Developing the Investor Base for Government Securities

Government securities issuers need buyers. Policymakers can do much to develop voluntary demand by financial institutions, nonfinancial institutions, and retail investors. Historically, governments have relied on their taxation and coercion powers to ensure adequate demand for their securities issues, resulting in captive sources of government funding. They did not always achieve their aim of lowering the cost of finance, but a certain outcome of this forced funding was economic inefficiency from misallocated resources. Although most developed countries have shifted from captive sources of government funding toward reliance on a diverse base of voluntary investors, captive sources of government funding are still a major feature of government finance in some developing countries. Governments can, through appropriate reform programs, licensing, regulation, and supervision, encourage the development of wholesale investor institutions that invest in government securities for income, hedging, trading, and repo transactions. Governments can also develop a retail investor base for government securities, and can further broaden and diversify the investor base by opening the market to foreign investors.
6.1 Introduction

Governments issuing securities need to understand the factors that motivate demand for their product, identify investor segments of the market, develop instruments with characteristics that match the features sought by different types of investors, and mount focused marketing campaigns. Stimulating demand for government securities is as important as developing the market infrastructure for more efficient trading. (See Chapter 3, A Government Debt Issuance Strategy and Debt Management Framework; Chapter 8, Developing a Government Securities Settlement Structure; and Chapter 9, Legal and Regulatory Framework.)

Policy issues concerning development of the investor base begin with conversion from captive to voluntary investors and include promotion of financial institutions and their active trading. These objectives can be accomplished by incorporating organizational, regulatory, and supervisory measures favorable to investment and markets into financial reforms, taking steps to attract nonfinancial investors, including retail, to trade government securities, and allowing entry of foreign investors into the domestic government securities market.

6.2 Captive Sources of Government Funding and a Diverse Investor Base

Historically, government issuers have paid inadequate attention to voluntary demand for short- and long-term government securities, relying instead on their powers of taxation and coercion to raise funding. Not only in developing countries, but also in most advanced countries, regulations compelled commercial banks to meet reserve and liquid asset ratios by holding Treasury bills and bonds. In addition, insurance companies and pension funds, as well as social security funds, were required to invest in government bonds, often specially issued nonmarketable instruments with substantially below-market yields. Many countries also imposed quantitative restrictions on holdings of nongovernment securities by insurance companies and pension funds. Such restrictions were often motivated by prudential considerations, but their net effect was a form of indirect coercion to hold government securities, and...
Developing the Investor Base for Government Securities

insurance companies and pension funds were thereby induced to heavily invest in them.

6.2.1 Pitfalls of Reliance on Captive Sources of Government Funding

Extensive reliance on captive sources of funding characterized government financing patterns in most of Western Europe and in some English-speaking countries (for example, Australia, Canada, Ireland, New Zealand, and South Africa) until the 1980s. Various deregulation initiatives since the early 1980s, which substantially lowered or eliminated reserve requirements on banks and eliminated prescribed investment ratios on insurance companies and pension funds, have dramatically reduced government reliance on this form of funding in most high-income countries. A notable exception among high-income countries to this trend is Singapore, where the Central Provident Fund is still required to heavily invest in nonmarketable government securities, although affiliated workers have been allowed to direct balances in excess of a specified level to a broad list of approved investments.

In contrast to most high-income countries, reliance on captive sources of government funding is still a major feature of government financing in developing countries. The minimum reserve and liquid asset requirements on banks continue to be quite high in many of these countries, providing the principal source of government funding. Several countries require their national provident funds or social security funds to invest heavily in nonmarketable securities. In addition to Singapore, Egypt, India, Jordan, Malaysia, and Sri Lanka are among the better-known cases—although the affected institutions in all these countries have been given some latitude in recent years to invest in equities and other marketable securities.

Prescribed investment restrictions on pension funds and insurance companies in many countries result in an indirect form of pressure for these institutions to hold government securities. Such investment restrictions are prevalent in most countries of continental Europe and Asia, as well as in developing and transition countries that reformed their pension systems in the 1980s and 1990s. The new private pension funds in Latin American and Eastern European countries either are not allowed to invest in equities and overseas assets (for example, Bolivia, Mexico, and Uruguay), or such investments are subject to low limits (for example, Argentina, Hungary, and
Developing Government Bond Markets

Insurance companies are subject to broadly similar investment restrictions. Although these funds and companies are free to place their investable funds in bank deposits and corporate bonds, pension funds in practice invest heavily in government securities out of yield and safety considerations.

Reliance on captive sources of government funding is not necessarily synonymous with low cost for the government and low yields for investors. Cyprus, Jordan, and Malaysia are countries where the real returns offered on this form of government funding have been high. Most Latin American and Eastern European countries offer market rates of return that, at the margin, are determined by the level of international demand for their government bonds. Captive sources of government funding may even occasionally receive generous remuneration, especially if governments miscalculate or adjust their rates slowly in response to market changes. In general, however, captive sources of government funding have received low returns, in some instances much below market levels and in some cases much below the rate of inflation. Worst-case examples in this respect have been Egypt, Peru, and Zambia, where, during most of the 1980s, real returns on the reserves of pension and provident funds were between 10 and 20 percent below the rate of inflation and lower than interest rates paid on short-term bank deposits.85

A negative effect of reliance on captive sources of government funding is that such arrangements stifle the development of government securities markets, especially when nonmarketable securities are issued to these sources of financing. Such securities are segmented from the rest of the market, not listed on any exchange, and not available for trading. Minimum reserve and liquid asset requirements on banks cause an artificial lowering of yields for those instruments that meet the legally imposed requirements and a concomitant drying up of liquidity for such instruments. Even when captive sources of funding involves traded securities, they tend to have an adverse impact on market development, since financial institutions are forced to buy and hold eligible government securities and are discouraged from engaging in active trading. This was the case in South Africa until the late 1980s, when the prescribed investment ratio imposed on pension funds and insurance companies was abolished. Policymakers should recognize that

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Developing the Investor Base for Government Securities

underdevelopment of government securities markets and low levels of trading deprive countries of the main benefits of active markets—more efficient price discovery and a dynamic process of financial innovation, both of which lower the cost of capital and promote a more efficient mobilization of savings and allocation of resources.

To develop sound and vibrant demand for government securities, policymakers need to move away from reliance on captive sources of government funding and draw on voluntary sources of funds that provide a better indication of the true cost of finance and thus help avoid a persistent misallocation of scarce economic resources.

6.2.2 Advantages of a Diverse Investor Base

To lower the cost of government debt and the volatility of market yields, policymakers need to stimulate a diverse investor base and develop instruments, trading facilities, and distribution networks that best suit the needs of those investors.

A diverse investor base that includes both domestic and foreign investors is essential for promoting market stability and enhancing market efficiency. A diverse investor base removes the threat to an issuer of being held hostage by a particular group of investors. A strong base of domestic and foreign investors provides the government assurance that it will be able to meet its funding requirements in an orderly manner. A strong foreign investor presence, in addition to broadening the diversity of the investor base for trading and holding government securities, will contribute to the introduction of financial technology and innovation, thereby leading to higher market efficiency.

A diverse investor base provides greater opportunities for financial innovation. A number of market innovations over the past 30 years, from floating-rate and zero-coupon bonds to inflation- and foreign-currency-linked instruments, have been developed to meet the requirements of different types of investors.

There are four general categories of potential investors in government securities instruments: domestic and foreign and, for each of these categories, financial (banks, the contractual savings sector, and collective investment funds) and nonfinancial (nonfinancial corporations and individual investors). The contractual savings sector and collective investment funds comprise the legal entities that invest in government securities in a principal
capacity. They include insurance companies and pension funds, which invest their accumulated reserves, and mutual funds, which invest pooled funds.

There has been a remarkable expansion of the activities of a wide range of financial institutions in recent years, including their participation in government securities markets. Institutional investors, comprising pension funds, insurance companies, and mutual funds, have grown at an explosive rate over the past two decades. The total assets of institutional investors in OECD countries rose from $3.2 trillion in 1981, equivalent to 38 percent of total GDP, to $26 trillion in 1996, corresponding to 105 percent of total OECD-area GDP. The average annual growth rate amounted to 15 percent. The assets of institutional investors grew nearly three times faster than the annual income in OECD countries. Outside the OECD region, several countries also experienced dramatic growth in institutional investors, including Brazil, Chile, Cyprus, Egypt, and South Africa.

The growth of institutional investors is summarized in Annex 6.A.

### 6.3 Financial Investors of Government Securities

#### 6.3.1 Commercial Banks

Commercial banks invest in government bills, bonds, and other debt instruments in order to meet liquid asset requirements, obtain a stable interest income to offset other more volatile investments, manage their short-term liquidity, and take positions on the future movement of interest rates. They also use their government securities holdings to hedge their interest rate positions and to provide collateral for repo transactions with customers and for discount window borrowing from the central bank. The growing role of repo facilities provides a strong reason for commercial bank investment in longer-term bonds.

Commercial banks have been in many countries the largest captive source of government funding. By setting high minimum reserve and liquid asset ratio requirements and ensuring that government securities are the only eligible assets that satisfy these requirements, governments have been able to borrow substantial amounts at below-market rates of interest. Commercial banks should not, however, be forced to hold government securities, but should be allowed to invest and trade in them as part of their overall balance sheet management and provision of financial services. In
modern financial settings and as a result of the role of repo facilities, commercial banks can be major investors in government securities on a gross basis, with active trading of government securities, while being small holders on a net basis.

While commercial banks are a major investor source for government securities, their strong presence in the government securities market at times may reflect some fundamental shortcomings in their commercial banking operations. Heavy investments in government securities by commercial banks may reflect weaknesses in their primary function, which is lending. Such operating weaknesses as ineffective screening and monitoring capabilities of loans, a dearth of reliable information on creditworthy borrowers and projects, and weak legal systems induce a flight to safety by banks to government securities. Once these operating deficiencies are corrected, banks will become less significant holders of government securities.

### 6.3.2 Contractual Savings Sector—Pension Funds and Insurance Companies

Pension funds and life insurance companies have traditionally been important investors in government securities, especially for longer-term issues. Pension funds and life insurance companies used to concentrate their activities in direct loans to corporations and households. Over time, their investment focus has shifted to marketable securities, which are traded on organized exchanges or over-the-counter markets and are valued on the basis of publicly available information.

Pension funds and insurance companies have a symbiotic and dynamically interactive relationship with securities markets. (See Chapter 7, Developing Secondary Market Structures for Government Securities.) Under certain conditions, they stimulate the development of securities markets. At the same time, well-functioning securities markets enhance the operating efficiency of the institutions, lowering the saving rate needed to attain a capital accumulation target for pensions or the cost of insurance.

Pension funds generate long-term financial resources and are ideally suited for investing in long-term instruments such as equities and bonds, including government, corporate, and mortgage bonds. During the accumulation phase, the liabilities of pension funds are linked to the growth of earnings of policyholders. This is particularly the case with defined benefit plans, but also holds for defined contribution plans with targeted replacement rates.
that are related to the evolution of incomes. During the decumulation (pay out) phase, the liabilities of pension funds depend on the terms and conditions of the pension plan, and particularly on whether nominal or inflation-protected pensions are offered. To avoid exposure to reinvestment risk, pension funds need to match the maturity of their assets with that of their liabilities, which reflects the age structure of policyholders. In countries where equity markets are well developed, pension funds have tended to invest extensively in equities, especially if they are allowed some flexibility in their investment options. If they are subject to stricter investment requirements, they have tended to hold more balanced portfolios consisting of bonds and equities. In countries with less well-developed equity markets, pension funds have tended to invest in bonds.

The nature and composition of their liabilities also determine the investment policies of life insurance companies. To the extent that their life and annuity policies are set in nominal terms, they have an inclination to invest in bonds, aiming to match the maturity of their assets and liabilities in order to avoid reinvestment risk. Because some of their liabilities, such as annuity products, carry very long maturities that exceed those of available assets, life insurance companies cannot completely hedge their reinvestment risk. So long as annuity business represents a small fraction of their total business, such reinvestment risk can be covered by their own equity funds. Life insurance companies typically invest the reserves that originate from equity-linked policies in equities.

Depending on the state of development of bond markets, both pension funds and life insurance companies show a preference for investing in corporate and mortgage bonds and in asset-backed securities. By maintaining a well-diversified portfolio of nongovernment bonds, they obtain a high return without assuming a high default risk. In the United States, life insurance companies invest only 3 percent of their assets in government securities, while they place 41 percent in corporate bonds, 9 percent in agency securities, and 21 percent in equities, with the remainder in other assets (real estate, loans, and bank deposits). In countries where nongovernment bond markets are underdeveloped, pension funds and life insurance companies invest more heavily in government bonds.

The concentration by pension funds and insurance companies of their investments and reserves in government bonds on a voluntary basis at times reflects weak and poorly developed equity and corporate bond markets. As the deficiencies of the latter markets are addressed, pension funds and insur-
Developing the Investor Base for Government Securities

ance companies, if given investment-choice options, will become less significant holders of government securities.

6.3.3 Collective Investment Funds—Mutual Funds

Governments that have substantial borrowing requirements may also look to collective investment funds, such as mutual funds, as a funding source.

Mutual funds offer professional management and asset diversification with high liquidity and low cost. Some mutual funds serve other institutional investors, but the vast majority focus on retail investors. The primary purpose of mutual funds is to invest in marketable securities—equities and bonds—on behalf of the public. Mutual funds are dependent on efficient and well-functioning securities markets.

Unlike pension funds and life insurance companies, which ideally maintain well-diversified portfolios, mutual funds are often created with specialized investment objectives. They, therefore, consciously carry unbalanced portfolios, with heavy concentration in bonds (either corporate or government) or equities (either diversified or sector specific). Bond mutual funds and money market mutual funds play active roles in government markets and provide a good source of government funding.

An interesting feature of mutual funds for developing countries is that their development does not depend on complex social security and insurance sector reforms. They can, therefore, grow fast, if they operate in a robust regulatory framework that promotes market integrity and protects the interests of small investors. Their rate of growth will depend on the conditions supporting desintermediation from traditional bank products (bank deposits) to capital market instruments.

6.3.4 Impact of Institutional Investors on Capital Market Development

6.3.4.1 Institutional Investors and Capital Market Development

Institutional investors can have a potentially large impact on the way financial institutions compete and on how markets operate. In addition to

making financial markets more competitive, institutional investors often are at the forefront in promoting efficient market practices and financial innovation. They typically favor greater transparency and market integrity, in both primary and secondary markets, seek lower transaction costs and encourage efficient trading and settlement facilities, and stimulate innovation in both products and trading practices that are tailored to more efficient management and hedging of their liabilities.

Pension funds and other institutional investors can act as a countervailing force to commercial and investment banks as well as other market intermediaries, forcing them to be more competitive and efficient and to lower their spreads on loans and their fees for issuing and trading securities. They stimulate financial innovation, especially the development of financial instruments such as zero-coupon bonds and asset-backed securities that meet the specific needs of the investing community. In developing countries, institutional investors have been instrumental in promoting the transfer of financial technology and the use of instruments and markets that have thrived in high-income countries. (See Box 6.1.)

6.3.4.2 Contractual Savings Sector and Capital Market Development

In addition to serving as a stimulus to financial innovation, the contractual savings sector provides a market for price-indexed securities and assets with long-term maturities. The minimum funding requirements of defined pension plans in the United Kingdom and the United States and elsewhere led to the development of immunization techniques and the demand for new financial instruments such as zero-coupon bonds, inflation-indexed bonds, collateralized mortgage obligations, as well as index options and futures. In addition, because of their long-term liability position, the contractual savings sector represents a strong and stable demand for long-term marketable financial assets. Figure 6.1 shows how the development of contractual savings (measured as the share of financial assets over GDP) and the maturity of government debt (long-term over total debt) are positively correlated.

The contractual savings sector contributes to the development of government securities markets through advance funding of future contingent liabilities.
Box 6.1. Financial Innovation

The past three decades have witnessed major financial innovations in, as well as a large expansion of, the financial services industry. Most innovations in the 1970s were prompted by an increase in the level and volatility of interest rates. Institutional investors, especially pension funds, and regulatory changes were also major forces stimulating this innovative process.

The response of most lenders and borrowers to the high and unpredictable interest rates of the early 1970s was to move to floating rate debt, including adjustable rate mortgages—a process that had already taken place in Britain during the 1960s. However, pension legislation enacted in 1974 codified the liabilities of private pension funds in the United States and imposed minimum funding requirements. This created a strong demand for long-duration fixed-income securities by pension funds, and contributed to the emergence and growth of both zero-coupon bonds and mortgage-backed securities.

The immunization strategies of pension funds also promoted the use of derivative products, such as index options and futures contracts, while pension funds spurred innovations in equity markets. The first indexed (or index-tracking) mutual fund was created for pension funds in 1971, in response to the growing realization that active investment management generally failed to achieve higher net returns than a fund passively invested in a market index. Since then, there have been several additional innovations, including index-tracking funds for bonds, midcap and small cap equities, value and growth equities, and international equities.

More recently, in response to the growing popularity of defined contribution retirement plans and the demand for more effective management of investment risk, new synthetic investment products have been developed. These minimize the downside risk of equity investments by providing a floor on the value of the investments over some period of time, while allowing some participation in the upside potential of the equity market.

Examples of Financial Innovation in Developing Countries

In Chile, the bonos de reconocimiento are zero-coupon indexed bonds that originated in 1987 in recognition of the state’s liability to contributors in the old pension system. These bonds are in great demand by insurance companies because of asset-liability matching requirements, and are also eligible assets for pension funds. A later innovation was to make these bonds transferable, to allow affiliates to opt for early retirement. Since 1990, they have been traded on the local exchanges. The mutuos hipotecarios, another innovation, were created especially for life insurance companies. They are a kind of illiquid mortgage bond whose only guarantee is the specific real estate property behind the debt. However, other innovations have not been successful. For instance, real estate corporations were especially created for pension funds, but only two were established and they disappeared by mid-1995, after four years in business, because of their relative tax disadvantages with respect to real estate investment funds, from the perspective of pension funds.

In Argentina, the common investment funds (fondos comunes de inversión) were created especially for pension funds in 1992. They represented 6.9 percent of the pension fund assets in 1998. Negotiable obligations, mortgage securitization, and leasing contracts are other new financial instruments gaining popularity in Argentina. Negotiable obligations must be held until their maturity, since they do not have a secondary market. Nonetheless, the size of this market has grown fivefold since 1992. Of the total amount invested in this security, banks issued about 51 percent in 1994 and only 9 percent in 1998. This reflects a significant increase in the relative importance of the corporate bond market for pension funds.

liabilities. In particular, private sector-funded pension plans reduce the size of the government debt and moral hazard that would otherwise result from explicit or implicit guarantees to alternative pension arrangements. Thus, such pension plan funding should improve the financial position of governments, thereby reducing the credit risk (and interest rate) on government debt instruments.  

By promoting the lengthening of the maturity of fixed-income securities, the contractual savings sector lowers borrowers’ refinancing risks. A government debt profile with short maturities, requiring frequent rollover of the entire stock of debt, exposes governments to the risk of periodic refinancing crises. On the other hand, a well-structured debt profile with maturities across a range of longer-term maturities shields governments

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Developing the Investor Base for Government Securities

from refinancing crises and hence reduces the need for governments to tighten fiscal policy dramatically (by sharply lowering expenditures and/or raising taxes) in order to meet its debt-service obligations when market conditions are not conducive for refinancing government debt.\(^{89}\) The short-term average maturity of Mexico's public debt, for example, exacerbated the 1994–95 peso crisis.

The potential contribution from the contractual savings sector to the development of government securities markets is not guaranteed. This sector can have a strong impact on the development of government securities markets if governments pursue sound monetary and fiscal policies. An environment of high inflation and large and growing fiscal deficits will discourage the contractual savings sector from investing in government securities with long maturities, and the development of the long end of the government securities market will thus be thwarted. Similarly, the use of the contractual savings sector as a captive source of government funding with below-market yields will act as a deterrent for the contractual savings sector to invest voluntarily in government securities.

6.3.4.3 Money Market Mutual Funds and Capital Market Development

Money market mutual funds, which invest predominantly in short-term money market instruments, including Treasury bills, have grown mainly in countries that have restricted the payment of interest on short-term bank deposits. Money market mutual funds in the United States received a major boost in the 1970s, when they first appeared, from the then-tight regulation of interest that commercial banks and other deposit-taking institutions were allowed to pay on retail deposits (Regulation Q). Although deposit institutions were gradually given more latitude to set their retail interest rates in the face of high inflation, they were forced to pay rates that were far below the rate of inflation. This gave a strong impetus to the emergence and growth of money market mutual funds. These funds invested in short-term money market instruments, comprising Treasury bills, large certificates of deposit, and commercial paper, and were able to pass on to their retail customers the considerably higher returns obtainable on wholesale funds.

89. See Alesina, Prati, and Tabellini 1990.
Money market mutual funds also offered attractive services, including a limited range of payment facilities. They grew rapidly and established a strong foothold in the U.S. financial system that survived the subsequent deregulation of deposit rates. France has also for many years applied tight limits on interest rates on retail deposits with banks and, in the 1980s and 1990s, promoted the creation of money market mutual funds that invested in Treasury bills and other short-term money market instruments.

Once established, money market mutual funds have continued to thrive even after the removal of interest rate regulations, probably because investors use them to park funds for subsequent investment in marketable securities. Australia, France, Greece, Japan, Spain, and the United States have relatively large-sized money market mutual funds.

The use of money market mutual funds for transaction purposes may also explain their emergence in countries such as the United Kingdom, where interest rates on short-term deposits have not been regulated. Given the competitiveness of bank deposits, however, money market mutual funds in these countries are unlikely to acquire the relative importance they enjoy in countries that have imposed strict regulations on the remuneration of short-term instruments and markets that have thrived in high-income countries.

6.3.4.4 Market Environment for Institutional Investors and Capital Market Development

Institutional investors are managed by trained professionals who are usually more aware than ordinary investors of the potential conflicts of interest and agency problems facing corporate management. They are thus better able to insist on legislation that protects the rights of minority shareholders and ensures market integrity. They also have an interest in promoting more effective corporate governance structures and in developing a more robust regulatory framework. Institutional investors can also exert effective pressure for more modern and efficient trading, clearing, and settlement facilities, including the creation of central securities depositories and book-entry systems.90

90. For an empirical analysis of the relationship between the development of contractual savings and capital markets, see Catalan, Impavido, and Musalem 2000.
Developing the Investor Base for Government Securities

Realization of these potential benefits is not automatic, but depends on the environment for institutional investors.91 A favorable environment includes a critical mass of investors, regulations that provide institutional investors scope for investment options, and a diversified financial structure. In addition, factors such as new technology, globalization, and regional integration also play important roles in capital market development.

When they first emerge, institutional investors control few resources and have little control over the evolution of market practices. When they reach some critical mass, they can begin influencing market development. When institutional investors are small but growing quickly, as in most countries that have recently reformed their pension systems, they tend to engage in buy-and-hold strategies and to use new inflows of funds for rebalancing their portfolios. Their impact on trading volumes is, therefore, smaller than in the case of larger and more mature institutional investors.

Regulations that provide institutional investors scope for investment options are also important. In countries where pension funds and insurance companies are required to invest in nontraded government securities, the direct impact on capital market development is negligible. Even quantitative asset-holding requirements expressed as upper limits on holdings of various asset classes are inhibiting, especially if they are binding. Among other reasons, overprotective regulations, such as minimum yield requirements (as is the case in Colombia, for example), has forced institutional investors to become holders of short-term securities.

Even in those countries where quantitative asset-holding requirements are not binding (i.e., the institutions hold, for example, fewer equities than what they are allowed according to the regulations), insurance companies in some of these countries do not adopt profit-maximizing behavior. They tend to follow conservative investment policies by investing predominantly in government securities. This practice has long prevailed in continental Europe and has inhibited the potential beneficial impact that institutional investors can have on capital market development. While their preference for bonds may help the development of bond markets, their nonmaximizing behavior has led them to adopt conservative valuation policies and to hold various debt instruments to maturity. In light of such investment conduct,

pension funds and insurance companies in these countries have made little contribution to the development of more efficient trading practices and have provided little stimulus to financial innovation.

The presence of a large number of different financial institutions stimulates competition and innovation and allows changes in investment policies to be effected more smoothly than where the financial structure consists of a few undiversified financial institutions. In Egypt, Jordan, and Sri Lanka, for example, where national provident funds or social security corporations dominate the institutional investor sector, their impact on capital market development has been constrained by the absence of a pluralistic financial structure. Such dominant institutions have been constrained to change their investment portfolio from bonds to equities for fear of causing a major adverse price impact and market instability, as well as concern about the corporate governance implications of a public sector agency holding controlling stakes in corporate entities. In contrast, large private pension funds in countries with large numbers of different types of financial institutions (for example, the United States and the United Kingdom) have been able to shift from bonds into equities without facing major obstacles.

6.3.5 Policies to Promote Institutional Investors

While the primary objective of pension funds is to provide affordable and sustainable pension benefits and of insurance companies to offer efficient insurance facilities, these financial institutions can be helpful in securities market development. In order to derive such market-development benefits from these institutions, governments need to adopt policies that promote their growth.

The specific needs of institutional investors go beyond demands for adequate return and security. These investors seek greater transparency and market integrity in both primary and secondary markets. They seek lower transaction costs and encourage efficient trading and settlement facilities. They stimulate innovation in both financial products and trading practices that are tailored to more efficient management and hedging of their liabilities. Institutional investors also give support to the adoption of accounting and regulatory policies that emphasize optimizing behavior, such as reliance on the prudent expert approach and permission to engage in securities lending and derivatives trading.
6.3.5.1 Promotion of Pension Funds and Insurance Companies

In promoting pension funds, policymakers need to pay attention to the overall organization of the social security system and the respective roles of public and private, as well as funded and unfunded, components. Where a government has decided to transform its government-sponsored pension fund system to a privately funded and privately managed system, care needs to be taken to assess the costs of transition and to ensure that the public system is not burdened with unsustainable financial obligations.

The promotion of private pension funds requires introduction of a robust and effective regulatory framework that resembles in its main elements the regulatory framework imposed on other types of financial institutions, including banks, insurance companies, and mutual funds. However, since pension plans involve very long-term contracts, spanning 60 years or more, their regulatory and supervisory framework needs to be particularly strong and effective. Pension fund regulations should stipulate clear licensing criteria to prevent the participation of unqualified institutions. They also need to stress the segregation and safe external custody of assets, prudent diversification and market valuation of assets, frequent actuarial reviews and audits, and extensive information disclosure and transparency. Effective supervision to ensure enforcement of the various rules and regulations is equally essential.92

Similar considerations apply to the development of more efficient insurance sectors. In most developing and transition countries, insurance sectors have suffered from repressive regulation, extensive fragmentation, and poor regulation and supervision. In many cases, a restructuring and consolidation of the insurance sector is necessary in order to provide more efficient insurance services and to support the success of pension reform programs. As in the case of pension funds, insurance regulation requires a robust framework for licensing and supervising insurance companies. Life insurance companies are institutions with long-term liabilities, and they can be insolvent but not illiquid for long periods. The restructuring and consolidation of the sector often requires mergers of small but viable companies and liquidation of insolvent companies. Their liquidation is often a lengthy process. Insurance

92. For a detailed study of pension funds, and justifications and strategies to promote their development, see World Bank 1994.
reform, like pension reform, is complex and requires a long period for the realization of promised benefits.

In both pensions and insurance, opening local markets to foreign participation and integrating them into global markets facilitate the transfer of financial technology, ensure that individual institutions operate prudently, and lead to well-capitalized institutions. A common feature in most countries that have reformed their pension and insurance sectors in the past two decades is the extensive involvement of large foreign groups, often through joint ventures with large local groups.

6.3.5.2 Promotion of Mutual Funds

The promotion of mutual funds often requires enactment of enabling legislation or regulation and introduction of a robust regulatory framework with effective supervision. Because mutual funds are relatively new institutions in most developing and transition countries, there is less need to restructure existing institutions. Mutual fund legislation or regulation is usually based on prototype models developed in North America and the EU that may need relatively little adaptation to local conditions. If there is a major challenge, it lies in ensuring that regulatory agencies have adequate numbers of well-qualified staff and sufficient authority to implement effective supervision.

Problems may arise, however, if mutual fund regulation and supervision deviate from sound practice, as suggested by the recent experiences of India and the Republic of Korea. Mutual funds should not offer guaranteed rates of return, unless they are expressed as guaranteed spreads over some benchmark. Mutual funds should also be required to mark their assets to market. Failure to use market valuations and to reflect these in published reports

93. In 1999, investor concerns in India about the financial health of a mutual fund, Unit Scheme 64 (US-64), which is managed by the state-run Unit Trust of India (UIT) and had carried a guaranteed 20 percent annual dividend, triggered a wave of equity selling, causing the Bombay share index, which represents the country's leading equity market, to lose 7 percent of its capital value on October 5, 1999. In the Republic of Korea, the Asian banking crisis of 1997, followed by insolvency of Daewoo, one of Korea's largest financial/industrial groups, in 1999—whose bonds were extensively held by mutual funds in Korea—triggered a virtual collapse of the industry. It had to seek substantial government assistance, mainly because Korea's mutual fund industry has, until recently, offered predominantly fixed-interest investments to its customers.
and advertised returns may give investors the false impression that they can redeem their mutual fund shares at the posted prices. If mutual fund assets include long-term bonds, they will be exposed to substantial falls in market prices in case of big rises in interest rates. The combination of long-term, fixed-interest assets and redemptions on demand at posted prices creates a heavy mismatch that is bound to cause large losses either for the mutual funds or for their investors.

One way to overcome the mismatch between illiquid bond markets and redeemable mutual fund shares is to operate closed funds. The shares of closed funds are not redeemable by their managers, but can be traded freely on the stock exchange. The problem with closed funds is that they often trade at a hefty discount to the net asset value of the fund and thus are not popular with investors. Another option is to offer funds with a fixed life, a fixed portfolio, and a guaranteed return. Provided there are no defaults among the bonds held in the portfolio, such funds can operate without a mismatch of assets and liabilities. On maturity, they could be rolled over into a new fixed portfolio. A third alternative is to authorize hybrid funds, known as “clopen” funds. Shares in such funds are not redeemable on demand but rather at specified monthly, quarterly, or annual intervals. Limits could be set on the proportion of shares that could be redeemed, and sufficient advance notice could be required.

Another obstacle to the development of mutual funds relates to the existence of an efficient distribution network. In the United States and the United Kingdom, for example, mutual funds have been promoted by independent financial groups and have been distributed through stockbrokers and financial planners or by direct marketing. In continental European countries and most developing countries, distribution networks have been controlled by commercial banks, which are the major sponsors of mutual funds.

Banks may face conflicting motivations in their mutual fund operations. At one level, their mutual funds may compete with their own deposit base, especially in the case of money market and bond mutual funds. In most countries, with the United States and the United Kingdom being exceptions, banks are the predominant managers and distributors of mutual funds. By offering their customers the opportunity to invest in mutual funds, particularly money market funds, they are disintermediating against themselves. Their cheap deposit base may be eroded, with adverse consequences for lending spreads and profits.
At another level, banks may fail to maintain a firewall between the allocation of assets for their own investment account and for the accounts of mutual funds under their management. To ensure that such malpractice does not occur, regulatory agencies need to be rigorous in their supervision and impose heavy sanctions when they detect deviations. Despite potential conflicts of interest, banks have successfully promoted mutual funds in most countries where they have been authorized to do so.

6.3.5.3 Taxation and Promotion of Institutional Investors

In many countries, institutional investors are promoted through tax incentives. In the case of pension funds, tax incentives often involve tax exemption of annual contributions and investment income, with retirement benefits taxed when they are received. This approach avoids the double taxation of long-term savings and provides incentives for retirement saving. In the case of life insurance, similar incentives are sometimes offered for premiums paid on long-term life policies. Some incentives are often offered, as well, on investment in equity mutual funds, as part of a set of policies to encourage savers to diversify their investments. Most exemptions are subject to stipulated ceilings. In most countries, when the assets of institutional investors become too large, the tax benefits are either withdrawn or substantially reduced. The case of Spain offers a good example of the use of tax incentives, legislative and regulatory changes, and the creation of new markets to develop mutual funds. (See Box 6.2.)

6.4 Nonfinancial Investors of Government Securities

6.4.1 Nonfinancial Corporations

The first group of nonfinancial investors is nonfinancial corporations, such as commercial and industrial companies. These companies are not long-term investors in government and other securities, but use these markets for efficient management of their liquid assets. Nonfinancial corporations can have a positive impact on the development of money markets if given direct or indirect access to its products. A particularly efficient means is through
Box 6.2. Development of Mutual Funds in Spain

Spain in the 1990s followed a course of dramatic expansion of the investment fund industry (see figures below), promoted within the framework of legislative and regulatory changes designed to facilitate (i) the creation of an investment fund industry, (ii) the establishment of repo and derivative markets, and (iii) accounting and taxation reforms aimed at making investment through funds more attractive.

In the initial phase of development, between 1985 and 1988, growth was slow due to the aversion of traditional banks to disintermediation. The liberalization of the financial system, increased competition, and the increasing loss of interest in fixed-term deposits gave rise to interest-paying checking accounts in 1987. At the same time, the deposit margin of investment funds was replaced by fees that rarely exceeded 2 percent overall. It is thus not surprising that financial conglomerates would devote few resources to promoting their funds. However, the government established a positive relationship with the banks that controlled the distribution networks by convincing them that lost earnings from lending spreads on deposits would be more than compensated by the fee income they could earn from managing investment funds. The government, in association with the banks, mounted a major campaign of publicity and public education.

The growth of investment funds during the late 1980s received a significant additional push from the very favorable tax treatment in effect since 1992. Mutual funds had been for years accumulating assets, to avoid a withholding tax on dividends. Yet, capital gains were subject to general income tax, after some partial adjustment for past inflation. Since 1992, the inflation adjustment was replaced by a fixed reduction of 7 percent per year elapsed, in excess of the first two years. This strong discrimination relative to ordinary capital income encouraged mutual funds, particularly those investing in bonds, to invest in shares, as capital gains from direct investment in shares received even more favorable tax treatment. Since 1996 (Law 7/1996), a new tax regime for capital gains has reduced, but not eliminated, the tax discrimination favoring mutual funds. (Capital gains are taxed after two years, but without further adjustment, at a flat 20 percent rate, well below marginal income tax rates.) This has made mutual funds attractive as longer-term savings vehicles, in contrast to deposit accounts, on which interest would be taxed at the full personal rate. In addition, there is an exemption on the first 200,000 pesetas of gains.

In 1990, the commercialization of FondTesoros added the element of security to mutual funds. The FondTesoros are privately managed investment funds that, under an agreement with the Treasury, invested exclusively in government debt instruments and are subject to lower maximum fees than ordinary funds, but profit from the Treasury's publicity. FondTesoros gave liquidity to the market and introduced government guarantees, which further contributed to development of the industry.

Spain has been no exception to the typical development of the mutual fund industry through money market funds, which tend to be the leaders at an early stage of fund development, as investors make their first moves out of bank deposits and into securities. Money market funds decline in relative importance as investors become more confident and move into longer-term bonds and equities.

The boom in the investment fund industry has promoted liquidity and efficiency in Spain's capital markets. The government debt market was the first and the main beneficiary, as liquidity and depth were added to the money market industry and the repo market, and subsequently to longer-term instruments (see figure below). In fact, bond and money market funds still dominate the Spanish market for investment funds, although equity investment and investment in international securities are now gaining in popularity.

Continued
The rapid growth of a supplementary (third-pillar) funded pension regime (Law 8/1987) has also favored the growth of mutual funds, as well as the market for government bonds. There is no restriction on the percentage of a fund that can be invested in bonds issued by the Spanish government or international organizations of which Spain is a member.

Sources: García-Vaquero (1999), and Analistas Financieros Internacionales 1997.

repo facilities, which allow investment in long-term bonds to be converted into short-term instruments. (See Chapter 7, Developing Secondary Market Structures for Government Securities.)
6.4.2 Retail Investors of Government Securities

In funding its borrowing requirements, governments often devote particular attention to individual investors in the retail market. Catering to the needs of retail investors is an essential part of an overall strategy to develop a diverse investor base. Retail investors add to overall demand for government securities and are relatively stable holders of such financial instruments.

Governments and other issuers, however, need to consider the processing and distribution costs of reaching and dealing with the retail market directly. Attracting retail investors indirectly through mutual funds may lower costs. Mutual funds appear to be particularly suitable for diversification of retail investor risk, as they can be vehicles for investment in a variety of securities such as corporate and mortgage bonds and corporate equities. Governments also can reduce the cost of directly accessing retail investors through automation.

The banking sector in the past has typically been reluctant to act as an intermediary for the government to handle security trading for the retail market because banks are wary of losing depositors who would withdraw deposits from a commercial bank in order to invest in retail government securities. However, given that mutual funds are offering government securities for the retail market and earning fees for this service has led some banks to enter this retail trade and thereby obtain similar income from this service.

The development of electronic trading systems of government securities has potential significance for broadening the investor base to the retail sector. Although it is still early, the Internet could open the door to a more efficient and cost-effective distribution of government securities in terms of price and administrative aspects.

Governments in many countries, both developed and developing, have historically catered to the needs of retail customers by issuing special, non-marketable financial instruments, often called national saving certificates. The basic objective of these certificates is to encourage the saving habit, especially among people who have limited access to formal financial institutions, and to assist in financing the government. The saving certificates are sold through post offices or banks, with maturities not exceeding five years and with interest income exempt from tax. To encourage long-term investment, the interest rate rises with the length of the deposit-holding...
Developing Government Bond Markets

period. In addition, various penalties are assessed on premature redemption. To limit the tax benefits that wealthy individuals could obtain by investing in such certificates, ceilings are often imposed on individual holdings.

The use of national saving certificates has been criticized for their expense, ineffectiveness, and distorting effects on banking competition. These certificates are processed manually, often at considerable cost, and they incur high distribution costs. They are offered at higher rates than those available, or permitted, on bank deposits and are thus criticized as representing unfair competition against banks. They also are segmented from other debt securities, and often are more expensive than debt instruments sold through organized markets. Although premature redemptions are subject to penalties, these are typically not large enough to change the perception of certificates as liquid instruments.

A more integrated approach to developing the retail market started to take root in the 1970s. It was developed by countries that faced large borrowing requirements, a lack of domestic institutional investors, and a strong need to obtain noninflationary finance outside the banking sector that did not put undue upward pressure on domestic interest rates. Greece and Italy, for example, have followed this approach by issuing instruments with characteristics that appeal to retail investors. These include high security, high yield, a lower minimum amount than usually required for investment in government securities, and protection against depreciation of local currency by linkage to an international currency. Commercial banks and post offices are used to distribute these instruments. To lower transaction costs, building an automated registration system that can evolve over time into a book-entry system is proving useful.

The initial success of this approach with short-term instruments, reinforced by lower inflation, may lead to the issuance of longer-term instruments, including notes and bonds denominated in local currency without an exchange rate link, as well as bonds linked to domestic inflation. In countries with high inflation and unstable economic conditions, however, investors may have little trust in the domestic inflation index and may require instruments linked to a foreign currency. Policymakers should, however, be aware of the trade-off between cost and risk when linking domestic currency securities to a foreign currency or to inflation, and as part of a prudential debt management strategy, they should keep the total risk exposure of the debt portfolio under
Developing the Investor Base for Government Securities

control. (See Chapter 3, A Government Debt Issuance Strategy and Debt Management Framework.)

In developing the retail market, governments need to take account of the characteristics sought by individual investors. These include security, high yield, and ease of access, but not active trading and hedging facilities. It is also important to maintain effective control over issuing and distribution costs and to develop an efficient and automated registration system.

The decision of what instruments to offer in the retail market should ultimately follow the government’s overall issuing strategy. A deep and liquid secondary market for government securities can reduce the funding cost. However, such a market can best be promoted by concentrating government issuance in a few standard marketable instruments. If the total size of government securities is limited, the temptation to tap into the retail market through nonmarketable instruments may hinder the liquidity of the secondary market, and, therefore, undermine the cost-effectiveness of government funding.

6.5 Foreign Investors in Government Securities

Foreign investors can enlarge the investor base for government securities. In the process, foreign financial institutions often contribute to financial innovation in domestic markets, thereby yielding efficiency gains through increased competition and the introduction of good practices in the provision of financial services. Foreign investors can also contribute to liquidity and maturity extension of government securities when the government securities market is initially centered on short-term maturities.

Despite these potential benefits, there are also risks associated with foreign investors participating in government securities markets. Their involvement can make host economies more susceptible to market volatility. Such concern may be all the more warranted if the economy in which foreign investors hold securities deteriorates and has weak fiscal policies, unsound banking systems, and distorted domestic markets. Under such circumstances, foreign investors are likely to withdraw abruptly from such a market, thereby aggravating the financial weakness of the country. The entry of foreign financial institutions can also erode margins already narrowed by competition stemming from domestic financial liberalization.
6.5.1 Growth of Foreign Investors in Government Securities Markets

Foreign investors of government securities hold an increasing share of the government securities market for some countries. While broader markets supported by a growing presence of foreign investors can facilitate governments in meeting their borrowing requirements at reduced costs, at the same time they make it more difficult for countries with a strong foreign investor presence to pursue domestic goals because of an increasing interdependence of financial markets.

Countries that have received the largest portfolio inflows have experienced the largest increase in market capitalization, and there seems to be considerable scope for increasing the share of emerging-country securities market assets in the portfolios of OECD-area institutional investors. From both the demand and supply sides, there would thus appear to be a great potential role for foreign investors in the development of developing-country domestic government securities markets.

In developing a domestic government securities market, developing countries face the challenge of reaping the potential benefits that foreign investors can offer while minimizing the associated risks. A country seeking to draw on foreign investors to widen the investor base for government securities should thus create an environment that will appeal to foreign investors.

The growth of the involvement of foreign investors in other countries' financial markets, including in government securities markets, is summarized in Annex 6.B.

6.5.2 Impact of Foreign Investors on Capital Market Development

The increased investor base when foreign investors are present is particularly important for capital market development, including government securities market development, as it helps deepen liquidity and extend maturities. Through sophisticated trading and investment strategies, foreign institutional investors can create additional liquidity in the form of arbitrage activities and diversification of investor portfolios.94 Foreign investors

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94. Institutional investors themselves are very much interested in market liquidity—the ability to transact in large size without moving the price against them and at low
can also contribute to maturity extension of government securities when the government securities market is initially centered on short-term maturities. In the development of the Spanish government securities market, for example, foreign investment banks played a key role in maturity extension of government securities by holding, in 1993, more than 50 percent of outstanding balances of medium- and long-term bonds.

The import of financial services also results in efficiency gains. Capital flows tend to cause specialization in the production of financial services, thereby creating global efficiency gains. For some countries, importing financial services will be more efficient than producing them locally. Financial services can be imported primarily through domestic establishment of branches of foreign companies, and through cross-border delivery.

The import of financial services can also bring dynamic efficiency to the domestic financial sector. The increased competition from abroad can make domestic producers of financial services more efficient, promoting innovation and enhancing productivity.

The process of financial innovation has been strongly driven by the growth of institutional investors and has been relatively slow in markets where the domestic institutional sector is less developed. Foreign investors can speed up the financial innovation process. They may, for example, introduce sophisticated trading arrangements and investment techniques, which may be quickly adopted and further developed by domestic financial institutions. At an early stage of Spanish government securities market development, domestic institutional investors were a rather unimportant group, but grew as the debt market developed. At the

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95. "The fact that the production of many financial services, wholesale financial services in particular, is characterized by economies of scale and scope implies that their production will be concentrated in certain countries on efficiency grounds." (Eichengreen et al. 1998a, p. 12.)

96. When the domestic banking system is weak, opening it up to competition to foreign banks (through either acquisition of domestic banks or startups of new institutions) is a delicate matter. Placing too much sudden pressure on a weak banking system can incur great risk to the domestic banking sector. For example, increased international competition may cause decreases in franchise value, giving domestic banks incentives to assume excessive risks.
same time, foreign investors played an important role in introducing financial innovations into the Spanish market, and their innovations were quickly copied and extended by domestic banks and asset managers. One example of such an innovation is the introduction of guaranteed-return mutual funds.

6.5.3 Risks Associated with Foreign Investors in Domestic Financial Markets

The presence of foreign investors can amplify the effects of policy distortions and agency problems associated with domestic financial liberalization. Domestic financial liberalization, by intensifying competition and squeezing margins in the financial sector, can bring risks to an economy. Without adequate prudential supervision and regulation, domestic financial liberalization can allow financial institutions to take on risks which are beyond their capacity to handle. Opening the domestic market to foreign financial institutions can expose the economy to additional risks. The entry of foreign financial institutions can erode margins further. If a culture of implicit guarantees exists (for example, a situation in which both lenders and borrowers perceive an exchange rate peg as a link in a chain of implicit guarantees), the high nominal interest rates characteristic of emerging markets can induce foreign investors to pour substantial short-term capital flows into such markets.

Countries with substantial short-term external debts are vulnerable to a self-fulfilling crisis. If foreign investors suddenly lose confidence in the creditworthiness of a country, they may refuse to roll over its stock of short-term debt, and the country will be forced to finance its debt service from its foreign currency reserves. If the reserves prove inadequate, a sharp reversal of capital flows follows. Mexico in December 1994, with extensive short-term dollar-denominated government debts and limited dollar reserves, found itself in a crisis when, simultaneously, previous lenders demanded repayment and no new lenders of dollars could be found.

It has been suggested that in the 1992 ERM crisis, the bond market turbulence of 1994, and the recent Asian crisis, hedge funds precipitated major movements in asset prices. The popular view is that hedge funds take large, highly leveraged positions against unsustainable currency pegs and other misaligned asset prices and can quickly reverse these positions so that major market moves result.
Developing the Investor Base for Government Securities

Some analysts, however, suggest that hedge fund capital is small relative to the resources at the command of other institutional investors. News of changes in hedge fund positions, however, may induce other investors to follow. Hedge funds would thus play an important role in herd behavior. Nonetheless, according to the limited econometric evidence, there is some indication that hedge funds herd together, but no indication that other investors regularly follow the lead of hedge funds. While some of the case study evidence points to the role of hedge funds as a leader (with the 1992 ERM crisis most frequently cited), it is equally possible to cite episodes where hedge funds were followers of the market rather than leaders.

It would be possible to limit the ability of hedge funds and other foreign investors to take positions in domestic financial markets by (i) taxing short-term capital inflows (as is done by Chile), (ii) requiring banks and brokers to raise margin and collateral requirements, and (iii) limiting the ability of financial institutions to provide the domestic credit needed to short the currency and to loan the securities needed to short equity and fixed-income markets. With a country's proven ability to provide a sustainable macroeconomic balance, these measures should be taken on an exceptional basis, as the benefits of the entry of foreign investors generally outweigh its risks.

6.6 Conclusion

A diversified investor base is an essential element of well-functioning government securities markets, with carryover benefits to capital market development in general. Such an investor base will allow governments to

97. See Eichengreen et al., 1998b.
98. One conservative estimate of hedge fund capital is US$90 billion (excluding funds of funds), of which US$30 billion belongs to macro funds that take large directional positions in currency markets. These figures pale beside those for other institutional investors. The assets of institutional investors in mature markets exceed US$20 trillion. Although hedge fund capital can be substantial relative to smaller emerging markets, macro funds concentrate a substantial share of their resources in particular emerging markets only under exceptional circumstances (see Eichengreen et al., 1998b).
99. The notion that other investors regard hedge fund managers as relatively well informed and hence follow their lead can be interpreted as an information cascade effect.
100. See Eichengreen et al. 1998b.
Developing Government Bond Markets

lengthen the maturity structure of their debt portfolio and lower the cost on their outstanding fixed-income debt. Moreover, a diversified and competitive investor base, by deepening secondary markets and market liquidity, will result in lower market volatility. In addition, the participation in government securities markets of investors with different institutional perspectives and investment motives will stimulate financial innovation in the government securities market, including the development of instruments with features that meet the demands of various types of investors, as well as the adoption of better transparency and regulatory practices and standards in government securities markets.

With the rapid expansion of the contractual savings sectors and collective investment funds, the potential sources of demand for government securities have widened considerably in recent years. In addition, retail and foreign investors have become important sources of demand for fixed-income securities. As governments move away from reliance on captive sources of government funding by financial institutions, they need to create an environment and promote policies that attract investors with different time horizons, risk preferences, and trading objectives. While a diversified investor base is a necessary condition for ensuring broad-based demand for government securities, a stable macroeconomic environment and prudent capital account liberalization are essential to maintain a stable and growing participation of the full range of investors in government fixed-income securities.
Annex 6.A
Growth of Institutional Investors

Institutional investors, comprising pension funds, insurance companies, and mutual funds, have grown at an explosive rate over the past two decades. The total assets of institutional investors in OECD countries rose from $3.2 trillion in 1981, equivalent to 38 percent of total GDP, to $26 trillion in 1996, corresponding to 105 percent of total OECD-area GDP. The average annual growth rate amounted to 15 percent. The assets of institutional investors grew nearly three times faster than the annual income in OECD countries.

Within the OECD region, institutional investors grew fastest in the G-7 countries, where they now represent more than 110 percent of GDP. Among the G-7 countries, the rate of growth was higher in France and Germany, two countries that had lagged in the development of institutional investors. Outside the G-7, the Netherlands and Switzerland, and to a lesser extent Sweden, have very large institutional investor sectors.

Outside the OECD region, several countries experienced dramatic growth in institutional investors, including Brazil, Chile, Cyprus, Egypt, and South Africa. Although they have large institutional investors, Malaysia and Singapore did not register very high growth, mainly because their national provident funds were already large in the early 1980s, the beginning of the period under review. Several other countries, especially in Latin America and Eastern Europe, implemented systemic pension and insurance reforms in the 1980s and 1990s that laid the foundation for rapid future growth of institutional investor assets. Starting from a very low base, insurance companies and pension funds in these countries are already experiencing growth rates of over 50 percent per year. They are, however, still relatively small and continue to play a secondary part in their national financial systems.

In 1980, there were probably no more than 10 countries in which institutional investors controlled resources exceeding 50 percent of GDP. These countries included the United States, the United Kingdom, Switzerland, the Netherlands, Singapore, and South Africa, and a few more English-speaking and Scandinavian countries. Seventeen years later, nearly all OECD-area countries had institutional investors with resources exceeding 50 percent of GDP. Among developing countries, Chile and Malaysia joined this group. In Chile, the total assets of institutional investors grew...
Developing Government Bond Markets

from less than 1 percent of GDP in 1980 to more than 60 percent in 1997. In the United Kingdom, the Netherlands, Switzerland, the United States, and South Africa, total assets of institutional investors now exceed 150 percent of GDP.

The structure of institutional investors varies considerably across countries. Pension funds tend to be very large in countries where government-sponsored social security systems offer modest benefits. These countries include the Netherlands and Switzerland among continental European countries, and the United Kingdom and the United States outside continental Europe. Pension funds are weak or nonexistent in France, Germany, Italy, and other continental European countries where government-sponsored social security systems continue to offer generous benefits.

Several developing countries have large national provident funds (e.g., Malaysia and Sri Lanka) or partially funded social security corporations (e.g., Egypt, Gambia, Ghana, and Jordan). Their role in the securities markets is largely confined to investing in government securities. In addition, a growing number of developing and transition countries, especially in Latin America and Eastern Europe, have reformed their pension systems and created private pension funds. Except for Chile, which reformed its pension system in 1981, private pension funds in these countries are still relatively small and have had limited impact on securities markets. In reforming pension systems and pension funds, policymakers should recognize the important role that these intermediaries can play in furthering an efficient securities market.

Life insurance companies are large in many countries that also have large pension funds because of the role they play in managing pension plans and insuring pension plan benefits. This is the case in Australia, Canada, the Netherlands, South Africa, Switzerland, the United Kingdom, and the United States. However, life insurance companies have experienced high growth rates even in countries with dominant government-sponsored social security systems. In France, total assets of life insurers exceeded 45 percent of GDP in 1997, up from only 8 percent in 1980. In Austria, Belgium, and Germany, life insurance companies have amassed assets equivalent to nearly 25 percent of GDP in 1997.

In Latin America and Eastern Europe, pension reform programs provide a strong stimulus for the development of life insurance business. These programs often require the provision of term life and disability insurance for the protection of workers and their families, and they also involve the pur-
Developing the Investor Base for Government Securities

Policymakers should also bear in mind the potential importance of mutual funds for government securities market development. Recent years have witnessed an explosion in the growth of mutual funds, fuelled by the spectacular performance of equity markets in most developed countries. In the United States, mutual fund assets rose from 5 percent of GDP in 1980 to 50 percent in 1997 and 65 percent in 1998. In the United Kingdom, they increased over the same period from 7 to 25 percent. Mutual funds have a strong presence in Canada; France; Hong Kong, China; Italy; and Spain, where they range between 35 and 50 percent of GDP. In several other countries, including Belgium, Germany, Greece, the Netherlands, Portugal, Sweden, and Switzerland, mutual fund assets exceed 20 percent of GDP. In Luxembourg and Ireland, mutual fund assets are very large relative to GDP, but most are offshore funds that attract foreign investors for tax reasons. Mutual funds have also been growing rapidly in many developing countries, but, except in a few countries such as Brazil, India, Republic of Korea, Malaysia, and South Africa, their assets generally amount to less than 5 percent of GDP.

There is considerable variety in the structure of mutual funds among countries. Mutual funds follow the relative development of equity and bond markets, although various features of the regulatory framework also seem to affect the demand for different types of funds. Equity funds account for the vast majority of mutual fund assets in countries where equity markets are large or have grown rapidly in recent years (for example, Hong Kong, China; Sweden; Switzerland; and the United Kingdom). The share of equity funds in total mutual funds has also increased sharply in the United States because of the very strong performance of U.S. equity markets. There has been a substantial change in favor of equity funds over the past few years in most European countries because of the lowering of real interest rates and the strong performance of equity markets.

In contrast, bond mutual funds have been predominant in most continental European countries, especially in the countries of Southern Europe, and in most developing countries. This probably reflects the lower efficiency and weaker attractiveness of equity markets in these countries and the high level of real interest rates.
Annex 6.B
International Diversification of Securities Portfolios

6.B.1 Growth of Foreign Institutional Investors in Emerging Markets

Investment in securities of emerging markets by foreign institutional investors is a relatively recent phenomenon. Only since the mid-1980s have closed-end investment funds (including country funds) begun to invest in emerging-country bond and stock markets. Pension fund investment in emerging markets is an even more recent phenomenon. Expansion of the pension sector in OECD-area countries has become a main source of continued capital flows into emerging markets. Investment of pension funds has been through mutual funds or directly on the pension funds’ own account.101

Countries that have received the largest portfolio inflows have experienced the largest increase in market capitalization,102 and there seems to be considerable scope for increasing the share of emerging-country securities market assets in the portfolios of OECD-area institutional investors.103 From both the demand and supply sides, there would thus appear to be a great potential role for foreign investors in the development of developing-country domestic government securities markets.

The 1990s have seen an explosive growth of cross-border flows of portfolio capital. A number of developing countries has attracted an increasing share of such capital, but still far less than industrial countries.104

An increasing interest in emerging markets has corresponded with “push” factors, such as a drop in U.S. interest rates and a slowdown in U.S. industrial production. This implies temporary and unstable capital flows to emerging markets. “Pull” factors include increasingly stabilized macroeconomic environments (at least before the Asian crisis) and continuing efforts toward economic and financial liberalization on the part of

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103. See Blommestein 1997.
104. Whereas gross inflows of portfolio investment to industrial countries during 1989–96 amounted to US$892.9 billion, such inflows to developing countries were US$23.4 billion (see Eichengreen et al. 1998a).
Developing the Investor Base for Government Securities

developing countries. Empirical evidence seems to point to the importance of push factors in explaining portfolio capital flows to developing countries, but country-specific developments could be at least as important for some regions, and seem to be more important for bond flows than for equity flows.105

6.8.2 Importance of Foreign Investors in Domestic Government Securities Markets

Institutional investors can diversify their portfolios globally by investing in foreign securities. By diversifying with emerging-market securities, many investors believe (or believed before the Asian crisis) that they could reduce portfolio risk and increase return. There is a gradual trend toward internationally diversified portfolios of pension funds. Portfolios of life insurance companies, however, are less diversified than those of pension funds. The portfolios of mutual funds in larger OECD countries have become significantly more diversified than those of insurance companies and pension funds.106

Institutional investors as a group are much less internationally diversified than would be true if they held a world market portfolio. Reasons for this home bias have been identified in the literature and include, for emerging countries, exchange rate risk, interest rate risk, transfer risk, settlement risk, and liquidity risk.107 The use of hedging instruments, such as forwards, futures, and options, can reduce exchange rate risk,108 but these instruments are not always available for emerging-market currencies. Furthermore, the price of hedging instruments will offset part of the gain from foreign investment, they may only be available for short periods, and trust deeds for pension funds may limit their use. In addition, transfer risk (exchange controls and nationalization of foreign assets) may affect the ability to repatriate returns. Settlement risk in less-developed securities markets may be large, with a high proportion of delayed or failing transactions, and liquidity risk may be significant in narrow overseas markets.

105. For example, see Chuhan, Claessens, and Mamingi 1998.
106. See Blommestein 1997.
Other impediments to international diversification include the nature of institutional investor liabilities. Many pension schemes and life insurance contracts have very precisely defined nominal liabilities. In these cases, the preferred investment strategy may be to match domestic liabilities with domestic assets. Regulatory constraints on foreign investments, the benchmark orientation of fund managers, and treatment by institutional investors of more diversified portfolios market securities as a separate asset class constitute yet other impediments. Limitations on the proportion of fund assets that can be invested in developing-country securities by the portfolio allocation guidelines outlined in the prospectuses of broad-based mutual funds (in contrast to dedicated developing-country mutual funds) also restricts the scope of international portfolio diversification.

109. See IMF (1995a) for statistical evidence on the hypothesis of investors treating developing-country equities as a separate asset class.
Developing the Investor Base for Government Securities

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