McKinsey Global Institute

# $118 Trillion and Counting:

## Taking Stock of the World's Capital Markets

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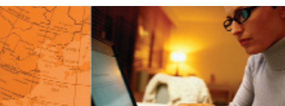

The McKinsey Global Institute (MGI) was established in 1990 as an independent research group within McKinsey & Company, Inc., to conduct original research on important global issues. Its primary purpose is to develop insights into global economic issues and reach a better understanding of the workings of the global economy for the benefit of McKinsey clients and consultants.

From time to time the institute issues public reports. These reports are issued at the discretion of MGI's director and its McKinsey Advisory Board when they conclude that the institute's international perspective and its ability to access McKinsey's knowledge of industry economics enable it to provide a valuable fact base to policy debates. The McKinsey Advisory Board is made up of McKinsey partners from Europe, the Pacific Basin, and the Americas.

The institute's staff members are drawn primarily from McKinsey's consultants. They serve 6- to 12-month assignments and then return to client work. MGI also commissions leading academics to participate in its research. The McKinsey Global Institute is based in San Francisco and has a presence in Washington, DC, New York and Shanghai.  MGI research fellows are based around the world as needed for individual research projects.

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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.

As always, the findings and conclusions draw from the unique perspectives that our McKinsey 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.

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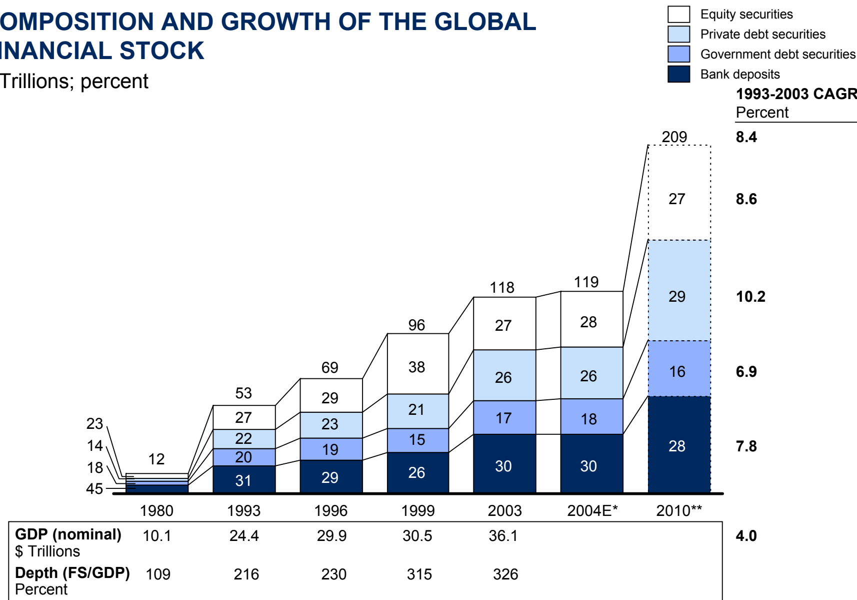
## $118 TRILLION AND COUNTING—GLOBAL FINANCIAL STOCK NOW THREE TIMES THE SIZE OF WORLD GDP AND GROWING FASTER

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**




* 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

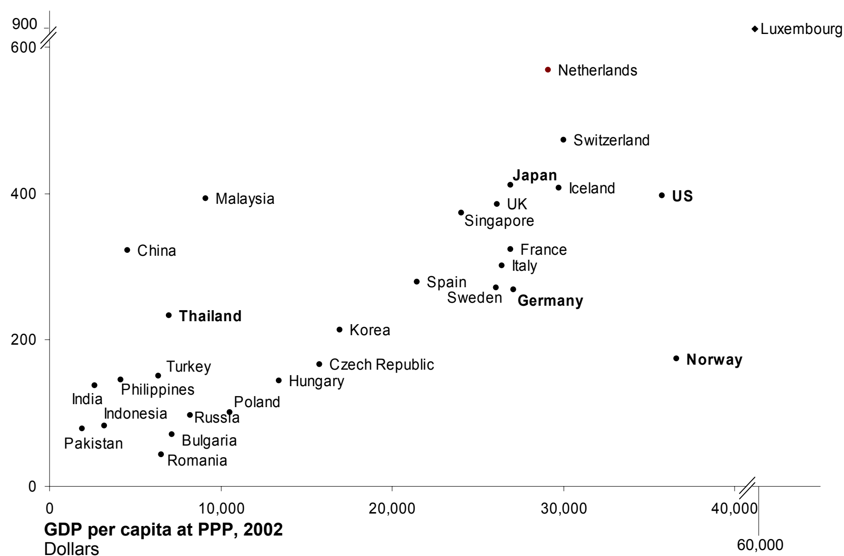
4. Financial deepening is usually beneficial, giving households and businesses more choices for investing their savings and raising capital, and enabling more efficient allocation of capital and risk. However, financial depth alone does not indicate the strength of an economy. For instance, the financial 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).

5. 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

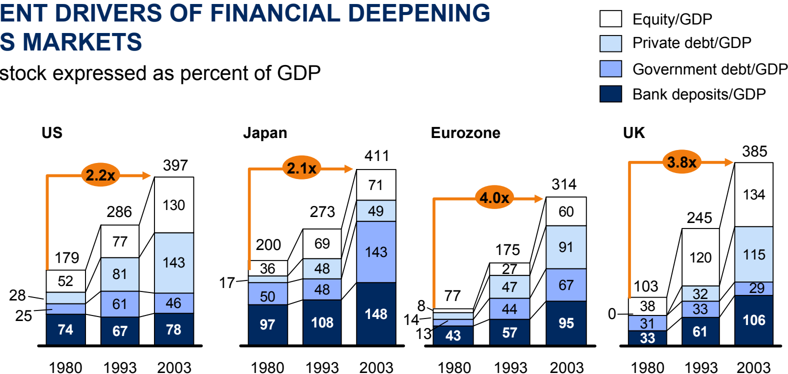



Source: McKinsey Global Institute Global Financial Stock Database; World Bank

## Exhibit 3

### DIFFERENT DRIVERS OF FINANCIAL DEEPENING ACROSS MARKETS

Financial stock expressed as percent of GDP




**1980-2003 change**

| | US Absolute* | US Relative | Japan Absolute* | Japan Relative | Eurozone Absolute* | Eurozone Relative | UK Absolute* | UK 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** |

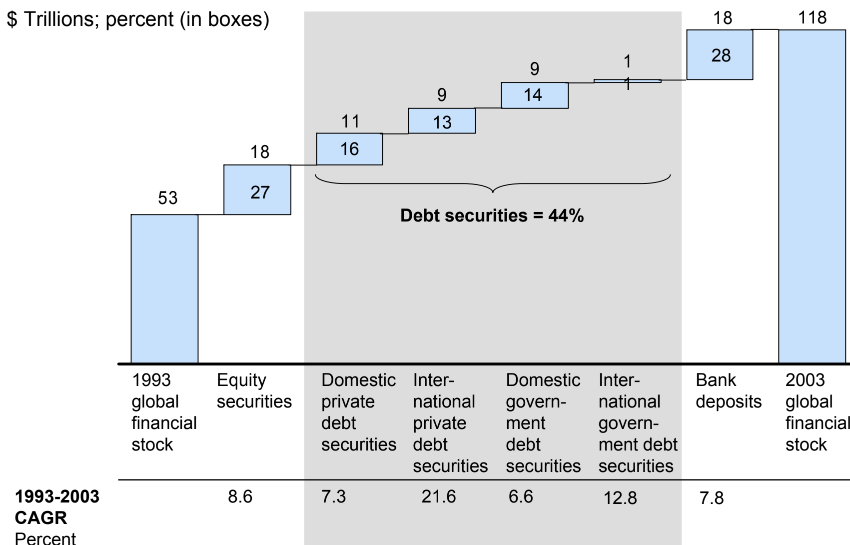
* In percentage points: e.g., the US depth for 2003 was 397 and for 1980 was 179, yielding a 218-point increase
Note: Some numbers do not add up due to rounding error
Source: McKinsey Global Institute Global Financial Stock Database; Merrill Lynch; Global Insight

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

1. 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**




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

2. 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.

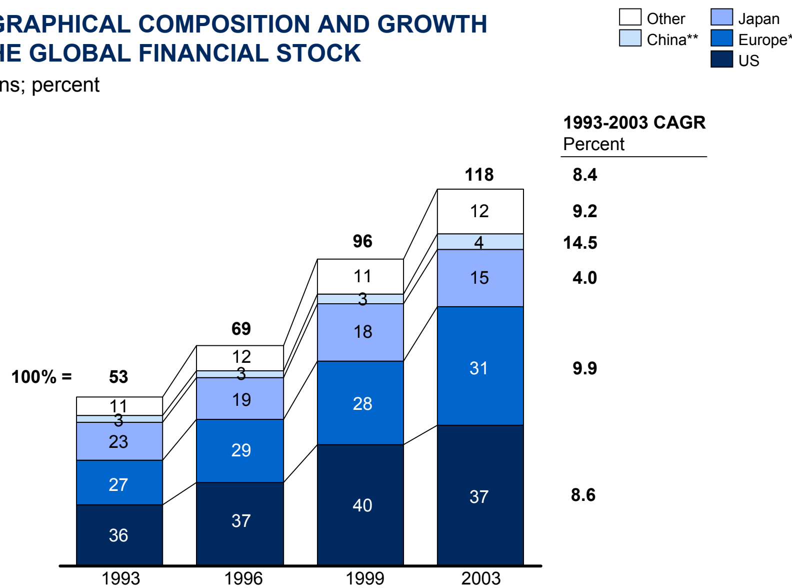
3. Bank deposits have, since 1980, grown more slowly than the *tradable* asset classes (debt and equity securities). As a result, there has been a striking shift within the global financial stock from *bank intermediation* to market intermediation and from *non-tradable* bank loans to *tradable* debt 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**




* 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).

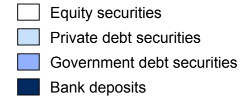
2. There are stark differences among these markets. The US market is dominated by private debt and equity markets. In Europe, by contrast, banks play a larger role in finance, although European debt capital markets are growing quickly. Asian financial markets are relatively isolated from each other and 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).

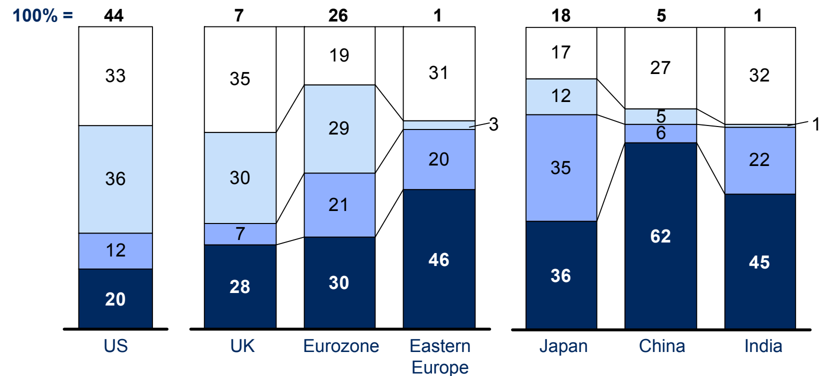
3. Patterns of financial asset growth vary across geographies. In the US, initial public offerings of small companies are a significant source of equities growth, as are increases in P/E ratios. In Europe, by contrast, increases in earnings and newly floated shares from privatizations of state-owned 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



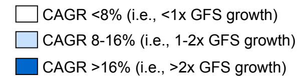

| | US | UK | Eurozone | Eastern Europe | Japan | China | India |
|---|---|---|---|---|---|---|---|
| **Depth (FS/GDP)** Percent | 397 | 385 | 314 | 99 | 411 | 323 | 137 |
| **CAGR** Percent | 8.6 | 11.3 | 9.8 | 19.3 | 4.0 | 14.5 | 11.9 |

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 |

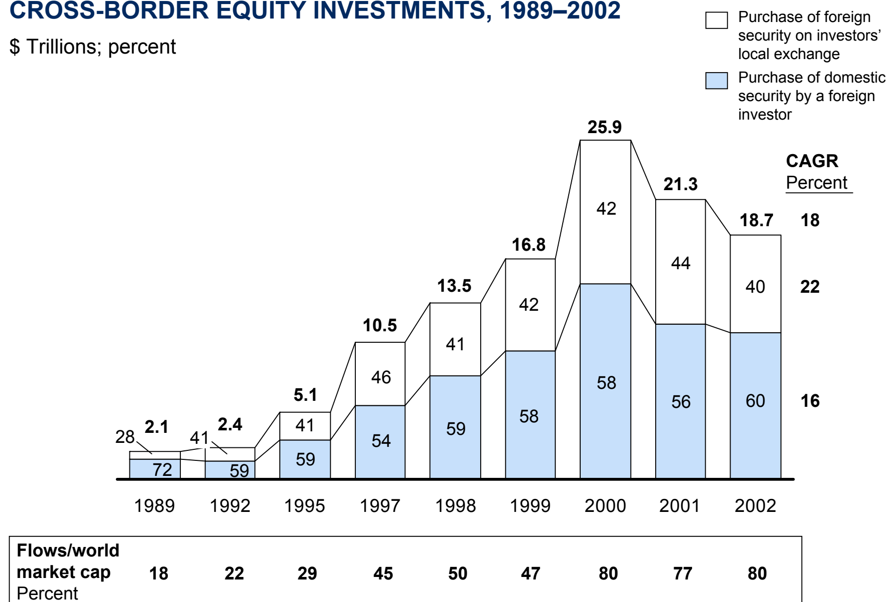
* The US Government debt securities stock grew much faster in 2002 (8%) and 2003 (11%)
Source: McKinsey Global Institute Global Financial Stock Database

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**




| Flows/world market cap Percent | 18 | 22 | 29 | 45 | 50 | 47 | 80 | 77 | 80 |
|---|---|---|---|---|---|---|---|---|---|

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.

2. 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: US | UK | Neth. | Japan | Germ | France | Switz. | Spain | Italy | Scand.* | ROE** | Total $ Billions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

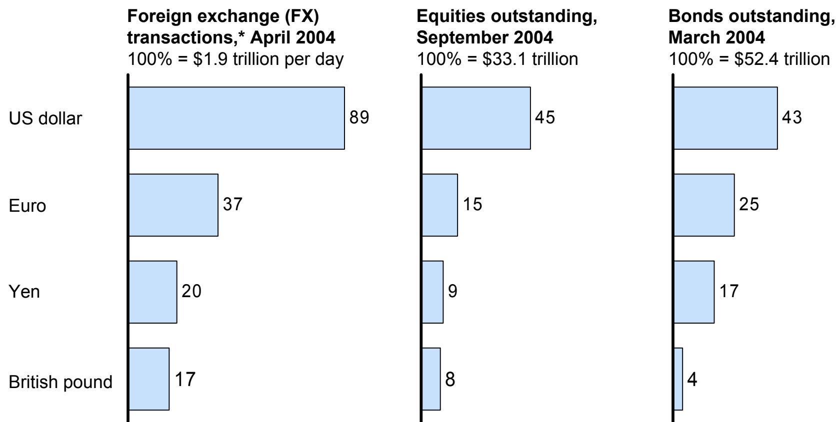
* Sweden, Norway, Finland, and Denmark
** Rest of Europe: Austria, Belgium/Luxembourg, Greece, Ireland, Portugal, Turkey
Source: Cross-Border Capital (unpublished data)

3. 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)