Cross-border holdings and cross-border flows are increasing. For example, today 12 percent of US equities, 25 percent of US corporate bonds, and 44 percent of Treasury securities are foreign owned (up from 4 percent, 1 percent, and 20 percent, respectively, in 1975). Debt issues are increasingly more international and equity portfolio flows are growing as investors buy more stocks abroad and as foreign companies make their shares available locally.

¹ All dollars are current US dollars. All growth rates are nominal growth rates based on financial stock numbers expressed in current US dollars; thus, they reflect inflation and exchange rate shifts.

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- **Countries vary significantly** in their financial stock evolution, composition, and growth. For example, bank deposits make up 20 percent of the financial stock of the US and 62 percent of China's; Japan's equity market has stagnated, while that of Eastern Europe has grown by 56 percent per year.
 - **There is a shift in the relative importance of the key regions.** Within the three regions we analyze—the US, Europe, and Asia—there are a few subregions of global importance. The US, the eurozone, Japan, and the UK account for 80 percent of the GFS. While much smaller, China and Eastern Europe are growing rapidly and may contribute meaningfully to GFS within 10 years.
 - **The US** plays a unique role in the GCM not only as the largest financial market (37 percent of GFS), but also as a global capital hub and conduit of capital. The relative importance of the US in total private debt and equities securities has increased, and reached 51 percent global share of private debt and 45 percent in equities in 2003. At the same time, the US share of government debt and bank deposits has dropped to 25 percent each. The US dollar maintains its unique position as the world's reserve currency despite its recent depreciation.
 - **Europe** is the second largest region (31 percent of GFS) and is gaining strength through integration, although it still remains a collection of different markets. The eurozone constitutes two-thirds of Europe's financial stock and is undergoing monetary integration, the UK acts as the European financial hub, Switzerland is a global private bank, and finally, Eastern Europe is one of the hot growth spots in the global financial stock. Europe's global share in each of the asset classes has increased modestly and has reached levels between 28 and 34 percent.
 - **Asia** is a region made up of markets that are both relatively isolated and very different, with Japan dominating two thirds of the region's financial stock and China driving the region's financial stock growth. Japan is losing global share in all asset classes but government debt securities. China has amassed a sizeable share of global bank deposits (9 percent) and is experiencing financial deepening across all asset classes.

2. GLOBAL CONTEXT

The current era of global capital market development was launched in the 1970s with the breakdown of the fixed exchange rate system and capital flow controls that had been in place since the end of World War II. That earlier system comprised a collection of largely independent national financial markets. In the late 1970s, floating exchange rates replaced the old system, and prices for instruments across borders came to be determined by capital market activity.²

To provide context for the evolution of this market since 1980, we first highlight a few select facts around the world economy, recent developments in the financial markets, and the degree of integration of the financial system.

Economic facts

The global economy reached \$36 trillion in GDP in 2003, up from \$24 trillion in 1993 and \$10 trillion in 1980. The average nominal world GDP growth between 1993 and 2003 was 4 percent per year, with significant year-to-year variations.³ The top three economies of the world—the US, the eurozone, and Japan—make up 65 percent of global GDP. At \$11 trillion GDP, the US is the largest national economy in the world and growing robustly (5.1 percent average annual growth in the 10 year period). The eurozone is now the second largest economy in the world, with 2003 GDP of \$8.2 trillion and average growth of 3.5 percent for the period. Finally, Japan's 2003 GDP reached \$4.3 trillion, but its 10 year average nominal growth is 0 percent, despite recent economic revival (Exhibit 1).

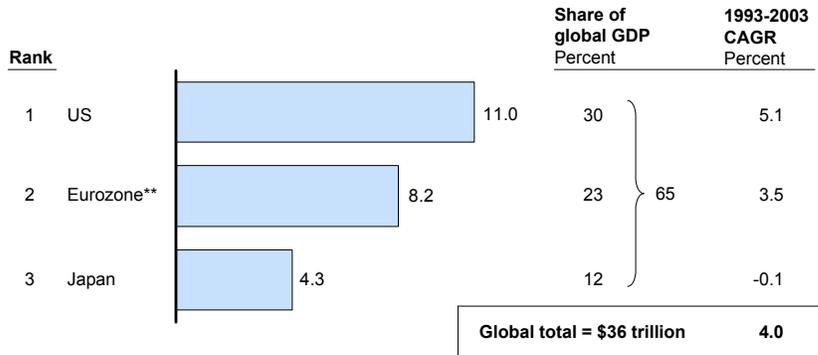
² The official date of the demise of the Bretton Woods Accord is August 15, 1971. However, the changes in the international financial system were more gradual. After the Bretton Woods Accord came the short-lived Smithsonian Agreement and European Joint Float, both of which failed in 1973. Governments then moved to pegged, semi-pegged, or freely floating currencies. In 1978, the free-floating system was officially mandated by the International Monetary Fund. In addition, it is important to note that the eurodollar market had an important role in the process of integration and free capital flows. The market developed in the 1950s as a result of Russia's having kept its dollar-denominated oil revenues in the UK to avoid US jurisdiction of its deposits. These dollar deposits funded loans less regulated than those originating in the US.

³ All GDP growth figures in this report are in nominal terms.

Exhibit 1

NOMINAL GDP OF TOP THREE CONTRIBUTORS TO GLOBAL ECONOMY, 2003

\$ Trillions*



* All dollars throughout this report are US dollars

** We use Europe as a comparative region in this report, including the eurozone, the UK, Switzerland, Sweden, Denmark, Norway, and all of Eastern Europe; the combined 2003 GDP of these countries was \$12.1 trillion, or 33% of the global GDP, with 4.4% 1993-2003 CAGR

Source: Global Insight; MGI analysis

Recent developments

Over the past 10 years, financial markets experienced multiple financial crises (Latin America, Asia, Russia), shocks (the equity market bubble), and scandals (derivatives, corporate governance, insider trading, mutual funds). At the same time, transaction costs have continued to fall due to improvements in technology and communications (automated trading platforms, 24 hour trading spanning time zones and geographies, etc.). In addition, derivative markets and, more broadly, financial innovation have continued to thrive and to address a greater range of investor needs.

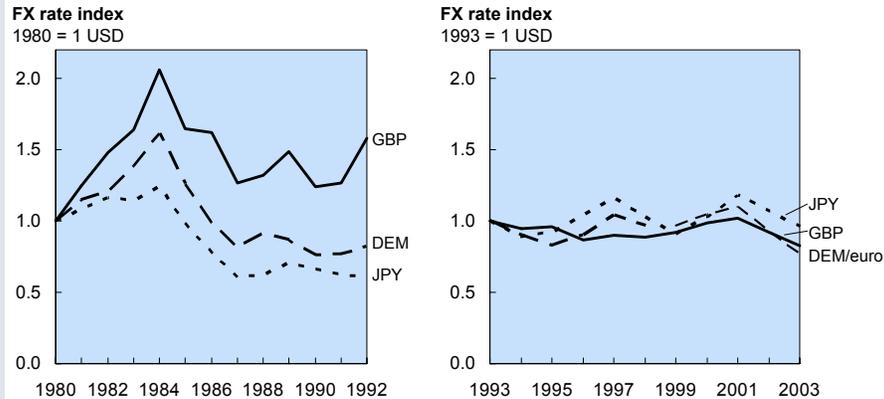
Foreign Exchange Rate Fluctuations

We express the financial stock of all countries in US dollars (to aggregate the national stocks on a global level), so foreign exchange rate dollar fluctuations against major currencies play a role in our findings on the relative size and growth of financial stock among regions in the global capital market.

Overall, exchange rate fluctuations since 1993 have been tamer than the 1980s. However, the US dollar has significantly depreciated against the euro, the British pound, and the Japanese yen since end-2001. Consequently, our findings potentially overstate the growth rates and relative sizes of the eurozone, the UK, and Japan, since these reflect not only the growth and size of the underlying financial stock in local currency, but also the impact of currency rate translation (Exhibit 2).

Exhibit 2

FOREIGN EXCHANGE RATES AGAINST THE US DOLLAR



Exchange rate USD equivalent	Exchange rate	
	2001	2003
GBP*	1.45	1.79
EUR*	0.89	1.25
JPY	131.80	107.10

* Expressed conventionally; the chart has these values converted in terms of 1 USD = X foreign currency units
Source: International Monetary Fund (IMF) International Financial Statistics exchange rates – national currency per US dollar (end of period average)

To illustrate the impact of foreign exchange fluctuations, the 32 percent annual growth of eurozone bank deposits, expressed in US dollars 2001–2003, can be disaggregated into 10.3 percent annual growth in underlying bank deposit stock expressed in euros and 19.7 percent of annual growth in the foreign exchange rate of the euro against the dollar.

Financial integration

Significant integration developments include the formation of the European Union (EU), its single currency and enlargement accords, and the continued financial liberalization and entry into a market-based economy of a large segment of the world (for example, the demise of command economies in Eastern Europe, China's shift toward a socialist market economy, India's economic liberalization). The harmonization processes surrounding the EU led to steps toward standardization of legislation and upgrades in the investment infrastructure (e.g., trading platforms, settlement and clearing systems), which facilitate greater capital market integration. The introduction of the euro as a single currency and the removal of the corresponding currency risk have further facilitated capital market integration.

3. OVERALL SIZE, GROWTH, AND DEPTH OF THE GLOBAL FINANCIAL STOCK

The global capital market continues to grow across all asset classes. This section provides an overview of the size, growth, and depth of the global financial stock, then describes the process of deepening.

Size, growth, and depth

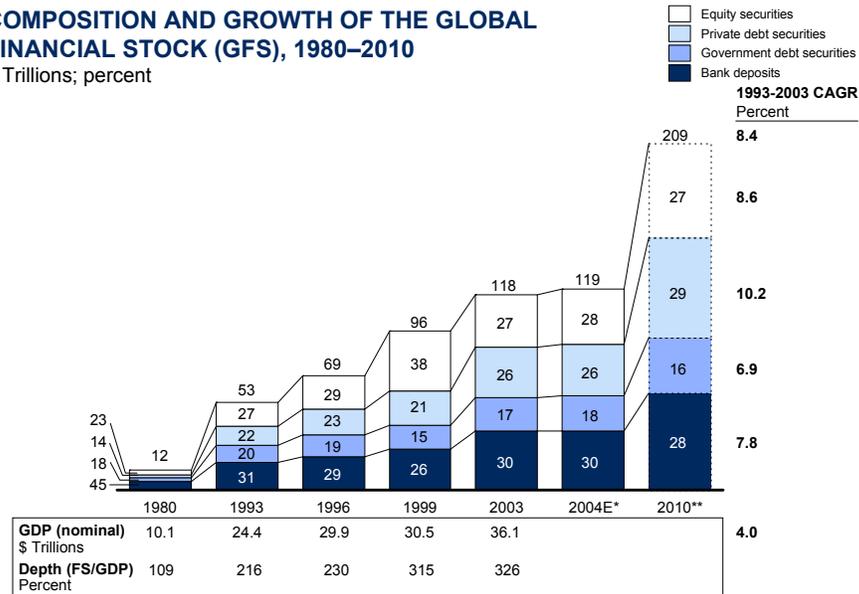
Our research shows the global financial stock reached \$118 trillion in 2003, up from \$53 trillion in 1993 and \$12 trillion in 1980. Simple extrapolations would have the market exceeding \$200 trillion by 2010 (Exhibit 3).

In addition to growing in absolute numbers, the global financial stock has grown relative to the underlying economy. While in 1980 the global capital market was roughly the size of global GDP (109 percent of GDP), it was double the size of global GDP by 1993 (216 percent), and more than triple the size of global GDP by 2003 (326 percent). Between 1993 and 2003, the global financial stock grew on average at 8.4 percent, more than twice as fast as the growth in global GDP of 4.0 percent. The differential growth rates of the global financial stock and world GDP result in financial deepening—a measure of the financialization of the global economy, quantified as the ratio of financial stock

Exhibit 3

COMPOSITION AND GROWTH OF THE GLOBAL FINANCIAL STOCK (GFS), 1980–2010

\$ Trillions; percent



* Based on latest available data: September 2004 for equities, March/June 2004 for debt, June 2004 for bank deposits
 ** Extrapolation off of 2003 base, with components grown at 1993-2003 CAGRs
 Note: 2004E shares do not add to 100% due to rounding error
 Source: McKinsey Global Institute Global Financial Stock Database; World Federation of Stock Exchanges; Merrill Lynch; Global Insight

to underlying GDP (expressed either as percent of GDP or multiple of GDP; Exhibit 3).⁴

Financial deepening

Why is financial deepening occurring? Is it a healthy development? And will it continue? Overall, deepening occurs as economies and financial systems develop and it is a sign of improved financial intermediation. This beneficial process is largely driven by growth in bank deposits, equity securities, and private debt securities. Government debt deepening, on the other hand, represents an increase in liabilities that have been postponed to future generations.

⁴ This ratio of financial stock to GDP is frequently used despite the fact that the financial stock is a “stock” concept, while GDP is a “flow” concept. While some analyses utilize fixed capital stock as a better stock comparable, we have chosen to use GDP because the measurement and understanding of gross fixed capital formation on a global scale are challenging. There are alternative definitions of financial deepening in the economic literature, for example as broad as money to GDP or credit to GDP, especially in developing countries where securities markets have not yet developed.

Why deepening occurs

Financial systems develop through the creation of institutions, instruments, and mechanisms that allow for intertemporal transfer of savings (or consumption) and efficient allocation of the savings pool available to investment opportunities. In other words, some households can postpone consumption and invest their savings, while other households, businesses, and governments can draw from these invested savings to raise capital and/or borrow money to fund attractive opportunities. In some developing markets, the only available savings instrument is a bank account and the only source of external funding is a bank loan. In developed markets, however, households can invest their savings in many instruments—bank accounts, stocks, bonds, or funds that repackage them—and borrowers can go to a bank, issue bonds, or raise equity in the public markets. Both investors and borrowers have greater choice in developed markets, which allows for better allocation of capital and risk.

Thus, equity securities, private debt securities, and bank deposits (which fund bank loans) facilitate capital intermediation and improve capital allocation. In contrast, government debt securities facilitate the redistribution of taxes across generations and, to a lesser degree, support the development of the private debt securities market.

Further, the development of a financial system and the inherent increase in financial instruments lead to financial stock growth beyond the growth of GDP. Many actions of businesses, governments, and households can increase financial stock independent of an increase in the real economy (Exhibit 4 lays out a framework for growth components by asset class and stakeholder). Within this framework, regions exhibit different patterns of financial deepening (see Section 4).

- **New equities.** The stock of equity securities increases both through businesses participating in the markets (i.e., privately held businesses going public, or publicly traded companies floating additional shares) and through government privatizations with their public offerings. In both cases, the financial stock increases independent of an increase in GDP (since the companies were already contributing to the GDP). What changes, however, is that the company is no longer under specific private or state control, but

Exhibit 4

FRAMEWORK FOR COMPONENTS OF FINANCIAL STOCK GROWTH

Asset class	Growth component	Impacted by actions of		
		Government	Business	Households
Equity securities	• Privatizations	X		
	• New stock issues		X	
	• Earnings growth		X	
	• P/E growth			X
Debt securities	• Increased government debt	X		
	• Increased private debt		X	
	• Securitization		X	
Bank deposits	• Increase in bank deposits (savings)		X	X
	• Increase in currency*			X

* Currency is very small relative to bank deposits

is under more general market control and its shares can be easily traded and valued.

- **Earnings and price-to-earnings ratio (P/E).** The value of the equity stock reflects the changing profitability, prospects, and risk assessment of publicly traded companies—i.e., the earnings and P/E. As equity valuations are forward looking, changes in expectations about the future can affect the value of the financial stock independent of GDP, which reflects only current activity.
- **Debt, government and private.** The stock of debt securities increases through issuance of government debt by governments and through increased issuance of private debt by businesses and financial institutions, without a direct link to underlying GDP. For example, if a person buys a house with a mortgage that the bank funds through issuing a mortgage-backed security (MBS), the net result is that an investor who bought the MBS has provided funding to the person who bought a house, without any underlying increase in GDP.

-
- **Securitization.** In addition, the debt financial stock increases through the process of securitization, which converts non-tradable loans into tradable debt instruments. Securitization in the US has increased the available capital for mortgages, which is otherwise constrained by the lending capacity of banks and thrifts. This makes home ownership more affordable, but again, there is no direct link to GDP.
 - **Bank deposits.** The stock of bank deposits is impacted by households' decisions about how much to save and hold in bank deposits, and by businesses' decision about how large cash reserves (bank deposits) to build up.⁵

Benefits of financial deepening

While there is a general connection between the degree of economic development and financial depth, it is important to note that financial depth alone offers no indication either of the strength of any given economy or of the strength of its financial system. To illustrate, the financial depth of the US is more than twice that of Norway, although both countries have similar GDP per capita; Germany and Thailand have similar financial depth at greatly different income levels; also Japan, with a troubled financial system, exhibits very significant financial depth. In general, markets with similar per capita income and financial depth fall into clusters of financial system development, which illustrate the high-level link between financial system development and GDP levels⁶ (Exhibit 5).

Financial deepening appears to be largely beneficial.

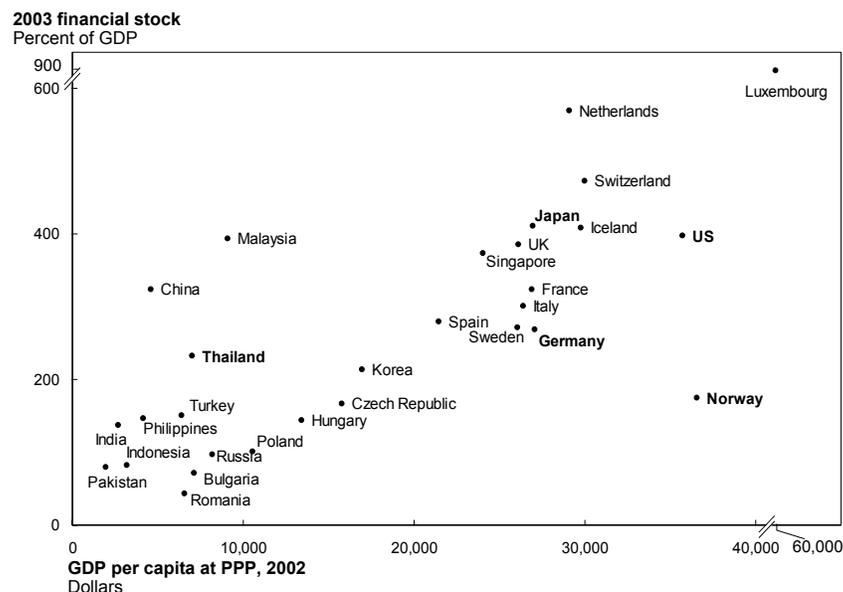
- **Financial deepening indicates improved access to capital.** Deeper financial systems tend to have a greater variety of financial institutions and instruments, providing users of capital with more choice and access. In

⁵ Our bank deposit numbers include a small amount of currency in circulation that does not conform to the definition of bank intermediation, but it has minimal impact on our findings.

⁶ Academic research has also established the link between financial system development and economic growth. For an overview of research see for example Farrokh Nouzad, "Financial development and productive efficiency," *Journal of Economics and Finance*; Volume 26, Number 2, Summer 2002.

Exhibit 5

LINK BETWEEN FINANCIAL DEPTH AND INCOME



Source: McKinsey Global Institute Global Financial Stock Database; The World Bank

countries like Chile, pension reforms have led to capital accumulation and financial deepening: residents are required to save and accumulate retirement assets, pension funds have become powerful institutional investors managing the growing retirement asset pools, and companies have gained easier access to the equity markets funded by these pools.

- **Financial deepening can improve allocation of risks.** More instruments and institutions allow for better matching of risks to appropriate risk takers. MBS in the US have allowed banks and thrifts to repackage their assets in a way that fits the risk requirements of new classes of investors, for example, insurance companies that are limited to investment-grade instruments. Given the long duration of both insurance liability and mortgage assets, MBS better match the risk profile of insurance companies than that of banks funded with short-term deposits.

Yet, in some instances, financial deepening may be accompanied by undesirable outcomes for the economy, as seen in price bubbles and excessive debt.

-
- **Financial deepening caused by asset price bubbles is unhealthy**, as market corrections can be painful. For example, in the case of equity valuations driven up by investor hype, the eventual burst can have serious consequences for the economy (as in a drop in aggregate demand, increased bankruptcies, and the like). The well-publicized crises in Japan, Southeast Asia, and Russia all had a negative impact on the underlying economies. The 1990s' equity market bubble in the US illustrates that even the most developed market is susceptible to negative activity, although the depth of the financial system prevented grave economic consequences. In addition, even before the burst, the wealth effect driven by rising asset prices and monetization of this new wealth can theoretically contribute to inflation. Unfortunately, it is very difficult to predict *ex ante* when a run up in asset prices represents a bubble.
 - **Deepening caused by excessive leverage can be problematic.** Some degree of leverage (that is, debt burden) is desirable and beneficial for the economy, as it can fund value-creating projects and allow for intertemporal transfer of income. However, while markets are self-correcting—for example, pricing debt higher or even cutting off access to funding for those with higher leverage—individual instances of debt defaults can result in bankruptcy. One worrying instance of financial deepening is government debt expansion: excessive government debt can lead to economic stagnation because it can crowd out private lending and hamper growth; in its extreme, it can trigger a costly financial crisis (as it did in Argentina and Mexico, for example).

Prospects for further deepening

It is difficult to posit any natural limit to financial deepening. Given that the underlying growth components have not been exhausted, deepening is likely to continue for the foreseeable future in both developed and developing markets.

- **Privatizations and IPOs.** More firms (theoretically all) could become publicly traded through privatizations and IPOs. While in the US only a few remaining government-owned entities could potentially be privatized (for example, the postal service), other countries (China, Mexico, even France) still have significant state business ownership. Though cyclical, the IPO market in the

US is robust and is supported by a solid financial system and the venture capital industry. As more financial systems develop and make going public a viable funding option, IPOs should increase in developing economies.

- **Securitization** has room for expansion in terms of geography and available securitizable asset pools and classes. Securitization has largely been a US phenomenon. While Germany has long used a form of securitization, other European issues have become more significant only in recent years.⁷ Finally, adoption in other parts of the world has been low. In many countries the mortgage loan markets, which fuel the securitization process, have great potential if developed. To put this in perspective, as of June 2004, total mortgages in the US reached \$9.9 trillion, or 85 percent of GDP;⁸ in contrast, Mexico's mortgage market represents only 5 percent of GDP. Further, \$5.3 trillion of US mortgages were securitized, suggesting potential for further growth of securitized issues both in the US and globally. In the same way that mortgages were followed by car loans in the asset-backed securities universe, potentially all loan types could be pooled and securitized in the future.
- **Pension funds** are growing fast in countries that recently have made pension system reforms, but are still low relative to GDP (for example, Mexico, Argentina, and Brazil all have less than 15 percent of GDP in private pension fund assets); by contrast, in the US pension funds reached 63 percent of GDP in June 2004.⁹ Thus, pension funds are another potential growth vehicle to accumulate savings and contribute to financial deepening in many countries.

⁷ Securitization in the form of Pfandbriefe instruments has been an important factor in the German financial stock growth; see Chapter 3 for details.

⁸ Federal Reserve Flow of Funds, Table L.217 for mortgage levels and Bureau for Economic Analysis for June 2004 GDP data.

⁹ Includes \$4.3 trillion in private defined benefit plans and defined contribution plans (including 401(k) type plans), \$2.0 trillion of state and local government employee retirement funds, and \$1.0 trillion in federal government retirement funds. Federal Reserve Flow of Funds, Tables L.119, L.120, and L.121 for retirement levels and Bureau for Economic Analysis for June 2004 GDP data.

4. ASSET COMPOSITION OF THE GLOBAL FINANCIAL STOCK

Our research aggregates four asset classes—equity securities, private debt securities, government debt securities, and bank deposits—and reveals interesting patterns of evolution over the past two decades.

- **Bank deposits.** The share of bank deposits in total global financial stock has shrunk, especially during the 1980s. In 1980, bank deposits made up 45 percent of the global financial stock; however, since the 1990s, the share of bank deposits has leveled out at 30 percent of GFS. Bank deposits' growth rate of 7.8 percent is lower than both the overall GFS growth of 8.4 percent and that of equity and private debt securities (8.6 and 10.2 percent, respectively), illustrating the long-term shift away from non-tradable financial assets to tradable ones (Exhibit 3). This trend is pronounced in most regions of the world, even in countries like China, where bank deposits still constitute the majority of the country's financial stock.
- **Equity.** In 1999, at the height of the equities market bubble, equity securities were the largest asset class in the global financial stock with 38 percent share. Since then, their share has fallen to 27 percent in 2003. The growth in equity securities stock has come through a combination of new issues, P/E increases, and earnings growth, with significant differences across countries. In the US, P/E increases since 1980 have been a meaningful source of equity stock growth, while in Europe growth has come mainly through earnings increases.¹⁰ Moreover, in the US, IPOs are a significant source of financial stock growth, while in Europe most newly floated shares come through privatizations (Exhibits 3, 6–7).
- **Private debt.** The share of private debt securities in the total global financial stock has almost doubled from 14 percent in 1980 to 26 percent in 2003. Private debt securities are the fastest-growing asset class, growing at 10.2 percent annually and contributing 29 percent of the total increase in the GFS over the past 10 years. Private debt securities have driven growth in the UK and US, and securitization has been an important factor in the US (Exhibits 3, 8–9).

¹⁰ However, this analysis is highly sensitive to start and end point as the P/Es are very volatile. In fact, the difference between the US and Europe is that after a P/E rally in the 1990s, the European P/Es largely reverted to 1980 levels, while US P/Es remained relatively high.

Exhibit 6

REGIONAL DIFFERENCES IN GROWTH COMPONENTS OF EQUITY SECURITIES STOCK, 1980–2003

Percent contribution to growth



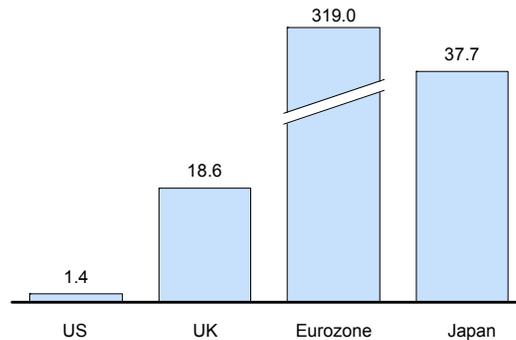
	US	UK	France	Germany	Italy	Japan
New issues	19	15	12	10	21	5
P/E-driven growth	36	9	4	4	0	5
Earnings-driven growth	45	76	84	86	79	90
CAGR	10	11	15	13	15	10

Source: McKinsey Global Institute Global Financial Stock Database; Datastream; Compustat; Bureau of Labor Statistics (BLS)

Exhibit 7

PRIVATIZATION OF STATE-OWNED ENTERPRISES THROUGH PUBLIC SHARE OFFERINGS*, 1993–2001

\$ Billions



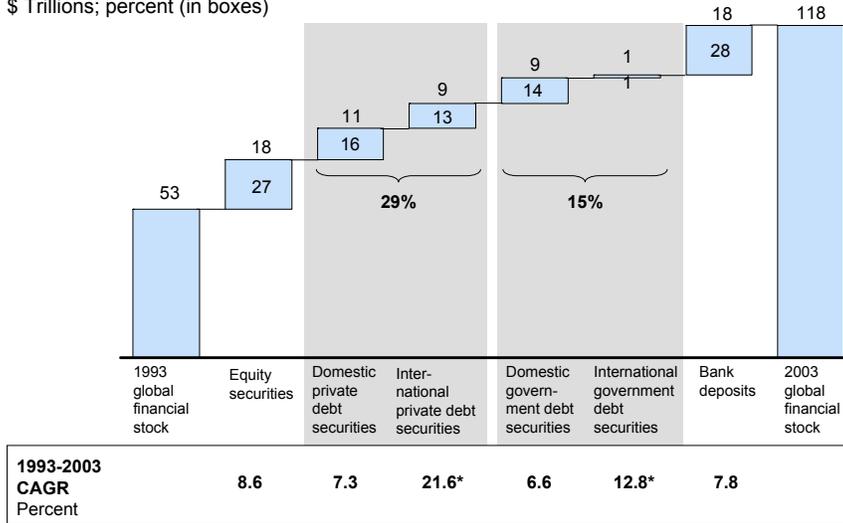
	US	UK	Eurozone	Japan
As share of GDP	0.01	1.3	4.9	0.8
Percent				
Share of all IPOs	0.1	20	76	>90
Percent				

* New issues from privatizations calculated as (total privatization proceeds to government) * (share of proceeds coming from new stock issues); data on total privatization proceeds covered 1993-2001, and data on share of proceeds covered 1990-1999
Source: Organization for Economic Cooperation & Development (OECD); IMF

Exhibit 8

CONTRIBUTION TO GLOBAL FINANCIAL STOCK GROWTH BY ASSET CLASS, 1993–2003

\$ Trillions; percent (in boxes)



* Combined growth of total international securities was 20%
 Note: Increases do not add up to \$118 trillion and 100% due to rounding error
 Source: McKinsey Global Institute Global Financial Stock Database

Exhibit 9

REGIONAL DIFFERENCES IN GROWTH COMPONENTS OF DEBT SECURITIES FINANCIAL STOCK, 1980–2003

Percent contribution to growth



	US	UK	France	Germany	Italy	Japan
Increased government debt	22	14	61	35	59	75
Increased private debt	42	82	39	29	39	24
Securitization	36	4	<1	36*	2	1
CAGR	12	13	14	12	14	12

* Almost all of it Pfandbriefe
 Source: McKinsey Global Institute Global Financial Stock Database; Datastream; Compustat; BLS; Deutsche Bundesbank-Capital Market Statistics

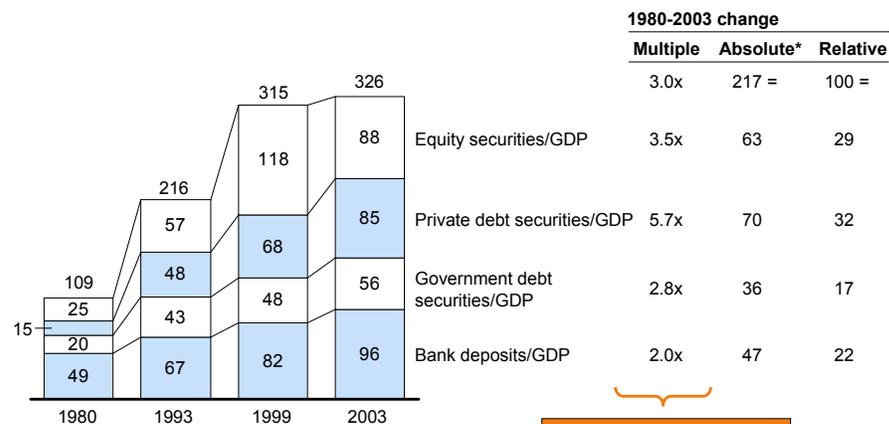
- Government debt.** Government debt securities are the smallest asset class in the global financial stock (17 percent in 2003) and have grown the most slowly over the past 10 years (6.9 percent). In contrast to the 1980s when government debt expansion drove total financial stock growth, it has contributed only 15 percent of the total increase in the GFS over the past 10 years. Over the same period, government debt securities have been the predominant source of growth in Japan, while their role in the US and UK has been small (Exhibits 3, 8–9).

Finally, all asset classes have grown relative to global GDP. Private debt has increased the fastest relative to GDP (the ratio of private debt securities to GDP increased nearly sixfold, from 15 percent of GDP in 1980 to 85 percent in 2003); and private debt has contributed the most to the increase of financial depth. In contrast, government debt securities depth increased the least, from 20 percent of GDP in 1980 to 56 percent in 2003 (Exhibit 10). Significant geographical differences are discussed in the next section.

Exhibit 10

COMPONENTS OF GLOBAL FINANCIAL DEPTH, 1980–2003

Financial stock expressed as percent of GDP



GFS is 3x deeper in 2003 than in 1980 driven largely by growth in private debt and equity

* In percentage points: e.g., the global depth for 2003 was 326 and for 1980 was 109, yielding 217 points increase
 Note: Some numbers do not add up due to rounding error
 Source: McKinsey Global Institute Global Financial Stock Database; Global Insight

5. INTEGRATION AND REGIONAL COMPOSITION OF THE GLOBAL FINANCIAL STOCK

Below the surface of the global aggregated picture of the GFS, there are interesting patterns in the relative importance and differential evolution of the regions comprising the GCM. Since the McKinsey Global Institute Global Financial Stock Database contains detailed data on 100-plus individual countries, we are able to take various views on a country and regional level.

In this section, we highlight the shifting regional composition of the GFS, some major contrasts across geographies, and the key findings from each of our in-depth regional analyses. We begin with a short discussion on capital market integration.

Integration

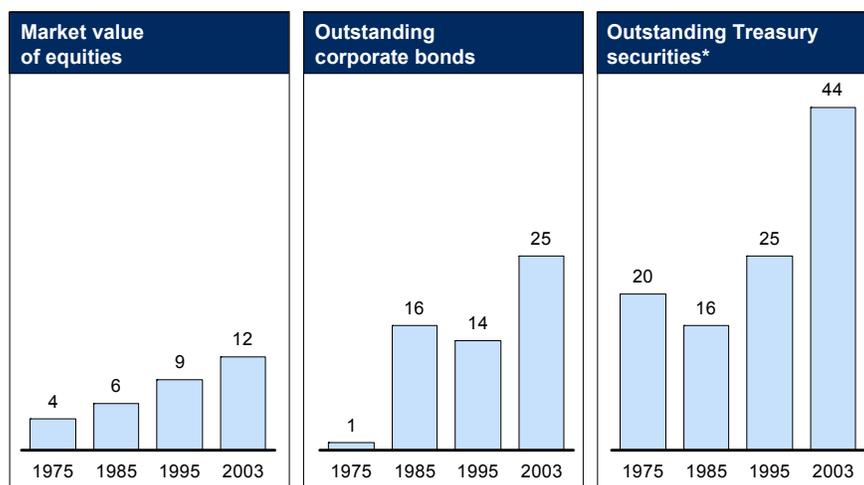
Despite major political and economic developments, financial crises, and a globalization backlash, the integration of the global capital market continues, as attested by cross-border activity, increased flows, and indications of price convergence.

- **Cross-border holdings** are growing. For example, the share of US financial assets owned by foreign investors has increased for equities, Treasuries, and private bonds. Even investment in domestic securities reflects capital deployed internationally for multinational corporations. One fourth of the US market cap is attributable to profits from foreign subsidiaries (Exhibits 11–12).
- **Cross-border flows** in both debt and equity are increasing. Debt issues are increasingly more international (that is, partially or entirely issued abroad). In fact, international debt has grown at three times the rate of the total financial stock while its share of total debt securities worldwide has grown from 3 percent to 9 percent. Equity portfolio flows are also increasing as investors buy more stocks abroad (cross-border equity flows) and as foreign companies make their shares available locally (e.g., through ADRs and cross listings; Exhibits 13).
- **Price convergence**, the ultimate sign of market integration, is also taking place. The foreign exchange markets were the first to integrate, and today arbitrage opportunities even in exotic currencies are instantly cleared by the market. In addition, burgeoning derivatives markets are linking regional

Exhibit 11

FOREIGN-OWNED US SECURITIES, 1975–2003

Percent



* Excluding Treasury securities held by the monetary authority
Source: Federal Reserve Flow of Funds

Exhibit 12

MARKET VALUE OF FOREIGN INCOME OF US MULTINATIONAL CORPORATIONS, 2002

\$ Billions

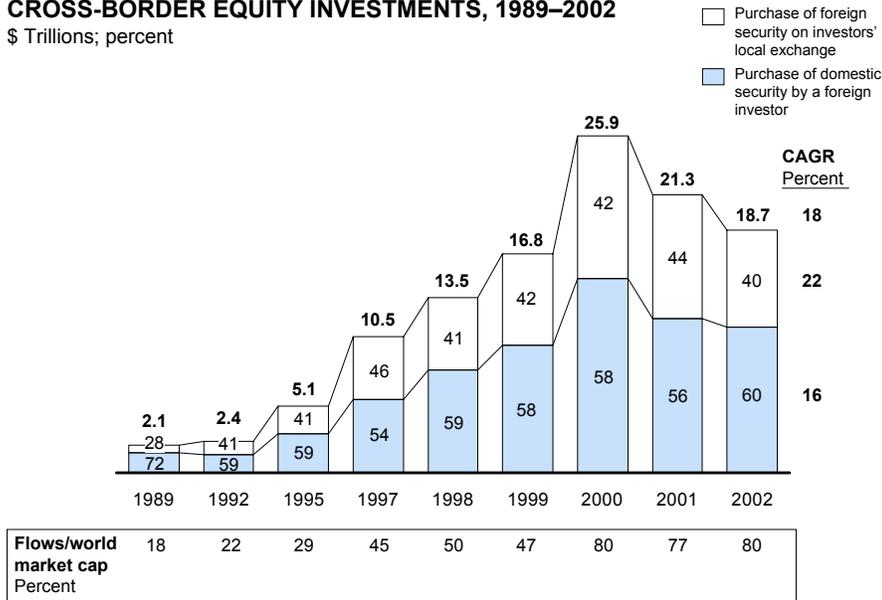
Industry	Income from foreign affiliates	Applied P/E ratio	Market value of foreign income*
Manufacturing	31.3	23.4	732.4
Finance**	16.3	15.8	257.5
Petroleum**	10.2	15.4	157.1
Wholesale trade	13.2	17.6	232.3
Services and information**	3.2	21.2	67.8
Mining**	10.2	21.2	216.2
Other***,****	49.8	21.2	1055.8
	\$134.2 billion		\$2.7 trillion = ~1/4 of total US market cap

* As measured by income receipts from foreign affiliates, multiplied by relevant industry median or index P/E ratio
** P/E ratios calculated by averaging 2001-2004 industry medians, to remove cyclicality
*** Includes utilities, agriculture/forestry/fishing, construction, retail trade, real estate, transportation, management of nonbank companies and enterprises, accommodation, health care, and miscellaneous
**** Source: Bureau of Economic Analysis (BEA); Standard & Poor's (S&P) Analysts' Handbook Supplement; MGI analysis

Exhibit 13

CROSS-BORDER EQUITY INVESTMENTS, 1989–2002

\$ Trillions; percent



Source: CrossBorder Capital; S&P Emerging Markets Factbook

markets across geographies; derivatives' notional principal value outstanding reached \$149 trillion in 2003, up from a mere \$9 trillion in 1993.¹¹

Regional composition of the global financial stock and shifting roles

While each national market represents an interesting and unique story, from a global point of view, only a few regions dominate the GFS, in terms of size and growth. Understanding the dynamics in these few regions provides the context of the global capital market evolution.

- **Size.** Only a handful of regions can be said to move the needle. Four regions—the US, the eurozone, the UK, and Japan—account for 80 percent of the GFS, with the US contributing 37 percent of total. Interestingly, despite the attention paid to it, Latin America accounts for only 2 percent of the GFS.¹²

¹¹ International Swaps and Derivatives Association Market Survey. Note that derivatives are not included in our global financial stock figures.

¹² Latin America here is defined as Latin American countries with 2002 financial stock exceeding \$20 billion and includes Brazil, Mexico, Argentina, Chile, Colombia, Peru, and Venezuela.

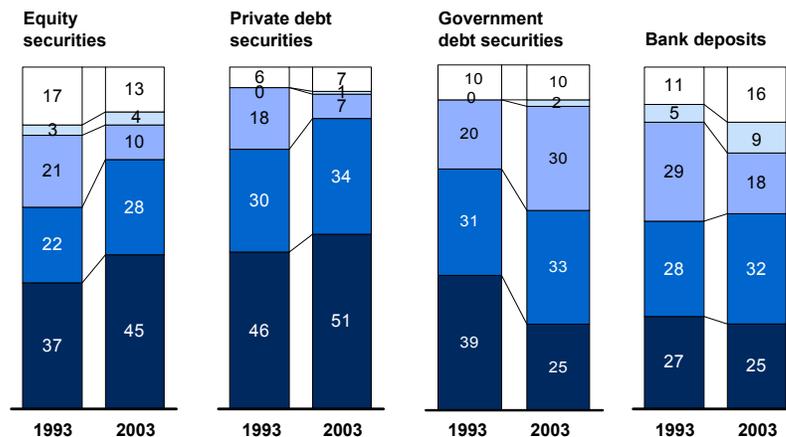
- Growth.** Several growth hot spots are shaping the evolution of the GFS. Specifically, China and parts of Europe are growing rapidly and may gain meaningful GFS shares within a decade. China is growing at 14.5 percent annually, and its global share of financial stock is increasing, especially in bank deposits where China's share has grown from 5 percent to 9 percent over the past 10 years. Eastern Europe is growing at 19.3 percent, fueled by brisk GDP growth of 8.9 percent per year since 1993, rapid development of the financial system, and integration with the rest of Europe. Finally, within the eurozone, we find high growth rates (in the range of 15 to 21 percent) in Spain, Ireland, Greece, and Portugal.

Differential growth rates lead to shifting importance in the GFS: the US remains a dominant player, especially in private debt and equity securities where it continues to gain share, but its role in the global government debt securities is shrinking; Europe is gaining global share across all asset classes; Japan is losing ground in all asset classes but government debt securities; and China is increasing its share across assets from a low starting point and already holds a formidable share of the global bank deposits (9 percent; Exhibit 14).

Exhibit 14

GEOGRAPHIC COMPOSITION OF THE GLOBAL FINANCIAL STOCK BY ASSET CLASS

Percent



Source: McKinsey Global Institute Global Financial Stock Database

Regional differences

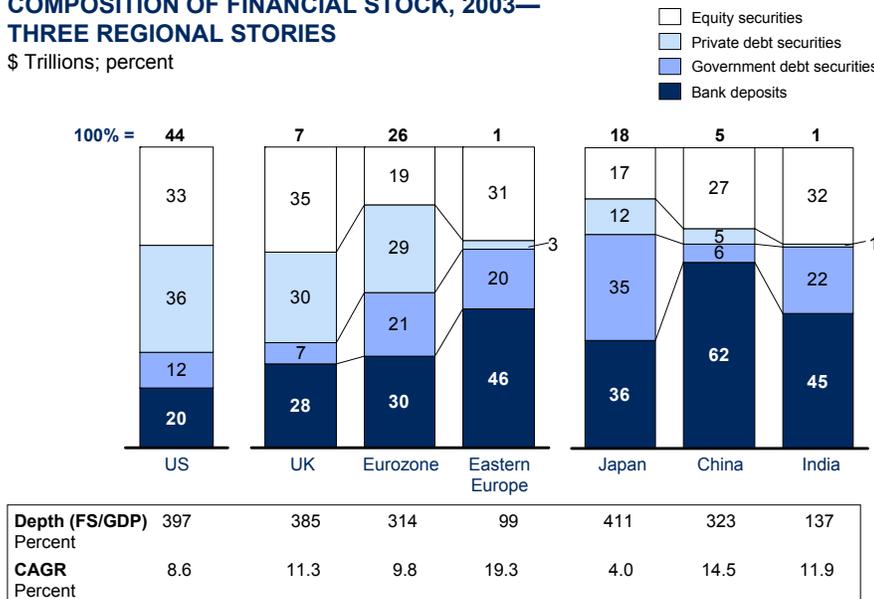
Regions vary significantly in asset composition, growth rates, and financial deepening.

- Asset composition.** The US exemplifies a market-dominated system, with only a 20 percent share of bank deposits. On the other end of the spectrum is China, with clear banking system dominance (62 percent share of bank deposits). Other countries we have analyzed fall across the full spectrum in between (Exhibit 15).

Exhibit 15

COMPOSITION OF FINANCIAL STOCK, 2003— THREE REGIONAL STORIES

\$ Trillions; percent



- Growth of asset classes.** Differential growth rates by asset class across countries can be seen in a "heat map." For example, private debt and equity securities in Eastern Europe are hot, growing at 26 and 56 percent, respectively. In contrast, Japan's private debt and equity markets are stagnant, as they have remained unchanged over the past 10 years (Exhibit 16).

Exhibit 16

REGIONAL VARIATION IN FINANCIAL STOCK GROWTH, 1993–2003

CAGR, percent

CAGR <8% (i.e., <1x GFS growth)
 CAGR 8-16% (i.e., 1-2x GFS growth)
 CAGR >16% (i.e., >2x GFS growth)

	US	UK	Eurozone	Eastern Europe	Japan	China	India
Equity securities	11	8	12	56	0	13	11
Private debt securities	11	21	11	26	0	18	0
Government debt securities	2*	5	8	17	12	28	14
Bank deposits	7	13	9	14	3	14	12

* The US government debt securities stock grew much faster in 2002 (8%) and 2003 (11%)
 Source: McKinsey Global Institute Global Financial Stock Database

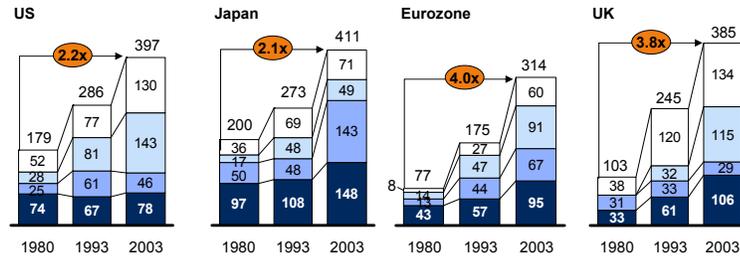
- Financial deepening.** On one hand, the regions vary vastly in their overall depth levels: the US, the UK, and Japan have reached significant depths (397 percent of GDP in the US and 411 percent in Japan); while the eurozone, Eastern Europe, China, and India have lower financial depths. On the other hand, the nature of financial deepening is even more telling when making cross-regional comparisons. Despite the similar overall depths of the US and Japan, the nature of the financial depth in the two countries is strikingly different: Japan's deepening has been a product of government debt expansion and a stagnant GDP, while the US deepening resulted from an expansion of private securities during a period of robust economic growth. In fact, most of the deepening (86 percent) in the US has come through private debt and equity securities, while in Japan exactly the opposite has occurred, with 80 percent of the deepening coming from bank deposits and government debt securities (Exhibits 15, 17).

Exhibit 17

REGIONAL VARIATION IN FINANCIAL DEPTH, 1980–2003

Financial stock expressed as percent of GDP

Equity/GDP
Private debt/GDP
Government debt/GDP
Bank deposits/GDP



1980-2003 change								
	US		Japan		Eurozone		UK	
	Absolute*	Relative	Absolute*	Relative	Absolute*	Relative	Absolute*	Relative
Equity/GDP	78	36	35	17	52	22	96	34
Private debt/GDP	115	53	32	15	77	33	115	41
Government debt/GDP	21	10	93	44	54	23	-2	-1
Bank deposits/GDP	4	2	51	24	52	22	73	26
FS/GDP	218	100	211	100	237	100	282	100

* In percentage points: e.g., the US depth for 2003 was 397 and for 1980 was 179, yielding a 218-point increase
 Note: Some numbers do not add up due to rounding error
 Source: McKinsey Global Institute Global Financial Stock Database; Merrill Lynch; Global Insight

* * *

The remainder of this section lays out the key findings for each of these regions while the subsequent chapters describe our regional-level findings in detail (thus, the reader may directly go to the chapters of interest, which contain these same summaries plus the detailed discussion behind them).

US KEY FINDINGS

- **Size and growth.** The US accounts for the largest share of the global financial stock (37 percent of total GFS). The total US financial stock is now \$44 trillion, more than double its size of 10 years ago and nearly nine times its size in 1980. The doubling over the past 10 years reflects a growth rate of 8.6 percent per annum since 1993, in line with the overall global rate of 8.4 percent.
- **Depth.** The size of the US financial stock relative to US GDP has increased from 179 percent in 1980, to 286 percent in 1993, to 397 percent in 2003. This depth exceeds that of the eurozone, but it is close to the depth in Japan. However, in contrast to Japan where the depth is largely driven by government debt expansion, the US financial depth is driven by the growth of private debt and equity securities.
- **Asset composition.** The US exemplifies the dominance of market-based financing and private securities. In contrast, bank intermediation and government debt securities play a smaller role than in the rest of the world.
 - **Private debt securities** are the largest asset class in the US financial stock (36 percent, compared to global average of 26 percent) and have grown faster than any other asset class (slightly more than 11 percent between 1993 and 2003). Two related processes have accelerated private debt securities growth: securitization and the activities of government-sponsored enterprises (GSEs).
 - **Equity securities** are the second largest asset class in the US (33 percent, which is higher than the global average of 28 percent) and have grown at 11 percent over the same period, with significant fluctuations. The increase in equity stock came mainly from earnings growth, but P/E increases and IPOs also have contributed meaningfully.
 - **Bank deposits** represent only 20 percent of the US financial stock, a much smaller share than the world's average of 30 percent. Further, they have grown more slowly than private debt and equity securities.
 - **Government debt securities** form the least important asset class in the US financial stock, with 12 percent share (as compared to 18 percent global share). They have grown at a mere 2 percent per year since 1993,

despite recent rapid expansion. The government has contributed modestly to the growth of US financial stock since 1980 (11 percent of increase), and even less since 1993 (only 4 percent).

- **Role in the global capital market.** The US acts as the hub in the global capital market. The US is a large, very liquid, deep, developed, and growing market fueled by the robust economic growth of the largest consumer economy in the world and by the special role of its currency. The US attracts the lion's share of cross-border equity flows, and foreigners hold an increasing share of its financial stock.

EUROPE KEY FINDINGS

- **Size and growth.** With 31 percent share, Europe is the second largest region in the global capital market behind the US. Europe's financial stock has reached \$37 trillion in 2003, up from \$3 trillion in 1980 and \$14 trillion in 1993. This increase over the past 10 years reflects a growth rate of 9.9 percent, which exceeds that of the US and the world (8.6 and 8.4 percent, respectively).
- **Depth.** The depth of Europe's financial stock has increased considerably from 84 percent of GDP in 1980, to 182 percent in 1993, to 306 percent in 2003; however, the current figure falls short of the US depth of 397 percent. Depth varies across countries within Europe. The UK and the Netherlands have reached financial depth of 385 and 569 percent, respectively, reflecting their hub roles, while the financial depth of Eastern Europe is only 99 percent, reflecting the developing nature of its financial system.
- **Asset composition.** Bank deposits and private debt are the most important asset classes in Europe's financial stock, with respective shares of 30 and 28 percent of total. Unlike the US, Europe's financial stock comprises a higher share of bank deposits and government debt securities, and smaller shares of private equity and private debt securities (24 and 18 percent, respectively). Private securities have grown fastest since 1993 (11.5 percent for private debt and 11.0 percent for equity securities). In contrast, government debt securities have grown slowest, at 7.6 percent.

-
- **Growth components.** The contribution of individual growth components to overall financial stock increase varies at the country level. Governments made the greatest contributions to growth in debt securities outstanding in France and Italy (61 and 59 percent, respectively) while the private sector made the greatest contributions in the UK and Germany (82 and 65 percent, respectively). Securitization (in the form of Pfandbriefe) was a meaningful contributor to growth only in Germany.

Equities grew mostly through increase in earnings (from 76 percent of equity growth in the UK to 86 percent in Germany), while new issues made a modest contribution (ranging from 10 percent in Germany to 21 percent in Italy). Privatization of state-owned enterprises has been the primary source of new issues in the eurozone, and has also contributed to IPOs in the UK. Finally, increases in P/Es have made only a limited impact on financial stock growth between 1980 and 2003.

- **Subregional composition.** We see four interesting stories within Europe:
 - The eurozone contributes 69 percent of the financial stock and is integrating through its single currency. The geographic composition of eurozone's financial stock reveals the dominance of its largest economies (Germany, France, and Italy), the emerging role of the Netherlands as a regional debt hub, and the fast growth of smaller economies (Spain, Ireland, Greece, and Portugal).
 - The UK, with 19 percent of Europe's total financial stock, is Europe's financial hub and plays a unique role in the global capital market, especially for foreign exchange and Eurobonds. Like the US, the UK's financial stock is dominated by equities and private debt securities. What is unique to the UK is the large share of international private debt securities, illustrating its hub role in Europe.
 - Switzerland is Europe's (and the world's) private bank. The financial stock of the country is only half the size of assets under management.
 - Eastern Europe is one of the growth hot spots in the global capital market, growing at almost 2.5 times the global rate (19.3 percent versus 8.4 percent). It will likely be a source for additional growth for Europe in

the future as its financial systems develop and its depth converges to Western European levels.

ASIA KEY FINDINGS

- **Size and growth.** After growing slower than the global average rate over the past 10 years (6.0 percent versus 8.4 percent per year), and thus consistently losing share in the global financial stock, Asia now commands 23 percent (\$27 trillion) of the global financial stock. Growth rates vary widely within Asia, with Japan at 4.0 percent per year, Korea at 11.2 percent, and China at 14.5 percent.
- **Depth.** Similar to other regions, Asia's depth has increased from 230 percent in 1993 to 330 percent in 2003. However, the drivers behind this deepening, as well as its significance, are quite different in the various parts of Asia.
- **Asset composition.** Compared to the US and Europe, bank deposits constitute a higher share of Asia's total financial stock, accounting for 41 percent of total. Government debt securities and equity securities represent 26 and 22 percent, respectively. Private debt securities are the smallest asset class with 11 percent share of total.
- **Growth components.** In contrast to the US, where equity and private debt securities drove the increase in financial stock, in Asia bank deposits and government debt securities were the dominant growth components, contributing 42 and 40 percent of the total financial stock increase since 1993, respectively.
- **Regional composition.** The four countries in Asia we analyzed in depth, Japan, China, India, and Korea, have each experienced different developments over the past two decades:
 - **Japan** remains an important part of the global capital market, although its role is rapidly diminishing. Within Asia, it has the anchoring role in Asia's financial system, accounting for two thirds of the entire Asian financial stock. The bulk of Japan's financial stock growth comes from government debt expansion (growing at 12 percent per year, or three times the overall

growth rate of Japan's financial stock), while the equity and private debt securities markets have stagnated.

- **China** has emerged as an important player in the global capital market. It is one of the global growth hot spots, growing nearly twice as fast as the world average (14.5 percent per year since 1993) and gaining global share in every asset class. Further, it commands a meaningful share of the global bank deposits (9 percent) and has become the country with the second largest financial stock in Asia (\$5.1 trillion, or 19 percent of Asia's total).
- **India** is often compared to China for its rapid economic development. However, in the context of the global financial stock, the importance of India is still not apparent: its financial stock is one sixth that of China, its depth is a fraction of China's (137 percent of GDP versus 323 percent), and it grows at a slower pace (11.9 percent versus 14.5 percent). This finding is surprising given India's Anglo-Saxon heritage and institutional setup.
- **Korea** is also behind China in the context of the global financial stock, despite its relatively well-developed capital markets. Korea's financial stock is the third largest in Asia, accounting for 5 percent of the total (while China's share is 19 percent). Korea has recovered from the financial crises in the region and has seen its financial stock grow at a brisk 11.2 percent per year between 1993 and 2003.