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Pension Funds and Capital Markets

Investment regulation, financial innovation, and governance

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The volatility in emerging markets during 1995 has reinforced the importance of local capital market development. Chile's resilient financial markets provide some useful lessons on the role pension funds can play in generating long-term financial resources and facilitating the growth of capital markets. The experience of Chile and indeed of several OECD, East Asian, and other Latin American countries shows that both pension funds and capital markets can thrive under the right macroeconomic policies—low inflation, small budget deficits, and positive long-term real rates of interest.

This Note briefly examines the dynamic interaction that can develop between pension funds and capital markets. Pension funds are not only a source of long-term savings to support the development of bond and equity markets. They can also be a positive force for innovation, for corporate governance, and for privatization. In turn, capital markets offer pension funds the opportunity for better portfolio returns and risk management. This interaction is a long, self-reinforcing process that builds on sound macroeconomic policies, effective regulatory reforms, and robust accounting, legal, and information infrastructure.

The key message for policymakers is that pension reform should be part of a broad reform program. It need not be delayed until capital markets are well established. But, equally important, large quantities of state assets should not be transferred to newly formed private pension funds—or, even worse, to state pension funds—without first taking steps to develop robust and well-regulated capital markets. Chile's gradual approach to investment deregulation is a good model for developing countries introducing mandatory but decentralized pension systems (see box).

Pool of long-term financial savings

Although the quantitative effect of pension saving on total savings is unclear and hotly debated, there can be little doubt that funded pension schemes lead to a big increase in long-term financial savings that can underpin capital market development.

The size of accumulated long-term funds depends on the maturity of the schemes, their coverage, the contribution rate, and the investment rate of return. The experience of Malaysia, Singapore, and, more recently, Chile shows that, once in place, a credible and well-run pension system can accumulate long-term resources rapidly. In Singapore, the resources of the Central Provident Fund rose from 28 percent of GDP in 1976 to 73 percent in 1986 and 76 percent in 1990, and in Malaysia, provident fund assets grew from 18 percent of GDP in 1980 to 41 percent in 1990 (table 1). Chile's pension system expanded from a mere 1 percent of GDP in 1981 to 9 percent in 1985, 26 percent in 1990, and 43 percent in 1994. Adding the assets of insurance companies brings contractual savings in Chile to nearly 55 percent of GDP. Large increases were also experienced in OECD countries with funded pension schemes.

Although the large accumulations of financial resources in these countries are sometimes smaller than the total assets of banks, their economic significance is often greater, because contractual savings are not inflated by interbank borrowing and lending. Pension and insurance reserves are the largest component of household financial wealth in all these countries.

INVESTMENT LIMITS: CHILE'S GRADUAL APPROACH

Chile applied very tight investment limits when it created its new, government-mandated but privately managed pension system. Initially, the investment limits were 100 percent for state securities, 80 percent for mortgage bonds, 70 percent for bank liabilities, 60 percent for corporate bonds, and 20 percent for quotas of pension funds. The limit on bank liabilities was reduced to 40 percent in 1982. In 1985, the limit on state securities was lowered to 50 percent and that on corporate bonds to 40 percent. Pension funds were permitted to invest up to 30 percent of their value in equities of privatized state enterprises, but no more than 5 percent for any one enterprise. In 1986, pension funds were also allowed to invest in corporations with dispersed ownership. Investments in real estate companies were permitted in 1989, subject to a global limit and a limit for individual companies. Pension funds were authorized to invest in foreign securities in 1990, subject to a very low and slowly increasing limit. At the same time, the limit on state securities was lowered further to 45 percent, while the limits on bank liabilities and corporate bonds were raised to 50 percent. Investments in venture capital and infrastructure funds were permitted in 1993, and in 1995 the limit on equity holdings was raised to 37 percent and that on foreign securities to 9 percent. Chile has also imposed limits on holdings of the securities of individual companies in order to prevent the concentration of risk. See the table below for the investment profile of Chilean pension funds.

INVESTMENT PROFILE OF CHILEAN PENSION FUNDS
(percentage of total assets)

Type of asset	1981	1985	1990	1994
State securities	28	43	44	40
Bank deposits	62	21	17	5
Mortgage bonds	9	35	16	14
Corporate bonds	1	1	11	6
Corporate equities	0	0	11	32
Other	0	0	1	3
Total	100	100	100	100

Source: Administradoras de Fondos de Pensiones.

To bond or equity markets?

Historically, whether pension fund assets flow into bond or equity markets has usually been a matter of regulation (investment limits) and attitude toward risk. U.K. pension funds' emphasis on equities is attributed to their freedom from detailed regulations and to the adverse effect on bond returns of the high inflation of the 1960s and 1970s (table 2). U.S. pension funds invest 46 percent of their resources in real assets and 54 percent in debt instruments. Although both countries apply the "prudent man" rule to pension fund investments and do not specify limits on different types and classes of assets, U.S. pension fund investment policies are more conservative as a result of the minimum funding requirements imposed by pension law. Continental European countries show a stronger predilection for bonds. The low level of equity holdings by European pension funds is often attributed to tight investment limits. But in most cases the limits are not binding, and the investment policies are due to a more conservative approach.

In Singapore and Malaysia, most pension funds are placed in government bonds and other debt instruments, with only a very small proportion going into equities. But Singapore and to a lesser extent Malaysia allow workers to invest their provident fund balances in housing and other approved securities. Singapore has recently permitted investments in foreign securities, and Malaysia is likely to follow suit. Chile did not initially allow pension funds to invest in equities and still subjects them to strict rules with maximum limits on investments in different instruments and issuers. These limits, designed to ensure adequate risk diversification, have been relaxed over time. Chile allowed equity investments in the mid-1980s, first in privatized utilities and then in other companies, and recently raised the equity limit to 37 percent of a pension fund's assets.

To local or foreign markets?

Pension fund investment in foreign assets is a controversial but important issue for all countries. International diversification may increase portfolio returns, especially if pension funds are too big for the size of the local capital markets. Most important, it helps reduce investment risk because of the less than perfect covariance in

investment returns across countries. But unrestricted foreign investment may institutionalize capital flight and prevent domestic markets from reaping the benefits of creating pension funds with long-term financial resources. For these reasons, most developing countries limit foreign investments. Chile, for example, did not allow overseas investments until 1990. It recently raised the limit for investments in overseas securities to 9 percent of assets (4.5 percent for foreign equities), even though actual holdings of foreign securities were less than 1 percent of assets, well below the previous limit of 6 percent. Chile also recently allowed pension funds to engage in currency hedging operations.

In industrial countries, pension funds have built up substantial holdings of foreign equities and bonds since the removal of exchange controls from the early 1980s onward and the relaxation of investment rules. These holdings range from well over 50 percent for the typical pension fund in Hong Kong to over 20 percent in Australia, New Zealand, and the United Kingdom. In the United States, foreign investments account for only about 10 percent of total assets, reflecting the country's large size and perhaps the ability to diversify risks by investing in U.S. multinationals.

TABLE 1 PENSION FUND AND LIFE INSURANCE ASSETS (percentage of GDP)

Country	1970	1980	1990
Switzerland	51	70	110
Netherlands	45	63	107
United Kingdom	43	46	97
United States	43	49	75
Singapore[a]	..	28[b]	76
Malaysia[a]	..	18	41
Chile[a]	..	1[c]	26
South Africa	0	..	84

.. Not available.
a. Refers to pension fund assets only.
b. 1976.
c. 1981.
Source: National central banks.

TABLE 2 ALLOCATION OF PENSION FUND ASSETS, 1990 (percent)

Country	Real assets	Debt instruments
Switzerland	33	67
Netherlands	31	69
United Kingdom	72	28
United States	46	54
Singapore[a]	2	98
Malaysia[a]	2	98
Chile	20	80
South Africa	60	40

a. Does not include workers' direct investments in housing and approved securities.
Source: National central banks.

Lessons on limits

Investment limits are unnecessary for industrial countries, with their well-established financial markets and sophisticated supervisory agencies. The "prudent man" rule and fiduciary diligence should suffice to ensure adequate diversification and custodial protection of pension fund assets. But in developing countries, initially tight and detailed investment rules are justified by the absence of strong and transparent capital markets, the compulsory nature of the pension system, and the pension fund members' lack of familiarity with capital market investments. These rules should be systematically relaxed as domestic capital markets grow and mature.

As a general rule, prudent policy would initially favor investments in indexed government bonds on market-determined terms. Relaxation of investment rules, such as lowering the ceiling on government bonds and permitting investment in equities, could come when pension fund assets reach, say, 5 percent of GDP, and permission to invest in overseas assets when they reach, say, 20 percent of GDP. Small countries could give permission to invest overseas earlier and allow a higher limit for foreign assets than larger countries with more diversified capital markets.

Force for innovation

Pension funds can play a big part in encouraging financial innovation and stimulating the

modernization of capital markets. As pension funds grow in size and relative importance, new instruments are developed to meet their needs and to fill perceived gaps in the markets. In the United States, for example, the development of securitization and financial derivatives has been attributed at least in part to the investment and risk management needs of pension funds and other institutional investors. The emergence of block trading and the reform of stock exchanges around the world, including the abolition of fixed commissions, can also be attributed to the growth of pension funds and other institutional investors.

Pension funds can act as catalysts for the development of efficient trading and settlement systems, the adoption of modern accounting and auditing standards, and the promotion of meaningful information disclosure. But their impact on trading efficiency and on market liquidity also depends on their investment policies. In countries where pension funds acquire strategic holdings and follow a policy of "buy and hold," their effect on market liquidity is small. But heavy trading is often criticized as excessive and motivated by concerns about short-term results rather than long-term performance.

Player in corporate governance

The question of market trading and strategic holdings is also linked to the role of pension funds in corporate governance. As pension funds grow, they become the dominant class of institutional investors and can acquire an important collective voice in corporate affairs. In South Africa, pension funds and the insurance companies that manage most of them acquire controlling stakes in a large number of companies, including other financial institutions, and play a dominant part in corporate affairs. In the United Kingdom and the United States, pension funds have tended to acquire small, fragmented holdings and have historically played a rather passive role. But in recent years, large, public pension funds have started to exercise greater voice in corporate matters. The growing presence of collective bodies (such as pension fund associations and ad hoc groups of institutional investors) has enabled them to take actions that have had a salutary effect on the performance of several large but stagnating corporations. They have strengthened the role of independent, non-executive directors and have replaced the top managers of persistently poorly performing companies. Collective bodies can exert influence without running into conflicts of interest and can economize on monitoring and other costs associated with a more active role in corporate governance—another example of the dynamic interactive process between pension funds and capital markets.

The role of pension funds in corporate governance is also likely to become an important issue in countries with mandatory but decentralized pension systems, such as Chile and other Latin American countries. Chile now requires pension fund managers to vote for independent directors. The collective voice approach being developed in the United Kingdom and the United States, as well as in Canada and other countries, also seems to be appropriate for developing countries.

Role in privatization

Pension funds can facilitate privatization and will do so more successfully as they accumulate substantial resources and look for profitable investments. But simply transferring state assets *en bloc* to pension funds in recognition of acquired pension rights might not work, and should certainly not occur without fundamental improvements in the way these transferred assets are managed.

In Chile, investments in privatized utilities are the core of the equity holdings of pension funds. Although their share has been declining, these investments still account for about 75 percent of the funds' equity holdings.

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