

Pension Reform and Capital Market Development

“Feasibility” and “Impact” Preconditions

Dimitri Vittas

Private pension funds are neither necessary nor sufficient for capital market development. But if they are subject to conducive regulations, adopt optimizing policies, and operate in a pluralistic structure, they can have a large impact on capital market modernization and development once they reach a critical mass.



Summary findings

The link between pension reform and capital market development has become a perennial question, raised every time the potential benefits and preconditions of pension reform are discussed. Vittas asks two questions. First, what are the basic “feasibility” preconditions for the successful launch of a pension reform program? And second, what are the necessary “impact” preconditions for the realization of the potential benefits of funded pension plans for capital market development?

His main conclusion is that the feasibility preconditions are not as demanding as is sometimes assumed. In contrast, the impact preconditions are more onerous. The most important feasibility precondition is a strong and lasting commitment of the authorities to maintaining macroeconomic and financial stability, fostering a small core of solvent and efficient banks and insurance companies, and creating an effective regulatory and supervisory agency. Opening the domestic banking and insurance markets to foreign participation can easily

fulfill the second requirement. The main impact preconditions include the attainment of critical mass; the adoption of conducive regulations, especially on pension fund investments; the pursuit of optimizing policies by the pension funds; and a prevalence of pluralistic structures.

Vittas also argues that pension funds are neither necessary nor sufficient for capital market development. Other forces, such as advances in technology, deregulation, privatization, foreign direct investment, and especially regional and global economic integration, may be equally important. But pension funds are critical players in “symbiotic” finance, the simultaneous and mutually reinforcing presence of many important elements of modern financial systems. They can support the development of factoring, leasing, and venture capital companies, all of which specialize in financing new and expanding small firms.

This paper—a product of Finance, Development Research Group—is part of a larger effort in the group to study the impact of institutional investing on capital markets. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Agnes Yaptenco, room MC3-446, telephone 202-473-1823, fax 202-522-1155, email address ayaptenco@worldbank.org. Policy Research Working Papers are also posted on the Web at www.worldbank.org/research/workingpapers. The author may be contacted at dvittas@worldbank.org. August 2000. (22 pages)

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**Development Research Group
World Bank**

**Pension Reform and Capital
Market Development:
“Feasibility” and “Impact”
Preconditions**

Dimitri Vittas

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1. Introduction

The link between pension reform and capital market development has become a perennial question that is raised every time the potential benefits and preconditions of pension reform are discussed. The creation of funded pension plans has major long-term implications for the functioning and growth of financial markets. The steady accumulation of long-term financial resources, which is a basic feature of funded pension plans, is bound to affect the composition of financial savings, even if it may not affect the rate of national saving. The very accumulation of these long-term resources raises the question of what preconditions must the financial system of a country fulfill in order to enable their efficient utilization and the achievement of the basic objectives of pension reform.

This paper¹ addresses these issues from two perspectives: first, it asks what are the minimum preconditions of financial sector development for the success of pension reform and the promotion of funded pension plans. These are described as “feasibility” preconditions. Then it asks what preconditions are necessary for allowing the pension funds to realize their potential impact on capital market development. These are described as “impact” preconditions.

The main conclusion of the paper is that the “feasibility” preconditions are not as demanding as it is sometimes assumed. In contrast, the “impact” preconditions are more onerous. The most important “feasibility” precondition is a strong and lasting commitment of the authorities to maintain macrofinancial stability, to foster a small core of solvent and efficient banks and insurance companies, and to create an effective regulatory and supervisory agency. Opening the domestic banking and insurance markets to foreign participation can easily fulfill the second requirement. The main “impact” preconditions include the attainment of critical mass, the adoption of conducive regulations, the pursuit of optimizing policies, and the prevalence of pluralistic structures.

The paper discusses the various preconditions in turn and provides country examples from different regions of the world that underscore the relevance of these preconditions. It also emphasizes the importance of a strong and long-term commitment by the authorities, not only in implementing pension reform but also in pursuing all the necessary capital market reforms. Before addressing these issues, a number of preliminary observations are made to put the question of pension reform and its links with capital market development into a more appropriate context.

¹ The paper is a continuation and expansion of earlier work on the links between pension reform and capital markets. It draws heavily on Vittas (1998b and 1999).

2. Objectives of Pension Reform

The first preliminary observation concerns the objectives of pension reform. It is always important to emphasize that despite the broader potential benefits in higher efficiency and economic growth that may ensue, the development of financial markets is not, and should not be, the primary objective of pension reform. Rather the basic objective of pension reform and, the *raison d'être* of pension systems, is the provision of adequate, affordable and sustainable benefits. Achievement of this objective, and the role that funded and privately managed pension plans can play in this, have far-reaching implications for the efficiency of financial markets. But these are side effects. They are highly welcome because of their beneficial impact on growth and development, but they do not constitute the primary reason for pension reform.

The second objective is the creation of a strong link between contributions and benefits in order to minimize any incentive distortions on the functioning of labor markets and avoid capricious and perverse redistribution caused by volatile inflation and inconsistent eligibility requirements. Attainment of this objective does not require the creation of funded plans but only the institution of defined-contribution plans or the use of lifetime earnings, less backloaded benefits, and full vesting and portability rights in the case of defined-benefit plans.

The third objective is the generation of long-term savings that would help stimulate the development of capital markets. It is often argued that use of funded pension plans would increase the rate of saving in a country. Although this is possible under certain conditions, it is by no means certain. But there is little doubt that the creation of funded pension plans changes the composition of financial assets and increases the supply of long-term contractual savings.

Pension reform can take three different forms: parametric, NDC, and systemic. Parametric reforms, such as increasing the normal retirement age, tightening conditions for early retirement and disability pensions, lowering benefit rates, raising payroll taxes, combating evasion, and enhancing the administrative efficiency of social security institutions, aim at preventing the financial collapse of traditional unfunded social security systems. They deal with fiscal imbalances but they do not address the distortions in economic incentives that characterize systems with weak links between contributions and benefits.

Reforms based on notional defined contribution (NDC) plans aim at eliminating the labor market distortions that result from high evasion and the growth of informal labor markets. NDC reforms link benefits to contributions and weaken the incentives for evasion and strategic manipulation that bedevil unfunded defined-benefit plans. By reducing the size of the informal labor market, NDC reforms raise labor productivity and lead to higher economic growth.

Neither parametric nor NDC reforms generate long-term savings or have any direct effect on the development of financial markets. Only systemic reforms that

involve the creation of funded pension plans have such effects. To the extent that better developed banking and securities markets make an independent and additional contribution to higher economic growth (Demirguc-Kunt and Levine 1996, Levine and Zervos 1998), then only systemic reforms would accelerate economic growth beyond what could be achieved by reducing the size of the informal labor market.

3. “Short-Cuts” and “Long-Cuts” in Development

The second preliminary observation concerns the use of “short-cuts” in development. A long-held view by Millard Long, the Director of the 1989 World Development Report on “Financial Systems and Development” (World Bank 1989) is that there are no “short-cuts” in development². There are several examples of futile attempts to accelerate the pace of economic development through the adoption of some simple solutions that pay little attention to the institutional capabilities of low-income countries. **Adoption of “best practice” is often advocated without the realization that if developing countries could implement “best practice” they would not be “developing”.**

Traditional examples of such “short-cut” solutions in development include the establishment of development banks, the imposition of directed credit programs on commercial banks and the use of prescribed asset ratios on insurance companies and pension funds. In most cases, these approaches created “captive funds” for financing large budget deficits, for supporting “white elephant” projects, and for favoring privileged groups of borrowers, without any sustainable positive effects on economic growth and development. There are some exceptions to this pattern but they involve countries that emphasized the importance of institutional development and monitoring capabilities. By and large, however, these solutions have ended in failure.

More recent examples include the use of privatization vouchers in the Czech Republic and other transition countries where the intention was apparently the overnight creation of large capital markets with thousands of listed companies and millions of personal shareholders. This was probably the “shortest” of all “short-cuts”. It should not be surprising that without effective and robust institutions, including capital market regulatory agencies, the various initiatives ended in extensive asset stripping and looting of privatized companies and the enrichment of few “entrepreneurs” at the expense of the masses of individual investors (World Bank 1999, Coffee 1999).

Another example is the transfer of state-owned but “privatizable” assets to social security institutions. This aims at transforming unfunded institutions with high implicit

² This is not to deny that some policies may promote development. Policies that ensure macroeconomic stability, introduce incentives for sound finance and focus on institution building are likely to have an important and lasting effect on accelerating development. These are long-term solutions that treat development as a process that is likely to suffer setbacks. They require patience and perseverance and cannot be described as short cuts.

debts into partially funded ones. But it is often undertaken without paying adequate attention to the lack of investment expertise at the receiving institutions and the absence of mechanisms that would insulate the management of these assets from political interference. It is an example of reforms that aim to achieve some elusive “synergy” but often end in suffering from “dysergy”³.

The reliance on international financial flows is a further example of a “short-cut” in development since these flows proved to be affected by the volatile sentiment of international fund managers. “Contagion” effects have been documented not only in the case of hedge funds and large pension funds and insurance companies but also in the case of mutual funds. Past research tended to show that international mutual funds did not exacerbate financial crises in developing countries. But recent research (Kaminsky et al 1999) shows that both individual investors and fund managers of US mutual funds that invest in Latin America reacted in an indiscriminate way after the Russian crisis of August 1998. The findings of this study highlight the importance of large domestic institutional investors for greater market stability and lower price volatility in emerging markets. The greater insulation of the Chilean and South African equity markets from the adverse impact of the international financial crisis of 1998, which is attributed, at least in part, to the strong presence of domestic institutional investors, provides additional support to this thesis.

Developing pension funds and other domestic institutional investors is in many respects the “longest” of “long-cuts” and requires patience and long-term commitment. Another recent World Bank research project points to a strong link between contractual savings (comprising the assets of both pension funds and life insurance companies) and equity market development (measured either by the value of trading or by market capitalization)⁴. It also shows that a strong presence of domestic institutional investors reduces price volatility.

Rather interestingly, the sample of OECD countries on which the research is based includes a number of countries where pension funds and insurance companies, though very large in aggregate, follow conservative investment policies and neither invest nor trade heavily in equities (e.g. Switzerland and the Netherlands). This suggests that contractual savings may have a direct as well as an indirect impact on capital market development. The latter probably stems from the greater attractiveness of capital markets for international investors in countries where contractual savings are large, prospective deficits of public pension schemes are small, and governments are able to finance their long-term borrowing needs by issuing bonds and without recourse to inflationary short-term borrowing from commercial banks. Testing of this possibility would require separate data on holdings and trading by foreign institutional investors.

³ “Dysergy” is a term coined by the author to describe the result of complex and over-ambitious reforms that aim at simultaneously achieving several objectives but end up in frustration and little implementation as delays in one area block action in all.

⁴ This research, undertaken by Alberto Musalem, has not yet been completed but preliminary findings underscore the link between contractual savings and equity markets.

But as argued below, the role of international investors appears to be very important in some non-OECD countries such as Singapore and Malaysia.

4. Financial Market Benefits of Systemic Pension Reform

The third preliminary observation concerns the financial market benefits of systemic pension reform. Pension funds and other institutional investors entail substantial long-term benefits for the development of financial markets. Because of their long-term orientation and their special financial needs and also because they are managed by professional investors, they have the potential to:

- act as a countervailing force to existing commercial and investment banks;
- stimulate financial innovation;
- exert pressure for greater market integrity and modernized trading facilities;
- strengthen corporate governance; and
- encourage more robust financial regulation with positive demonstration effects for other financial sectors, such as banking and insurance⁵.

Countervailing Force. One of the main potential benefits of the growth of institutional investors is the intensification of competition in the financial system. The development of new sources of finance forces dominant commercial banks to become more competitive and to start seeking out their customers rather than waiting for prospective borrowers to visit them. The development of institutional investors also contributes to more competitive investment banking and securities markets (e.g. competitive bidding for corporate issues, lower issuing and trading costs, etc.).

Financial Innovation. Institutional investors, and especially pension funds, were major forces stimulating the financial innovation that has taken place over the past forty years (Bodie 1990). Directly or indirectly, they supported the development of asset-backed securities, the use of structured finance and derivative products, the launching of index-tracking funds, and the offer of synthetic products that protect investors from market declines. Financial innovation stemming from institutional investors is also evident in those developing countries that have implemented systemic pension reform, such as Chile and Argentina (Diamond and Valdes-Prieto 1994, Walker and Lefort 1999).

Market Integrity. Institutional investors, which are managed by trained professionals, are usually more aware than ordinary investors of the potential conflicts of interest and agency problems facing corporate management. Institutional investors also have more clout and are thus better able to insist on investor protection legislation that will ensure market integrity. Investor protection rules are generally better developed

⁵ The capital market effects of contractual savings and institutional investors are discussed in greater detail in Vittas (1998b and 1999). See also Walker and Lefort (1999) for an empirical study of the impact of pension funds on capital market development in Latin America.

in countries where large institutional investors hold diversified minority positions in a large number of companies than in countries where institutional investors are either underdeveloped (e.g. Germany) or tend to hold large controlling positions in a small number of companies (e.g. South Africa). At the same time, a stronger legal protection of minority shareholder rights may have contributed to the earlier and on a larger scale diversification into equities of institutional investors in Anglo-American countries compared to continental European countries.

Modernization of Market Trading. Institutional investors may also exert considerable pressure for modern and efficient trading, clearing and settlement facilities. In the United States and other countries, they have encouraged the use of bloc trading, the abolition of minimum commissions, the restructuring of stock markets and the automation of trading facilities. They have also played an important part in promoting more efficient clearing facilities and establishing central depository agencies that facilitate the move to book-entry systems and provide safekeeping services. And they have exerted pressure for modern efficient and reliable back-office operations that have suffered in all countries with emerging securities markets as existing facilities could not cope with fast growing trading volumes⁶.

Corporate Governance. The role of institutional investors in corporate governance has evolved in line with their growing importance as corporate owners. As long as their equity holdings were small and diversified in a large number of companies and as long as they represented a small fraction of market capitalization, institutional investors adopted a passive approach to corporate governance. They tended to vote with management and if they were unhappy with corporate performance, they could sell without suffering a big fall in market price.

But with continuing growth in their accumulated assets, institutional investors have collectively become dominant shareholders of many nonfinancial corporations. As a result, they can no longer exercise the "exit" option without disrupting the market and suffering big falls in market prices. They are effectively forced to exercise "voice". Institutional investors, mostly through various collective bodies, have been instrumental in emphasizing the importance of strengthening corporate governance structures and especially of increasing the accountability of top managers.

Financial Regulation. The development of institutional investors requires a robust and effective regulatory and supervisory framework. This takes time to develop and requires a strong and lasting commitment by the authorities. Although stringent regulations may be imposed at first, especially if a compulsory pension and insurance system is created, over time regulations need to be relaxed and to emphasize transparency and prudence as well as the fiduciary duty of managers toward investors (Vittas 1998a).

⁶ In many countries around the world that do not have the size and depth of US markets, modernization initiatives have been undertaken in response to growing interest by international investors, often the very same institutional investors that promoted the modernization of US and UK markets. As discussed below, growing international integration is another major factor promoting capital market development.

In developing countries with weak regulatory structures, a long-term benefit of creating private pension funds may well be the establishment of new and robust regulatory agencies that have a strong positive demonstration effect on other segments of the financial system.

5. “Feasibility” Preconditions

Much attention has been paid over the years to the presence or absence of “feasibility” preconditions. The absence of well-developed financial markets has been a traditional argument against the creation of funded pension plans. As argued elsewhere (Vittas 1998b), this view is shortsighted and ignores the dynamic interaction that is likely to develop between pension funds and capital markets⁷.

In fact, the “feasibility” preconditions for successful implementation of pension reform are not as demanding as it is sometimes assumed. The gradual accumulation of pension fund assets provides ample time for the fulfillment of these preconditions. The most important “feasibility” precondition is a strong and lasting commitment of the authorities to maintain macrofinancial stability, to foster a small core of solvent and efficient banks and insurance companies, and to create an effective regulatory and supervisory agency.

Macro-stability. Macroeconomic stability and low inflation are essential because neither the securities markets nor institutional investors can function efficiently under high and volatile inflation. Although the use of inflation-indexed instruments may mitigate the problems caused by moderate inflation, any indexation mechanism would tend to break down in the presence of high and accelerating inflation. The experience of Brazil in the 1980s has shown that inflation-indexed instruments provide little protection in periods of hyperinflation. With the acceleration of inflation, price adjustments must be effected at shorter and shorter intervals, otherwise the holders of indexed financial instruments suffer large losses from the erosion of the real value of their assets.

Broad fiscal balance is also important because it is usually the single most important source of high and accelerating inflation. Governments with large, persistent and growing budget deficits are unable to finance them by borrowing and issuing new bonds and are forced to monetize their debt, fuelling and exacerbating the inflationary process.

One difficulty posed by the presence of large budget deficits is that systemic pension reform usually entails an increase in the deficit of the public pension (social security) system during the transition period. This is because pension payments to current pensioners will continue to be made, while some of the payroll taxes from active workers will be diverted to the new funded pillar. This is why several European

⁷ According to Walker and Lefort (1999), this point is also underscored by Valdes-Prieto and Cifuentes (1990).

countries that are faced with large pension expenditures are forced to adopt a gradual process in their pension reform programs. Countries like Sweden, Italy, France, and Slovenia are forced to undertake parametric or, at best, NDC reforms before they are in a position to implement a systemic pension reform program.

Sound Banks and Insurance Companies. The second “feasibility” precondition is the presence of a core of sound and efficient institutions. Many developing countries have financial systems that are dominated by insolvent and inefficient banks, often owned by the state or by large private groups. Insurance sectors are even less developed, are dominated by inefficient state monopolies or under-capitalized and under-reserved private companies, and operate under repressive regulations that inhibit competition, innovation and efficiency.

In most developing countries, the problems posed by the underdevelopment of banks and insurance companies can be resolved by opening the market to foreign institutions. Although they tend to engage in some “cream skimming” by focusing on the more profitable and attractive segments of the market, foreign banks and insurance companies bring many benefits to the local markets through the transfer of financial technology and know-how, the training of managerial and other staff, and the adoption of sound business practices. In most reforming countries in Latin America and Eastern Europe, foreign banks and insurance companies play a leading part in the private pillar of the new multi-pillar pension systems, often in joint ventures with large local groups.

A core of sound and efficient banks and insurance companies is important for the handling of contributions and other payments, for the maintenance of individual records and accounts, for the provision of robust and efficient custodial services, and for the offer of reliable insurance contracts, especially with regard to term life and disability insurance. Custodial services are particularly important because they require sophisticated computer systems, efficient record-keeping and reporting facilities, and large financial resources.

Effective Regulation and Supervision. The third “feasibility” precondition concerns the creation of an effective regulatory and supervisory agency. Again, the main need is for a firm and lasting commitment for the creation of a sound and robust regulatory framework, not the prior existence of a strong agency. The tasks of the new agency would initially be limited to vetting applications and ensuring that only qualified institutions obtain licenses to operate pension funds. Over time the regulatory agency must develop all its other functions, including the creation of a strong capability in undertaking off-site surveillance and conducting on-site inspections. Taking timely intervention action in cases of potential default and serious violations of regulations is also very important. Under the modern approach to financial regulation, the new agency will most likely use the services of external private sector actuaries, accountants, auditors, and custodians for furthering its work. Relying on international expertise provided by foreign regulatory agencies and international consulting firms will also contribute to the effective discharge of its functions.

6. “Impact” Preconditions

Pension funds and other institutional investors have potentially large benefits for the development of financial markets. These benefits are not, however, automatic but depend on a number of “impact” preconditions. These include the attainment of critical mass, the adoption of conducive regulations, the pursuit of optimizing policies, and the prevalence of pluralistic structures. In many respects, fulfillment of these “impact” preconditions is much more onerous and challenging than fulfillment of the basic “feasibility” preconditions. This is because the “impact” preconditions rely on the long-term success of the pension reform program and the implementation of far-reaching reforms in most other segments of the financial system.

Attainment of critical mass. Critical mass is difficult to define with any degree of precision. In general, it is unlikely to be attained until pension funds and other institutional investors command resources corresponding to about 20 percent of GDP or, with regard to equity markets, own around 20 percent of outstanding equities. The level of assets that would signify attainment of critical mass would also depend on the presence of foreign institutional investors. A higher scale of domestic institutional investors would be required for critical mass when international investors are not active participants in the domestic market.

The importance of critical mass is obvious for countries that implemented systemic reforms in the 1990s⁸. Although the reform programs are promising and pension funds are growing fast in all reforming countries, their total assets are mostly less than 5 percent of GDP and their quantitative impact on the development of equity markets is small. Even so, they have some qualitative impact in that they create a demand for financial institutions that provide services to pension funds, such as custodian firms and asset managers.

In Chile, the absence of critical mass manifests itself in a different way. The Chilean pension funds have accumulated assets corresponding to 45 percent of GDP, while all institutional investors, including pension funds, insurance companies, and mutual funds, control resources equivalent to 65 percent of GDP. As documented in Walker and Lefort (1999), institutional investors gave a boost to the development of bond markets, including corporate and bond markets, and the creation of rating agencies. But their impact on the equity market was more subdued.

The Chilean pension funds invest about a quarter of their total assets in equities. As the Chilean equity market has a total capitalization in the region of 95 percent of

⁸ The list of countries that implemented systemic pension reforms in the 1990s includes Argentina, Bolivia, Colombia, El Salvador, Mexico and Uruguay in Latin America as well as Hungary, Kazakhstan, Latvia, and Poland in Eastern Europe and Central Asia. Other countries, including Bulgaria, Costa Rica, Croatia and Romania passed relevant legislation and plan to implement their systemic reforms in the near future.

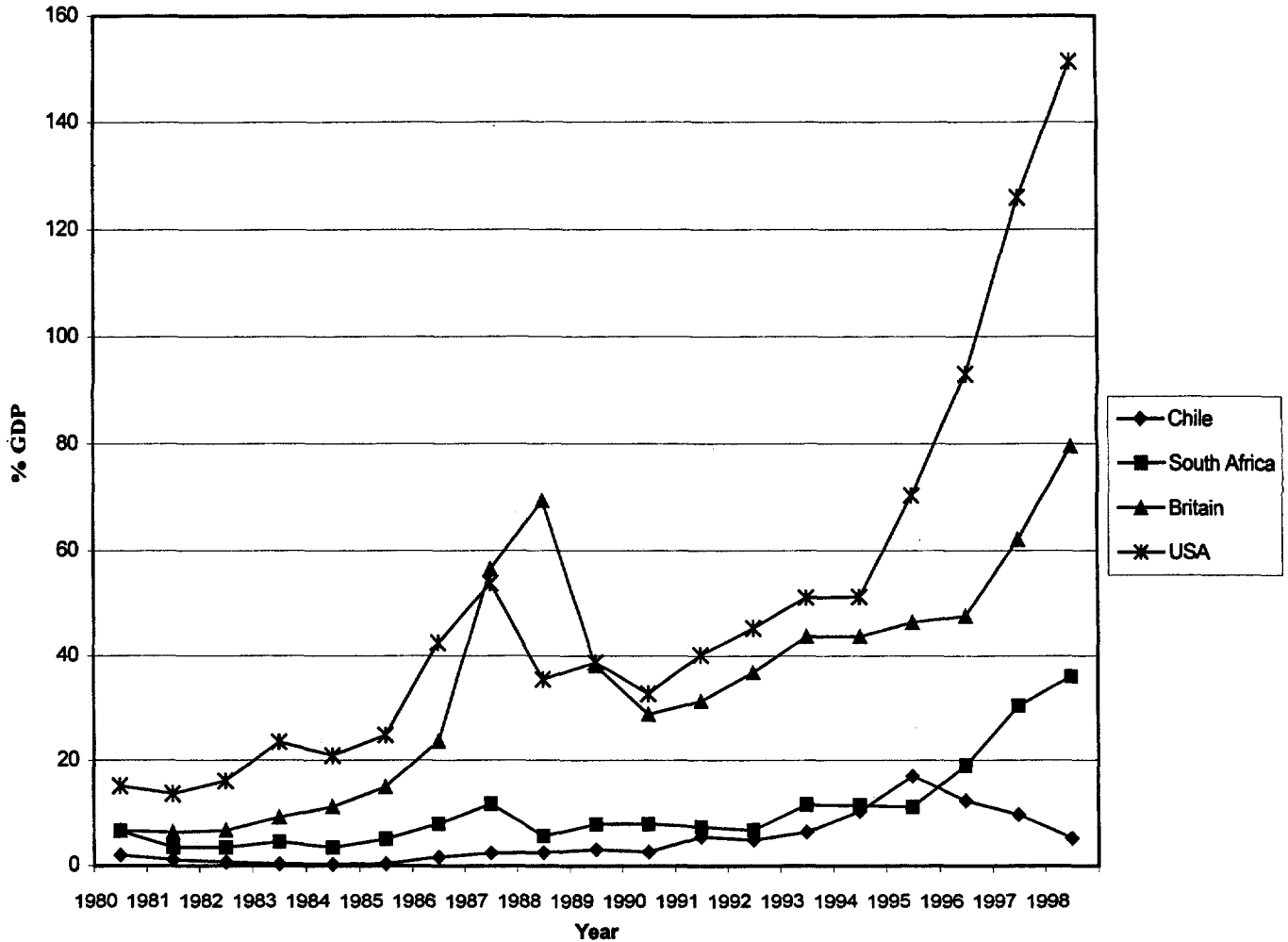
GDP, the pension funds own collectively somewhat less than 10 percent of the Chilean equity market. Adding the equities held by other institutional investors does not raise this total by much because most mutual funds are bond funds, while insurance companies also invest heavily in debt instruments. With about 10 to 12 percent of the equity market, the ability of Chilean institutional investors to influence market practices is constrained and is not as large as that of UK and US institutional investors, which own over 50 percent of their respective markets⁹.

Another manifestation of critical mass is in the value of market trading. Chile and South Africa are two countries where institutional investors are large but the value of equity trading is low. As shown in Chart 1, the value of trading in both Chile and South Africa increased slightly over the years, but did not experience the explosion that characterized the US and UK markets (and most other equity markets around the world). In Chile, this is partly explained by the young age of pension funds. Although newly created pension funds grow very fast as a result of the contractual nature of pension saving, they tend to adopt a “buy and hold” strategy since they can rebalance their portfolios by changing the asset allocation of new flows, without the need to sell existing holdings. This is especially the case in markets with a few “eligible” equities. However, the Chilean restrictions on short-term holdings by foreign investors may also have been a factor, since in Brazil the existing private pension funds also hold no more than 10 percent of the total equity market, but trading volumes and market liquidity are much higher than in Chile¹⁰.

⁹ The Chilean pension funds own collectively more than 30 percent of the equity capital of some large privatized utilities. Their collective corporate influence is much greater in these companies and their segments of the market.

¹⁰ “Buy and hold” strategies were also adopted by US and UK pension funds when they first diversified into equities in the early 1950s (Vittas 1998b, Chernow 1990).

Market Trading Chile, South Africa, Britain, USA



In South Africa the pension funds have a much longer history but until the change of political regime in 1994, they were forced to invest heavily in local equities by buying out the stakes of departing foreign investors. For most of the 1980s, the pension funds followed a “buy and hold” strategy and the value of trading was very low. Market trading expanded after 1994 when the economic sanctions against South Africa were lifted and foreign investors returned to South African equities. Pressured by the needs of international investors the local equity market was restructured and modernized. The value of trading reached 31 percent of GDP in 1997, up by a factor of 3 since 1993. The South African experience highlights the important interaction between domestic and international institutional investors.

Adoption of conducive regulations. Reaching critical mass is not sufficient for the realization of the potential market benefits of pension funds and other institutional investors. Adoption of conducive regulations is a further “impact” precondition. Several countries have large provident funds or social security corporations but the imposition of

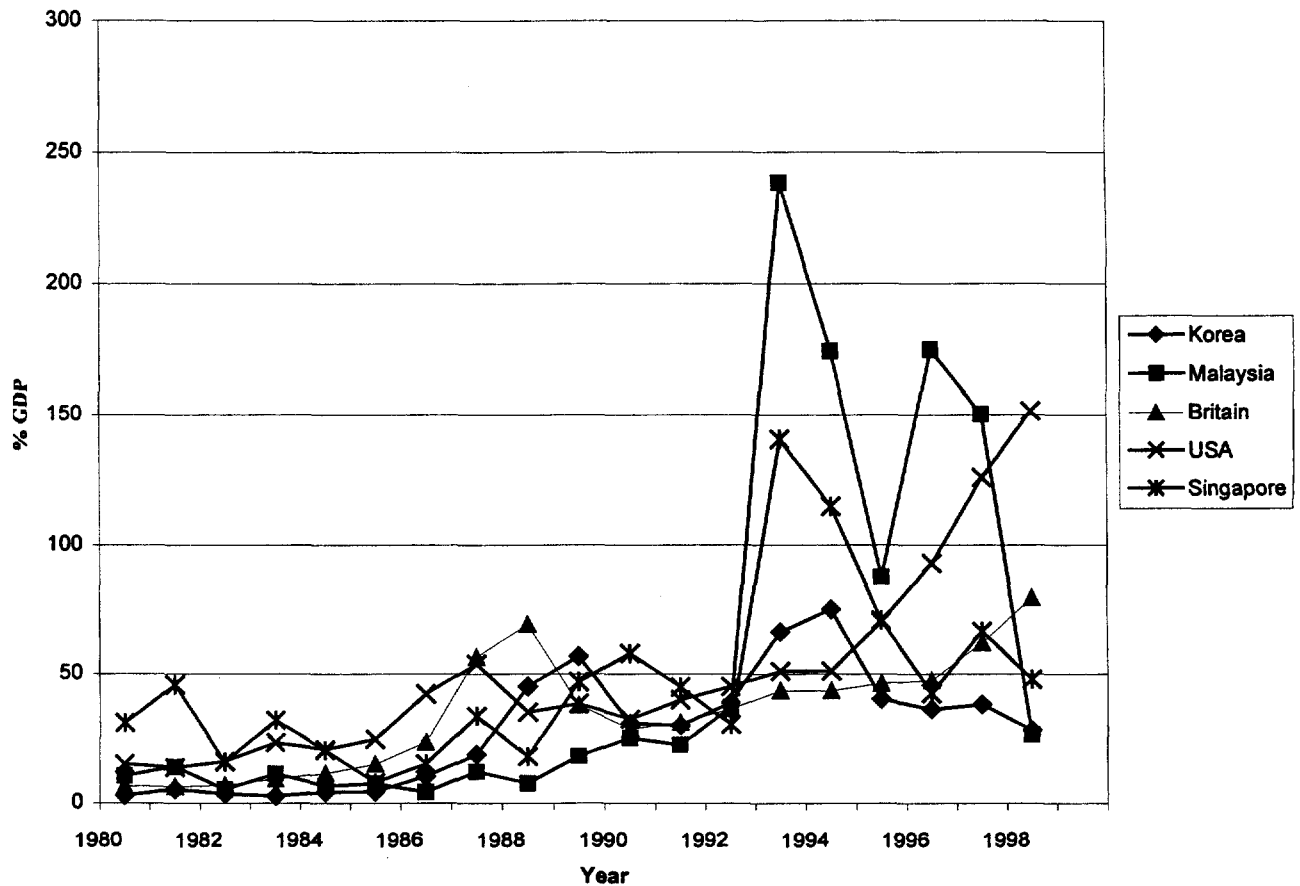
constraining regulations has limited their direct impact on capital market development. Such regulations include a requirement to invest their resources in nonmarketable government bonds or at most in marketable government bonds and bank deposits, with very low limits imposed on equity holdings.

The best known examples are the national provident funds of Singapore and Malaysia. Although these funds have avoided the fate of provident funds in African countries, where high negative real rates of return have eroded the real value of fund balances, they have failed to provide a direct stimulus to the development of domestic securities markets. Other countries where pension institutions attained critical mass but have suffered from the absence of conducive regulations include Cyprus, Egypt, India, Jordan and Sri Lanka¹¹.

Singapore and Malaysia are interesting examples of the volatile impact of international investors (Chart 2), especially when they are contrasted with the experience of Chile and South Africa. While domestic institutional investors were forced to be absent from the local equity markets, the value of trading exploded under the pressure of growing international interest from much less than 25 percent of GDP in the 1980s to well over 150 percent in the 1990s. In the case of Malaysia the value of trading reached nearly 250 percent of GDP in 1993, but fluctuated wildly after 1993 and fell to less than 40 percent in 1997 in the aftermath of the Asian crisis. The experience of Singapore was similar, though less extreme. This underscores the benefits of a diverse investor base and presence of strong domestic institutional investors alongside foreign institutions.

¹¹ Most of the institutions in the countries listed in this section of the paper have been given some freedom in recent years to invest in equities and other marketable securities. In Singapore and Malaysia, affiliated workers have been allowed to invest directly in approved mutual funds and other assets any balances in excess of a stipulated minimum level. These initiatives represent a welcome change from the past policy of using these institutions as captive sources for financing government budgets, but the new approach is too recent to allow an assessment of its impact on capital market development.

**Market Trading
East Asia, Britain, USA**

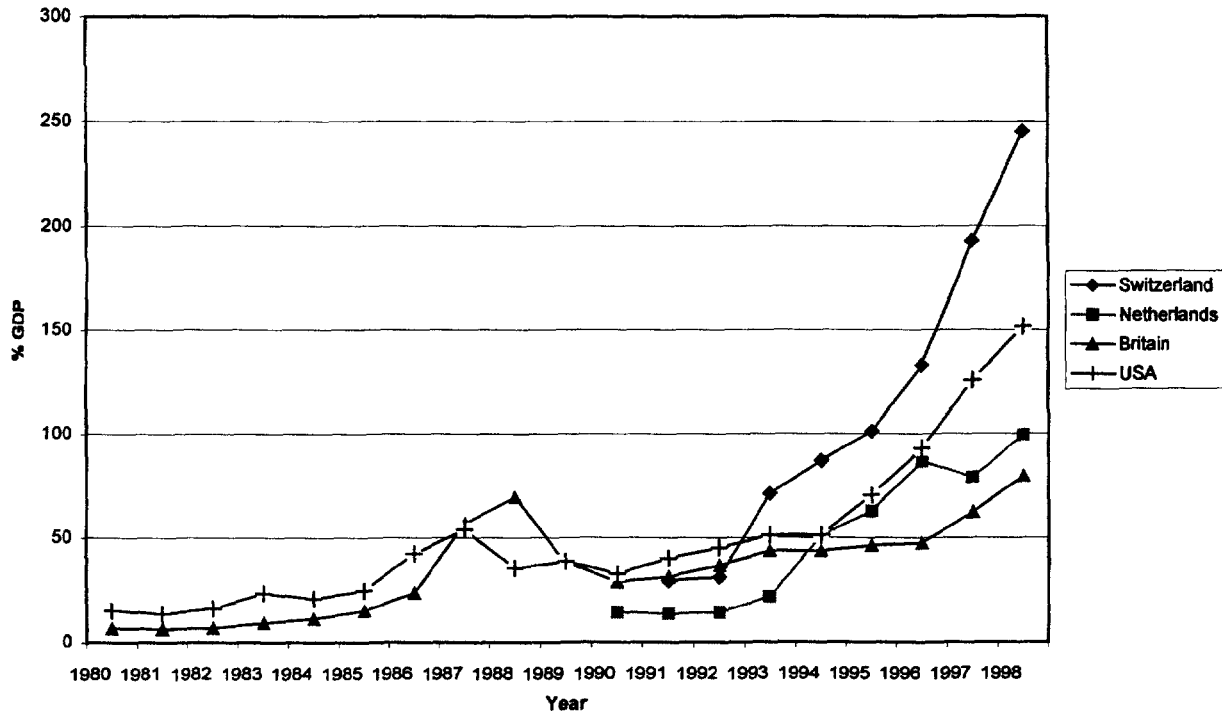


Pursuit of optimizing policies. The third “impact” precondition concerns the adoption of optimizing behavior by pension funds. Pension funds in the Netherlands, Switzerland and some other continental European countries are very large but have been constrained over the years by quantitative restrictions on their asset allocations (Davis 1998). These limited their ability to invest in equities and to that extent their effect is similar to that discussed under the previous section. However, an interesting feature of continental European pension funds is that quantitative restrictions have been non-binding, at least in the aggregate. Their limited involvement in the domestic equity market was due as much to the pursuit of conservative investment policies that favored fixed income securities over equities as to the quantitative limits imposed by the regulators.

In recent years, both the investment regulations have been relaxed and the pension funds have changed their asset allocation strategies in favor of equities. For instance, Swiss pension funds have raised their equity holdings from less than 5 percent in the mid-1980s to nearly 20 percent in 1996 (Queisser and Vittas 2000). They own less than 10 percent of Swiss equities. These levels are far below those of pension funds in

the United Kingdom and the United States¹². The growth in the value of trading in the Netherlands and Switzerland (Chart 3) reflects to some extent the growing equity allocations of pension funds but is more likely the result of the growing integration of European and global markets.

**Market Trading
Switzerland, Netherlands, Britain, USA**



The importance of optimizing policies is also underscored by the performance of pension funds and other institutional investors in South Africa. Although they invest heavily in equities, South African institutional investors have generally followed a “buy and hold” strategy and have played a passive role in corporate affairs. The result has been a less than stellar investment performance. The main explanation for the absence of optimizing policies is the fact that institutional investors, and the asset managers they hire, belong to the five conglomerate groups that dominate the South African economy and securities markets. The recent entry of foreign investors and the process of “unbundling” of the large groups that has started in recent years promise to lessen the dominant role of financial conglomerates, allowing pension funds to seek higher returns and exert greater influence in corporate affairs. The South African experience

¹² A very recent change in Switzerland retains quantitative limits, but allows pension funds with demonstrated professional management to adopt the “prudent expert” approach.

underscores the risks inherent in the continuing growth of financial conglomerates in other parts of the world.

Prevalence of pluralistic structures. As in the case of critical mass, it is difficult to be precise about what constitutes a pluralistic structure. Obviously, systems dominated by national provident funds (as is the case in Malaysia, Singapore and Sri Lanka) or by one or two private pension funds (as is the case in Bolivia) do not have a pluralistic structure. At the other end of the spectrum, countries with hundreds and even thousands of pension funds, such as the United States, the United Kingdom and Switzerland, are characterized by a prevalent pluralistic structure. But many countries (e.g. Argentina, Chile, Czech Republic, Hungary, Mexico and Poland) have between 5 and 30 pension funds and in these cases it is difficult to say whether the institutional structure is sufficiently diverse to ensure the benefits of pluralism.

A pluralistic structure is important for stimulating competition, encouraging innovation and promoting efficiency. In most countries, the absence of competition allows social security corporations and national provident funds that dominate local pension systems to operate inefficiently, maintain poor records and suffer from long delays in determining pension benefits for retiring workers and resolving disputes. In securities markets, dominant institutions are exposed to other problems.

In Sri Lanka, the national provident fund has long been required to invest all its resources in nontraded government securities, effectively loans to the government. However, a recent decision to diversify into marketable securities, including equities, is faced with the dilemma that the resources of the provident fund are much larger than the total market capitalization of the Colombo Stock Exchange. Even a small reallocation of assets in favor of equities could cause a large increase in prices. Even if the provident fund invested in the market index, it could have a destabilizing effect. Such an effect would of course be greater if the fund invested in individual companies. A dominant institution would also be exposed to serious adverse price impact as market participants, anticipating its investment decisions, could act against its interests.

The Social Security Corporation of Jordan, another dominant institutional investor in its domestic markets, has long been concerned about the potential adverse price impact of increasing its investments in equities. It has also been concerned about strong criticism and second-guessing of its investment decisions by all kinds of external observers, from parliamentarians to academics and journalists. These valid concerns have inhibited the corporation in its investment policies and have resulted in an extensive reverse maturity transformation, whereby nearly half its total long-term resources have been placed in short-term bank deposits.

In countries where pluralistic structures prevail, large pension funds have been able to change their asset allocations in a gradual but effective way, without much second-guessing, raising political concerns or causing unavoidable adverse price impacts. For instance, the pension funds of General Motors Corporation in the United

States and Imperial Tobacco in the United Kingdom implemented major shifts in their asset allocation policies in the late 1940s and early 1950s.

A pluralistic structure is also important for ensuring that corporate governance and control do not end up either in a public sector institution or in relatively few private institutions. It is further instrumental for encouraging innovation in asset allocation policies. In the United States and the United Kingdom, the gradual move to indexed portfolios and the more recent growing emphasis on private equities and enhanced indexing have all been facilitated by the prevalence of pluralistic structures.

Given the existence of large scale economies in record keeping, collection of contributions and payment of benefits, there is a worldwide trend toward increasing market concentration, especially in countries that rely on non-company pension plans. One way to preserve the benefits of pluralism while achieving scale economies in those areas where they are important is to separate the asset management function and allow or require the use of a sufficient number of external asset managers. This is put forward as a possible option in Chile where the number of independent pension funds has already fallen to 7, with the four largest accounting for more than 80 percent of total assets (Iglesias 1999). It is also an approach proposed for dominant public sector institutions in Egypt, Jordan, Sri Lanka and elsewhere provided the selection of external asset managers can be insulated from political considerations and effected in an objective and equitable manner.

7. Other Forces of Long-Term Change

Before concluding this paper it may be useful to make a number of corollary observations. As the experience of many countries in Europe and Asia shows, **pension funds (and domestic institutional investors more generally) are neither necessary nor sufficient for the development of securities markets.** This is not to deny their large potential impact on capital market development and the dynamic interaction that is likely to evolve between pension funds and capital markets. But other forces, such as advances in technology, deregulation, privatization, foreign direct investment, and especially, regional and global integration, may have the same impact. In fact, in some European countries, such as for instance Greece, it is likely that integration into the Euroland is not only stimulating capital market development but may also both force and facilitate pension reform through its imposed restrictions on fiscal deficits. In such countries the link may be from capital market development to pension reform rather than the other way round.

It is also important to note that at the global level, the impact of the investment policies of large American and European pension funds and insurance companies may be far greater than that of small and slowly growing domestic institutions. A small increase in the asset allocation of these funds to foreign markets may have a very large impact on the functioning of equity markets of many smaller economies. This explains

the relevance of globalization and international integration for many market developments.

Realization of this important link is not, however, an argument for transferring management of all the assets of domestic pension funds to an international asset management company to be invested in the world index (as is vociferously argued by some). Even though a substantial part of total resources should be internationally diversified and could be invested in this way, a large part ought to be directed toward the domestic economy. The main reason for this would be to promote the development of small firms and economic sectors that tend to be overlooked by global institutions.

8. Pension Funds and “Symbiotic” Finance

Institutional investors, and especially pension funds, can play a key part in what may be called “symbiotic” finance, i.e. the simultaneous presence of several important elements of a modern financial system. In the first place, pension funds promote the development of other institutional investors, such as insurance companies and mutual funds. Insurance companies benefit from the imposition of compulsory term life and disability insurance and later on from the purchase of annuities by retiring workers. In Chile, the ratio of total assets of insurance companies to GDP increased by a factor of 15 since the implementation of pension reform in 1981. Mutual funds benefit by the growing demand for efficient fund management and by an important demonstration effect as workers become more familiar with the benefits of collective investments in marketable securities.

Institutional investors promote the development of both equity and bond markets, and they can play a central part in the development of mortgage finance through mortgage bonds or mortgage securitization. Access to mortgage finance through the security of their own house is often an important first step for new and small entrepreneurs in obtaining business finance.

A more promising avenue is through the support that pension funds and other institutional investors can provide to factoring, leasing and venture capital companies. These financial intermediaries specialize in financing new and expanding small firms and can effectively compete with commercial banks that tend to dominate the financial systems of most developing countries. Institutional investors can support their operations by investing in commercial paper, corporate bonds and equities issued by them.

The efficient operation of factoring, leasing, venture capital and mortgage finance requires a far-reaching modernization and strengthening of the legal underpinnings of financial contracts. These include laws that facilitate the creation, registration and liquidation of collateral security, the foreclosure of mortgages, the repossession of assets and their disposal in second-hand markets, and viable exit options through well functioning securities markets.

It is important to emphasize at this juncture that the role that pension funds can play in developing domestic financial institutions and domestic sources of finance is not an argument for prohibiting an international diversification of their assets. This is especially so for countries where the industrial, utility and financial sectors are increasingly integrated with global markets through strategic ownership by large foreign groups. Blanket prohibition of foreign investments would then be tantamount to forcing pension funds to invest in small companies or in those inefficient large local companies that attract no foreign interest. The most promising approach, especially for smaller countries, would be to encourage international diversification of the majority of pension fund assets, but retain a significant part for promoting local financial institutions that specialize in those sectors that are neglected by the large multinational financial groups.

9. Short-Term and Long-Term Beneficiaries of Pension Reform

As argued above, pension reform and the development of pension funds and other institutional investors is one of the longest of “long cuts” in development. The benefits for workers and the economy take long to materialize but they last. An instructive way to appreciate the long-term nature of the reform benefits is to ask who are the main beneficiaries in the short term.

Experience from Latin America shows that the first beneficiaries are the various “**consultores**”, all those who advise governments about the need and implications of pension reform¹³. Then come the “**publicitores**”¹⁴, the advertising companies and other publicity specialists that help pension fund companies in their advertising campaigns. Third in the list are the infamous “**promotores**”, the selling agents that sign up employers and workers. In Latin America, selling agents have acquired notoriety because of their role in encouraging workers to switch pension funds for no other apparent reason but to generate commission income for themselves, which they then partly share with the switching workers. Selling agents have also played a notorious part in the “mis-selling” fiasco of personal pension plans in the United Kingdom.

Fourth come the “**aseguradoras**”, the insurance companies that, as noted above, benefit from the provision of term life and disability insurance and the sale of annuities to retiring workers. Fifth are the “**administradoras**”, the pension fund management companies. These incur heavy start-up costs before the launching of the new system and during its first few years. In Chile, the pension fund management companies posted losses for the first three years of the operation of the new system but over time they were able to recover their capital outlays and achieve high returns on

¹³ This includes not only the numerous Chilean economists that have become popular travelers in Latin America and other parts of the world, but also the growing army of actuaries, economists and pension specialists in North America and Europe, not to mention those working for multilateral institutions, such as the World Bank or the OECD.

¹⁴ I understand that the right term is “publicistas”.

equity. Last come the “**trabajadores**”, who truly benefit when they retire. Their pension benefits are not only more secure but most likely higher than what they would be under an unreformed system. In the long run, the workers also benefit from the enhanced efficiency of securities markets and the achievement of higher economic growth.

Recognizing that workers are the last group to reap benefits from the reform is not a cynical admission of some important weakness of the new systems but rather a pragmatic and realistic assessment of the allocation of benefits of any reform program. Moreover, such an allocation is not uncommon. For instance, in the case of any type of infrastructure project (an airport, a new road, an electric utility), the first beneficiaries would be the consultants who prepare the feasibility studies, followed by the engineers who draw the blueprints and then the construction companies that build the project. But the long-term beneficiaries are the residents and workers of the country who reap the long-term benefits from the services offered by the new project¹⁵.

10. Conclusions

The main conclusions of this paper can be listed as a series of bullet points.

- The basic rationale of pension funds is to provide retirement benefits.
- Pension funds and other institutional investors generate long-term contractual savings and stimulate the development of securities markets.
- They can act as a countervailing force to existing commercial and investment banks, stimulate financial innovation, exert pressure for greater market integrity and modernized trading facilities, strengthen corporate governance, and encourage more robust financial regulation.
- The “feasibility” preconditions for successful pension reform are not as demanding as it is sometimes assumed while, in contrast, the “impact” preconditions are more onerous.
- The most important “feasibility” precondition is a strong and lasting commitment of the authorities to maintain macrofinancial stability, to foster a small core of solvent and efficient banks and insurance companies, and to create an effective regulatory and supervisory agency. Opening the domestic banking and insurance markets to foreign participation can easily fulfill the second requirement.

¹⁵ The long-term benefits of systemic pension reform, the large positive externalities and the similarities with major infrastructure projects strongly suggest that the transition costs of reform programs should, in large part, be financed by issuing debt rather than raising taxes. This is, however, a topic for a another paper.

- The main “impact” preconditions include the attainment of critical mass, the adoption of conducive regulations, the pursuit of optimizing policies, and the prevalence of pluralistic structures.
- Pension funds are neither necessary nor sufficient for capital market development. Other forces, such as advances in technology, deregulation, privatization, foreign direct investment, and especially regional and global integration, may be equally important.
- But if they are subject to conducive regulation, adopt optimizing policies, operate in a pluralistic structure, and when they reach critical mass, pension funds can have a large impact on both capital market development and economic growth.
- Pension funds are critical players in “symbiotic” finance, the simultaneous and mutually reinforcing presence of many important elements of modern financial systems. They can support the development of factoring, leasing and venture capital companies, all of which specialize in the financing of new and expanding small firms.
- Financial innovation, technology and globalization allow developing countries to adopt new instruments faster, although institution building is a long-term process.

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