

INTERNATIONAL CAPITAL MARKETS

Developments, Prospects, and Key Policy Issues

By a Staff Team led by
Donald J. Mathieson and Garry J. Schinasi



International Monetary Fund
September 2000

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PREFACE

The *International Capital Markets* report is an integral element of the IMF's surveillance of developments in international financial markets. The IMF has published the *International Capital Markets* report annually since 1980. The report draws, in part, on a series of informal discussions with commercial and investment banks, securities firms, stock and futures exchanges, regulatory and monetary authorities, credit rating agencies, and the staffs of the Bank for International Settlements and the International Swaps and Derivatives Association. The discussions leading up to the present report took place in Brazil, Chile, France, Germany, Hong Kong SAR, India, Japan, Singapore, South Africa, Switzerland, the United Kingdom, and the United States, in early 2000. The report reflects information available up to the end of June 2000.

The *International Capital Markets* report is prepared in the Research Department, under the general direction of the Economic Counsellor, Michael Mussa. The *International Capital Markets* project is co-directed by Donald J. Mathieson, Chief of the Emerging Markets Studies Division, and Garry J. Schinasi, Chief of the Capital Markets and Financial Studies Division. Co-authors of the report from the Research Department are Torbjorn Becker, Bankim Chadha, Jorge Chan-Lau, R. Sean Craig, Burkhard Drees, Ronald Johannes, Charles Kramer, William Lee, Gabrielle Lipworth, Jens Nystedt, Anthony Richards, Jorge Roldos, R. Todd Smith, Amadou Sy, and Caroline Van Rijckeghem. Silvia Iorgova, Anne Jansen, Oksana Khadarina, Subramanian Sriram, and Peter Tran provided research assistance. Contributors from other departments are Paula De Masi, Western Hemisphere Department; Peter Hayward, Monetary and Exchange Affairs Department; and James Morsink, Asia and Pacific Department. Caroline Bagworth, Sheila Kinsella, Rosalind Oliver, Ramanjeet Singh, and Adriana Vohden provided expert word processing assistance. Marina Primorac of the External Relations Department edited the manuscript and coordinated production of the publication.

The study has benefited from comments and suggestions from staff in other IMF departments, as well as from Executive Directors following their discussions of the *International Capital Markets* report on August 2, 2000. However, the analysis and policy considerations are those of the contributing staff and should not be attributed to Executive Directors, their national authorities, or the IMF.



LIST OF ABBREVIATIONS

ADRs	American Depository Receipts
BBVA	Banco Bilbao Vizcaya Argentaria
BCCI	Bank of Credit and Commerce International
BIBF	Bangkok International Bank Facility
BIS	Bank for International Settlements
BSCH	Banco Santander Central Hispano
CACs	Collective Action Clauses
CFTC	Commodity Futures Trading Commission
ECB	European Central Bank
ECU	European Currency Unit
EMBI	Emerging Markets Bond Index
EMF	Emerging Markets Free
EMTA	Emerging Markets Traders Association
EMU	European Monetary Union
EONIA	euro overnight index average
ESCB	European System of Central Banks
EU	European Union
FDI	foreign direct investment
FSA	Financial Supervisory Agency
FOMC	Federal Open Market Committee
GDRs	Global Depository Receipts
G-7	Group of Seven
G-10	Group of Ten
HIPC	heavily indebted poor countries
HLI	highly leveraged institution
IFC	International Finance Corporation
IIF	Institute of International Finance
IMFC	International Monetary and Financial Committee
ISDA	International Swaps and Derivatives Association
JGB	Japanese government bonds
LCBO	large, complex, banking organization
LIBOR	London interbank offered rate
LTCB	Long-Term Credit Bank
LTCM	Long-Term Capital Management
MRO	main refinancing operations
NAFTA	North American Free Trade Agreement
NCB	Nippon Credit Bank
NPV	net present value
OECD	Organization for Economic Cooperation and Development
OTC	over-the-counter
PFE	potential future exposure
PSI	private sector involvement
SAR	Special Administrative Region
SDDS	Special Data Dissemination Standard
SEC	Securities and Exchange Commission
VaR	value at risk
Y2K	Year 2000



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The following symbols have been used throughout this volume:

- ... to indicate that data are not available;
 - to indicate that the figure is zero or less than half the final digit shown, or that the item does not exist;
 - between years or months (for example, 1997–99 or January–June) to indicate the years or months covered, including the beginning and ending years or months;
 - / between years (for example, 1998/99) to indicate a fiscal or financial year.
- "Billion" means a thousand million; "trillion" means a thousand billion.
- "Basis points" refer to hundredths of 1 percentage point (for example, 25 basis points are equivalent to ¼ of 1 percentage point).
- "n.a." means not applicable.

Minor discrepancies between constituent figures and totals are due to rounding.

As used in this volume the term "country" does not in all cases refer to a territorial entity that is a state as understood by international law and practice. As used here, the term also covers some territorial entities that are not states but for which statistical data are maintained on a separate and independent basis.

During 1999 and into the first half of 2000, global financial conditions generally improved in tandem with the strong rebound in the global economy. Following the most severe market turbulence—especially for emerging markets in the postwar period—entailing a succession of regional crises that enveloped the major financial markets, credit concerns have eased and global investors became more willing to engage in risk taking. This was especially evident in their rush to invest in technology-related companies that underpinned the “new economy.”

As markets recovered during 1999, mature market credit spreads receded from their crisis peaks and have remained appropriately above precrisis levels, given the decline in highly leveraged activities that had compressed spreads before the crisis. The remarkable, continued rapid growth of U.S. productivity—largely related to the new economy—helped sustain the low inflation expansion in the United States, and spurred U.S. and worldwide investment. Despite the upturn in global interest rates, equity markets rose to record highs during the second half of 1999 and into early 2000 on increasingly optimistic expectations of future earnings growth for investments in dynamic technology-related sectors. The deepening and broadening of credit markets in the euro area helped boost global debt issuance, especially euro-denominated debt, reflecting too the increased pace of corporate restructuring (especially merger and acquisition activity) and the gathering strength of the global expansion. Even in Japan, equity markets recovered on initial signs that the decline in output may have bottomed.

Emerging market asset prices saw strong increases in 1999 as fundamentals in many countries improved, and the domestic and external financing situation of most emerging markets continued to recover from the rolling crises that

affected Asia, Russia, and Brazil between mid-1997 and early 1999. Reflecting these improvements, the credit ratings of a number of emerging markets improved. Emerging market bonds posted strong returns in 1999, significantly outperforming the low or negative returns for most alternative fixed income asset classes in mature markets. Emerging equity markets also had a stellar year, driven by the performance of technology-related stocks. Other favorable developments include a widening of the investor base for emerging market assets, a diversification of funding sources by borrowers, and a shift toward longer-term funding.

Since March 2000, however, participants in mature and emerging markets have become less at ease with the uneven growth patterns among the major currency areas, signs of inflationary pressures, and increasing external imbalances. These have produced a growing list of questions and risks. In particular, the sustainability of technology-based productivity gains, which fueled the robust low inflation expansion in the United States, was repeatedly tested by investors as they faced these and other uncertainties. This is clear in the increasing volatility in global equity markets. Emerging market currencies and debt markets were also affected by the sharp correction in technology sectors of equity markets, especially the Nasdaq, as investors identified both these classes of investments with the riskiest of financial assets that would benefit or suffer as risk appetites changed. Additional tensions arose from technical factors related to repurchases of U.S. and U.K. government debt, which impaired traditional hedging and pricing practices associated with government yield curve benchmarks and the interpretation of credit and swap spreads in the mature and emerging markets.

Increased volatility and declines in mature equity and bond markets also adversely affected their counterparts in the emerging markets over

March–May 2000. It became apparent that the rally in emerging markets also had been helped in part by the forces that drove the “new economy” paradigm. Further, the rally had relied on expectations of only modest increases in official interest rates in the United States and Europe. Thus, emerging market assets were hit hard when global stock markets fell and the monetary policy tightening in mature markets threatened to be larger than had earlier been expected.

This increased market volatility has heightened once again the recognition of risks in global financial markets, including those associated with the rapid integration of national financial markets into the global arena, the ongoing lack of transparency, and increased competitive pressures on financial institutions. Indeed, reflecting on the lessons from the crises and contagion that spawned earlier global turbulence, investors question the effectiveness of the existing international architecture, including the role of the IMF, to realize the potential to generate growth in increasingly integrated and securitized international capital markets. Private and public sector initiatives have begun to address some of these and related issues, for example with specific measures to improve risk management practices and bolster regulatory and supervisory capabilities. The proposed revision of the 1988 Basel Accord on Capital Adequacy is a key element in bringing prudential regulations up to date. Other public and private groupings have also explored ways to ensure the smooth functioning of the financial system, particularly how to improve banks’ liquidity management, the safety of payment systems, the reliability of stress testing, and the effectiveness of portfolio credit management systems.

This year’s *International Capital Markets* report reviews and assesses recent developments in the mature and emerging financial markets and continues the analysis of key structural changes in global financial markets that has been presented in recent reports. Global financial markets are inherently information-, communication-, and computation-intensive, and advances in telecommunications and computer technologies during

the past two decades have dramatically lowered the cost of undertaking many financial activities. The potential economies of scale and scope created by these declining costs have led to intense competition to gain market share both within and across national and international financial markets. This intense competition has been characterized by the development of new financial instruments and services and the use of these financial innovations to enter new markets or to attract new customers. This year’s report examines two aspects of this process of financial innovation and market penetration: the global development of the over-the-counter (OTC) derivatives market and the expansion of foreign-owned banks into emerging markets. The report also examines another issue, namely market participants’ assessments of proposals for private sector involvement in the prevention and resolution of crises, that is likely to affect the future terms and conditions of market access for many emerging markets.

Chapter II provides a comprehensive assessment of recent developments and trends in the major financial markets and identifies key risks and uncertainties in the outlook. Of particular significance are the questions regarding the durability of the “new economy” and the underpinnings of the global rise in equity markets, the heightened potential for exchange rate volatility, and the risks associated with financial restructuring in the euro area.

Chapter III reviews developments in emerging markets over the past year, including trends in net and gross financing flows, and in primary and secondary markets for emerging market assets. As of mid-2000, emerging market asset prices were mostly modestly higher than a year earlier, reflecting some unwinding of the (probably excessive) pessimism toward emerging market economies that had grown out of the recent crises. Further, while emerging market assets remain among the more volatile asset classes, the continuing decline in the volatility of returns from recent crisis levels will enhance the attractiveness of emerging markets to investors. The chapter also notes some favorable developments

in the investor base and the financing sources of emerging market borrowers. While the risk tolerance of some of these new investors is yet to be tested through a full cycle, a wider investor base—provided it has realistic expectations about the return and risk on its holdings—will help support the stability of financing to emerging markets. In addition, at the same time as the investor base is widening, emerging market borrowers are diversifying their financing sources, with greater recourse to domestic currency financing and longer-term funding. The chapter concludes that these developments offer the hope of greater stability in financing flows to emerging markets and greater prudence in the financing of borrowers in emerging markets.

Chapter IV focuses on OTC derivatives markets. The rapid growth, development, and widespread use of OTC derivatives transactions and markets has accompanied, and in many ways driven, the international integration of national financial markets and the globalization of finance. Much has been written about derivatives as financial instruments, and last year's *International Capital Markets* report discussed the role of highly leveraged institutions and their OTC derivatives positions in the mature market turbulence during the autumn of 1998. These markets comprise the internationally active financial institutions, and they are central to the functioning and efficiency of the major bond, equity, and foreign exchange markets. They are governed by private sector arrangements and are influenced indirectly by regulatory, supervisory, and legal systems. The smooth functioning of these systemically important markets relies heavily on market discipline, more so than in most other financial markets. Recent episodes of turbulence revealed the risks posed to market stability originating in features of OTC derivatives instruments and markets. The chapter identifies sources of risk to market stability as well as imperfections in the underlying infrastructure. Progress in addressing some of these risks and imperfections has been limited, and the chapter identifies areas where further efforts are neces-

sary if the risks to instability are to be reduced and avoided in the future.

Following the crises in Asia, Russia, and Brazil, the international financial community has explored ways to enhance the international financial architecture with a view to preventing crises, where possible, and to mitigating their severity when they do occur. One cornerstone of the new international financial architecture initiative has been the official community's efforts to further the private sector's involvement in crisis prevention and resolution. Chapter V provides a systematic review of recent experiences with, and market views on, these efforts. Within the context of crisis prevention, the official sector has focused on how to improve data transparency, promote improved standards and codes, enhance debt management, facilitate information sharing and negotiation between debtors and creditors, support the introduction of collective action clauses in international bonds, study the feasibility of standstills and stays, and evaluate the usefulness of market-based capital controls. On the crisis resolution front, policies have had the objectives of limiting the size of official financing packages, reducing moral hazard, and restoring medium-term viability of the debtor country. This chapter assesses market views and discusses the extent to which the official community's objectives have been attained and how the initiative is likely to affect the terms and nature of international financing to emerging markets.

Chapter VI discusses the increasing role of foreign banks in emerging markets. The growing presence of foreign-owned institutions in the second half of the 1990s increased the share of assets under foreign control to more than half of total assets in several emerging markets in Central Europe and Latin America. The chapter analyzes the factors that have stimulated the rise of foreign participation, including those that drove global financial institutions to expand toward emerging markets, and the factors underlying the authorities' decisions to remove existing barriers to the entry of foreign institutions. The arguments that have been made in favor of and against greater foreign presence and the empiri-

cal evidence on the effects of foreign entry are also reviewed and assessed in this chapter. Finally, the main policy issues include the need to coordinate and upgrade prudential supervi-

sory and regulatory policies across borders, bank concentration issues related to the merger of large international banks, and associated systemic issues.

DEVELOPMENTS AND TRENDS IN MATURE CAPITAL MARKETS

Throughout most of the 12-month period ending in June 2000, developments in international capital markets continued to be strongly influenced by the perception that the U.S. economy offered the highest risk-adjusted asset returns in the major currency areas. Favorable perceptions reflected the continued strong performance of the U.S. economy, uncertainty about growth prospects in Europe, and the halting economic and financial recovery in Japan. While this combination of factors might not explain all of the international reallocations of capital and risks, or all asset-price movements, it was an important part of the background against which these adjustments occurred. Beginning with the April–June 2000 period, this favorable sentiment about U.S. returns may have changed.

Throughout most of the period under review, and despite uncertainty about the sustainability of U.S. productivity growth, U.S. markets continued to receive considerable attention from international investors, as reflected in U.S. financial flows and asset price dynamics. Even when U.S. equity markets declined sharply, investors temporarily shifted capital into U.S. fixed-income markets and reentered equity markets when they thought equity valuations had fallen to sufficiently attractive levels. From time to time, investors' faith in the sustainability of U.S. asset returns faltered, and there were occasional periods of high volatility, most notably in U.S. equity markets and in the value of the dollar, which most likely reflected a rebalancing of risks in portfolios. Overall, however, the value of the dollar first appreciated, then depreciated, and on balance held its ground (on a nominal weighted-average basis), despite the growing current account deficit and mounting uncertainty about whether U.S. productivity gains would continue to support high growth with low inflation.

Strongly reflecting investors' sentiments, U.S. investment themes increasingly resonated internationally. Most notable was the worldwide and concentrated allocation of funds into the equity and debt instruments of companies in the technology, telecommunications, and media sectors. Market developments also reflected the rebalancing of portfolios away from government bonds and toward private markets as fiscal positions consolidated in many countries. Reflecting these tendencies, although a continued net capital flow out of Europe weighed heavily on the euro, European equity and corporate bond markets appreciated sharply as capital flowed into them. Some of Japan's markets benefited as well from improved investor sentiment. In late summer and early fall 1999, signs of an economic recovery in Japan persuaded some international portfolio managers—others soon followed—to raise their Japanese equity and, to a lesser extent, bond holdings from underweighted positions relative to Japan's share of global asset markets and the size of the real economy. This rebalancing was associated with a sharp rise in the yen and a rally in Japan's equity market that was sustained until recently.

Toward the end of the period under review, investors increasingly focused on the uncertainties in the U.S. economic outlook, especially on the possibility that monetary policy would tighten when there emerged evidence of persistent rising wage and price pressures and an overheating U.S. economy. At the same time, the Japanese yen showed signs of strengthening further against the dollar, and the euro began to recover from record lows—both indications that investor sentiment might be changing to reflect uncertainties about the sustainability of dollar asset returns. At end-June 2000, considerable uncertainties remained. The key risks reflect these and related uncertainties summarized in the following questions. Is inflation on the rise in the

United States, and what would this mean for U.S. and international portfolio adjustments and asset markets? How far will the euro appreciate, and what impact might it have on the process of financial and corporate restructuring that is now under way and making demands on European finance and financial markets? Will Japan's asset markets adjust smoothly if and when the recovery begins in earnest, and has financial and corporate restructuring established the basis for an enduring expansion in the world's third largest economy? Finally, have risk management practices and financial markets infrastructures improved sufficiently since the Asian, Russian, and Long-Term Capital Management (LTCM) crises to reprice and reallocate capital in the presence of the risks just described, especially if some of the adjustments occur in a less orderly than desirable fashion?

Foreign Exchange Markets

During the period (mid-1999–mid-2000) under review, the main developments among the major exchange rates were a weakening of the euro against the dollar and a strengthening of the yen. Over the year to June 2000, despite record current account deficits, the U.S. dollar strengthened by about 1 percent in nominal effective terms and ranged around the strongest levels since the late 1980s, appreciating steadily against the euro by 10 percent, but depreciating by 12 percent against the Japanese yen (Figure 2.1). Support for the dollar was underpinned by capital inflows to dollar markets, driven partly by confidence that U.S. productivity gains would sustain further improvements in corporate profitability and thereby bolster equities and corporate bond valuations (Table 2.1 and Box 2.1).¹

Movements in the major currencies also reflected capital flows out of European markets and toward the United States and Japan.² Much of the foreign interest in U.S. corporate securi-

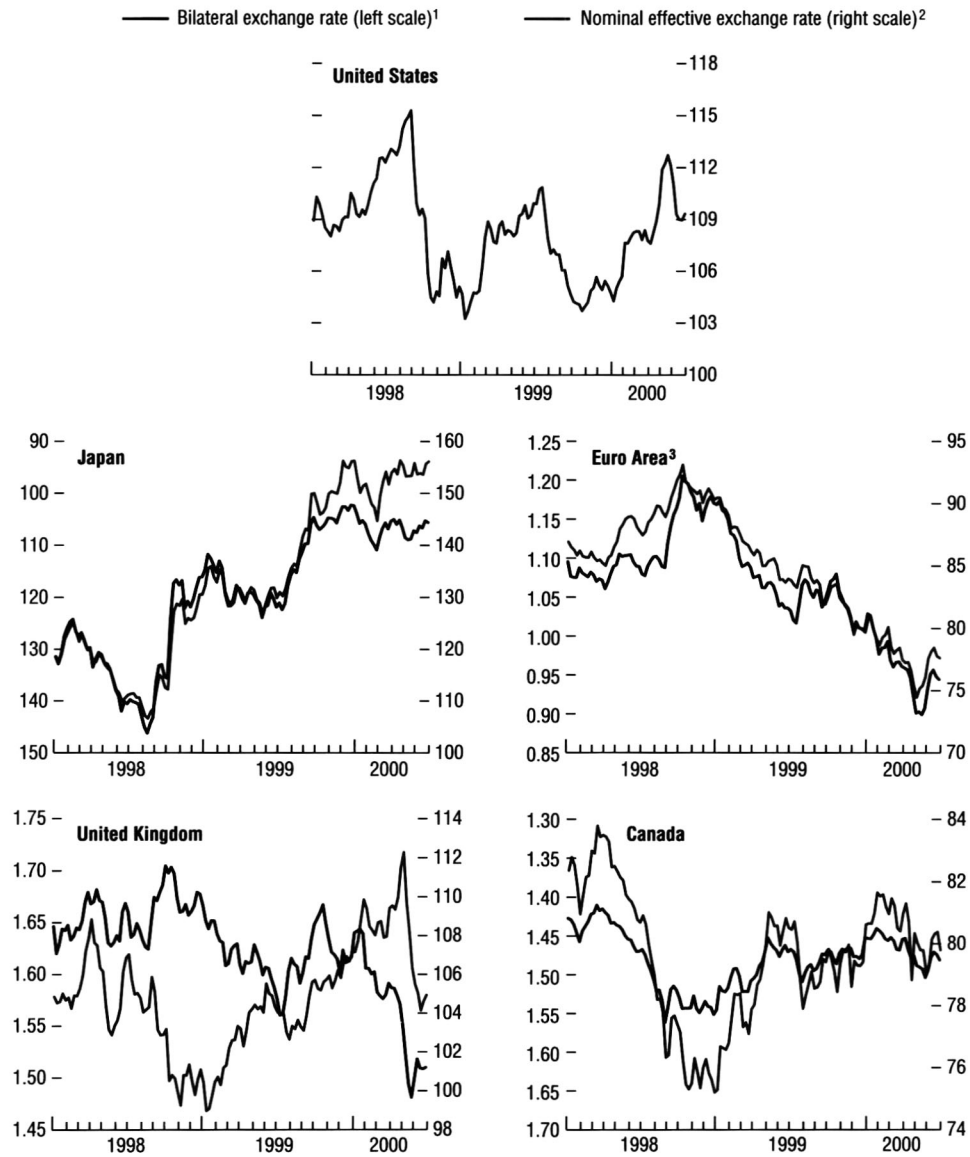
ties came from European investors. Net capital outflows from Europe (amounting to about \$70 billion in the financial account, and including about \$180 billion in net direct investment and portfolio outflows) contributed to the weakening in the euro from \$1.184 at the start of European Monetary Union (EMU) to a low of \$0.885—a depreciation of 25 percent, although the euro rebounded somewhat to \$0.95 by the end of June 2000, a net depreciation of 20 percent. The view that the spread between dollar and euro interest rates was likely to increase further, and the rapidly increasing supplies of both domestic and international euro-denominated securities (Table 2.2)—reportedly including issuance by sovereign and international borrowers who used the proceeds to pay down dollar-denominated debt—also likely contributed to the weakening of the euro against the dollar. As the euro slipped in value, the volatility of the euro-dollar rate increased (Figure 2.2), partly reflecting a withdrawal of capital devoted to market-making amid financial restructuring. However, this decrease in market-making does not appear to have had a lasting impact on liquidity in the euro markets—spreads on currency trades involving the euro have generally narrowed to levels previously associated with the deutsche mark.

The strength of the yen seems to have reflected three main factors: the large and growing Japanese current account surplus; strongly improved investor sentiment and associated capital inflows; and capital repatriation by Japanese investors, who reportedly reduced foreign currency exposures ahead of the end-September 1999 fiscal half-year (during July–September, the yen appreciated by 15 percent against the dollar). Volatility in the yen-dollar market displayed no clear trend during the period under review, although at various points in time it did spike up. Market participants have suggested that interventions by the Japanese authorities were aimed not only at limiting appreciation of the

¹The associated idea of a “new economy” in the United States is discussed in IMF (2000a).

²The considerable recorded outflows from the United Kingdom may partly reflect its role as an international financial center.

Figure 2.1. Selected Major Industrial Countries: Exchange Rates, January 1, 1998–June 30, 2000
(Weekly average)



Sources: Bloomberg Financial Markets L.P.; and IMF.

Note: In each panel, the effective and bilateral exchange rates are scaled so that an upward movement implies an appreciation of the respective local currency.

¹Local currency units per U.S. dollar except for euro area and United Kingdom for which data are shown as U.S. dollars per local currency.

²1990 = 100; constructed using 1989–91 trade weights.

³Prior to 1999, data refer to synthetic rate.

Table 2.1. Net Foreign Purchases of U.S. Long-Term Securities, 1995–99*(In millions of U.S. dollars)*

	Government Bonds	Corporate Bonds	Corporate Stocks	Total
1995	162,844	57,853	11,240	231,937
1996	273,964	83,743	12,511	370,218
1997	234,024	84,358	69,597	387,979
1998	105,841	121,930	50,020	277,791
1999	84,205	160,537	107,522	352,264
of which:				
Europe	-9,493	111,939	98,060	200,506
Germany	5,191	4,817	13,410	23,418
United Kingdom	-6,190	92,302	42,902	129,014
Spain	-14,756	179	2,657	-11,920
Asia	62,990	11,190	3,379	77,559
Japan	31,741	5,902	5,723	43,366
China	15,770	800	241	16,811

Source: United States, Department of Treasury, *Treasury Bulletin* (various issues).

yen but also at offsetting increases in yen-dollar volatility. Variations in yen-dollar volatility over the period under review also appear to be related to technical factors, including hedging of dollar exposures by Japanese institutional investors. Specifically, Japanese institutions typically hedge about 40 percent to 60 percent of their dollar exposures (totaling \$400–\$500 billion), often with barrier options (see Box 4.1). These hedge ratios depend on the level and volatility of the exchange rate. A change in hedge ratios of, say, 10 percentage points, which is reportedly not uncommon, can generate considerable rebalancing activity—especially if the yen-dollar rate approaches knockout prices on barrier options, triggering volatile market dynamics. This is consistent with the marked increase in actual and implied yen-dollar volatility from about 10 percent in the first part of 1999 to as high as 22 percent in September 1999.

Credit Markets

Developments in the mature credit markets were driven primarily by the rising trend of interest rates in Europe and the United States and little change in the supportive monetary and fiscal policies in Japan (Figure 2.3). The main sources of higher interest rates were continued strong growth in North America and a firming of the European recovery that, in turn, encour-

aged central banks in these regions to tighten monetary conditions.

A variety of other temporary factors influenced yield curves. In Japan, expansive fiscal policy created concerns about the prospective increase in the supply of long-term Japanese government bonds (JGBs). By contrast, in Europe and the United States, yield curves and spreads of corporate bonds (relative to government bonds) were influenced by strong corporate financing requirements in tandem with reduced public-sector financing requirements. In the United States, the stock of government debt dropped from 48 percent to 39 percent of GDP during 1995–99, while the stock of nonfinancial corporate debt increased from 17 percent to 22 percent of GDP. In Europe, euro-denominated international debt issues reached a record in 1999, exceeding U.S. dollar issuance in that year as well as issuance in the euro's legacy currencies in earlier years.

United States

In U.S. money markets, liquidity remained ample in 1999 despite the Federal Reserve's reversal of the interest rate reductions made during the autumn of 1998. Nonetheless, the demand for liquidity occasionally pushed up liquidity-sensitive money market spreads, as in late 1999 when spreads relative to treasury bills widened on year