



Social Protection Discussion Paper Series

**Supervising Mandatory Pension Funds:
Issues and Challenges**

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with contributions from Edward Whitehouse**

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Supervising mandatory pension funds: Issues and challenges

Gustavo Demarco and Rafael Rofman,
with contributions from Edward Whitehouse

The regulation and supervision of pension funds is a critical part of building public confidence in a funded-pension system. This paper argues that confidence is best bolstered by an independent, autonomous and transparent supervision agency, particularly when previous systems had failed. The choice between proactive and reactive supervision depends on previous experience of self-regulation in a country's financial sector.

The paper examines four key areas of supervision in detail: institutional, financial, membership and benefits control. It looks at collection of contributions, asset valuation, portfolio limits, custodianship and benefit guarantees. New data are presented on the performance of supervision agencies in and on marketing and operation costs of new pension funds in Latin America. Comparative data for OECD countries also included.

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Supervising mandatory funded pension systems: Issues and challenges

Gustavo Demarco and Rafael Rofman,
with contributions from Edward Whitehouse¹

1. Introduction

This paper looks at general issues in designing the supervisory framework for a mandatory defined-contribution pension system. Many countries have introduced such a system and others are seriously considering reform. Although much has been written about issues such as the transition to a funded system and the design of benefits, very little has been said on the crucial issue of regulating pension funds. Yet, regulation and supervision are crucial to the success of reforms.

Although influenced by the experience of the authors in the supervision agency in Argentina, the paper aims to come to general conclusions relevant to other countries embarking on fundamental pension reforms. The authors also draw on their experience of Chile, Colombia, Costa Rica, Hungary, Peru and Uruguay. Data from OECD countries are also included.

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The focus of the paper is on establishing an efficient and effective supervision agency. Some discussion of regulation is also unavoidable, since reasonable regulations are a necessary condition for appropriate supervision.

There is no unique, optimal supervision system. Countries may choose particular models, and what seems desirable in abstract may prove impossible in the context of actual policy design. Second-best solutions usually result.

The following section discusses possible approaches to pension-fund supervision and the factors should be taken into account when designing the system of control. The third section looks at specific issues in the organisation of a supervisory agency, while the fourth section describes the areas of the pension system where supervision should be concentrated. The fifth section concludes.

2. The conceptual approach to supervision

Central banks, tax-collection authorities and capital-market regulators, such as securities and exchange commissions already carry out most of the activities of a pension supervision agency. Some analysts, such as Shah (1996), have argued that specialist managing companies reduce the overall efficiency of the pension system and that a separate supervisory agency is unnecessary.

On the other hand, participation in the reformed pension system is often mandatory (at least for part of the population), unlike other forms of savings. The state therefore has a responsibility to ensure that fund management meets some basic rules and is carefully supervised, at least in the first years of the new system (Vittas, 1998).

A second argument for a specialised supervisory agency is the unique combination in pension systems of capital markets, insurance and social security. In many reforming countries, there is no prior experience of regulating a system with such

complex interactions. At the minimum, some formalised degree of co-ordination between different agencies would be necessary.

A third argument is that some of the products in the new pension system, such as life and retirement insurance are new, or they were under-regulated or even unregulated in the past. Public pensions were often also unsupervised, with the assumption that standard government audit procedures would suffice. But this has proved wrong in many cases, as systems went bankrupt or came close to bankruptcy.

A fourth practical reason is that people are often suspicious of the transparency and efficiency of pre-existing supervisory agencies. Reforms received electoral support because they promised radical changes in pension systems, and ‘cultural’ vices of some regulatory agencies are linked in voters’ minds with previous failures.

Mandatory multipillar schemes are expected to perform better than traditional pay-as-you-go models, partly because their designers believe that supervision from both authorities and fund members will be more efficient. Nevertheless, these schemes are not immune from risks, even in the absence of wrongdoing. These risks have some similarities with those in a pay-as-you-go scheme (McGillivray, 1997). The government, which forces workers to contribute and aims to ensure a minimum level of welfare to all members of society, must therefore try to reduce such risks. Easy-to-understand regulations and an efficient, effective supervision agency are a vital part of controlling such risks.

The main choice in designing the supervisory system is between proactive and reactive models. The first approach involves detailed regulation of most activities of pension-fund managers. Supervisory and auditing activities must be detailed and well defined. The aim is to prevent possible wrongdoing. The second approach relies on self-regulation, with much less detailed instructions from supervisors. Pension fund managers are assumed to have the right incentives for adequate self-regulation. The

state needs only to intervene in the few cases when these incentives fail. In the reactive model, sanctions and penalties for violating the system's rules need to be very heavy.

The case for proactive models of supervision for newly-created pension funds in less-developed countries is quite strong. Such countries have little tradition of regulatory enforcement and a poor reliability record in the financial sector. Countries with longer and broader experience of self-regulation of financial institutions should consider a more reactive model.

The choice between proactive and reactive depends crucially on the national context. However, a combined approach can be the worst choice: for example, a reactive model in a country with light or rarely enforced penalties will probably end in crisis.

3. The organisation of the supervisory agency

3.1 Regulation or supervision?

Although regulation (*i.e.*, setting the rules) and supervision (*i.e.*, enforcing the rules) of pension funds are distinct functions, they could be assigned to the same institution, or clearly assigned to different institutions. Using a single institution has the advantage of defining control routines regardless of the personal preferences of regulators. The second allows supervisors to approach their job without preconceptions.

A combination of both alternatives is possible. This corresponds more closely to the experience of countries that have introduced private pension funds. In most countries a 'superintendency of pension funds' was created, while the regulatory framework was defined partly by this agency, and partly by other authorities, such as finance and labour ministries, the social-security administration, and regulators of other financial services.

3.2 *Organisational structure*

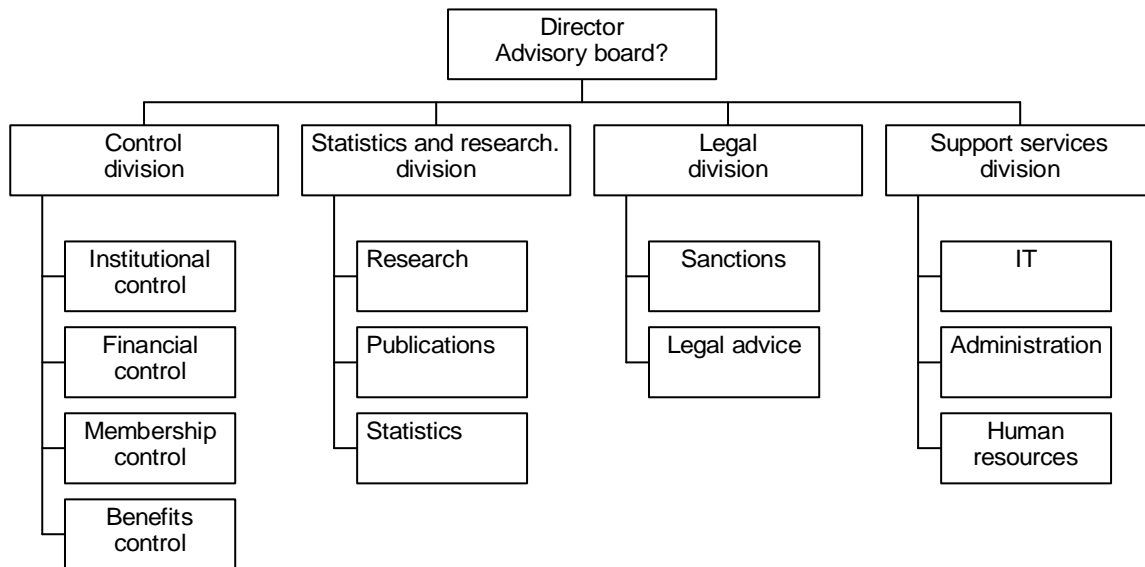
The supervision agency's tasks consist of four main areas, which are discussed in the following section: control of institutional structure, finances, membership and pension benefits.

Another potential supervision area is enforcing payment of pension contributions. The strategy for enforcement will depend on the collection system. If contributions are collected directly by private pension funds, as in Chile, the funds must play a role in controlling evasion. But if contributions are collected centrally, as in Argentina, the collection agency must develop programs to control evasion. Many countries have chosen centralised collection, so the control of evasion will constitute an important area of supervision.

The organisational structure of the supervisory agency must take account of its legal role. While details will depend on the peculiarities of each system, some basic elements are universally relevant.

Accountability and effective supervision suggest that a single director, with full powers to apply regulations and issue new ones, should head the agency. An advisory board can be useful, but only if it does not limit the decision-making ability of the director. The division responsible for the control of pension-fund activities should have at least four departments, dealing with institutional issues (such as licensing and book keeping), financial issues (investment limits, returns, guarantees), membership (joining funds, transfers, claims) and benefits (calculation of annuities, disability and survivors benefits). Another division should cover statistical and research, with facilities for issuing publications. A third division should handle legal affairs, including a department responsible of handling sanctions and another for legal advice (including normative advice and complaints). Finally, a support services division should handle information technology, administration and human resources. Figure 1 illustrates the proposed structure.

Figure 1. **Organisation of the supervisory agency**



3.3 Status of the director of the supervisory agency

The authority of the supervisory agency must be shielded from political pressures. Although this is true of most regulatory functions of the state, the primary aim of pension supervision must always be to protect the long-term stability and security of members' funds. Low-level regulations could have a significant effect on the investment of billions of dollars, which will necessarily expose the supervisory agency to lobbying. To avoid (or, at least, minimise) them, the agency should be autonomous and independent of government ministries. The director should preferably be appointed through a transparent process, probably with participation of parliament or congress, and serve for a fixed period.

3.4 Budget

Two approaches to financing the agency are possible. Expenses could come from general government revenues (as in Chile) or pension fund management companies could be required to pay a supervision fee (as in Argentina). The second choice is more appealing, since it avoids cross-subsidies to scheme members when not all the population participates in the system. In addition, if the supervisory agency has the power to collect its own fees, it can reduce political pressure from other areas of government.

In Argentina, the supervisory agency sets out an annual budget within the pre-specified limit of 1.5 per cent of system revenue. The agency then spends as necessity dictates and requires transfers from the managing companies monthly, covering the expenses of the previous month. This gives the agency room for manoeuvre as necessary. At the same time, there is no incentive to overspend (as there might be if fees exceeded regular expenses). Budgeted supervision expenses have been below 0.5 per cent of system revenue and actual expenses have been around 60 per cent of the budget.

3.5 Staff

Staffing the supervision agency may be a challenging task when the new pension system is introduced. Professionals with relevant experience will probably be highly specialised and scarce. The supervisory agency will therefore need to develop an intensive training programme to ensure a supply of capable staff.

The agency will of course be competing with the pension-fund managing companies to hire a relatively few trained professionals and to train others with the right aptitude. To attract and retain a qualified workforce, the supervision agency must offer competitive wages and benefits (such as holidays, health insurance, bonuses *etc.*).

In many countries, this may be superior to the packages offered to other government officials. This is probably unavoidable. It can either be achieved implicitly (*i.e.*, through hidden benefits) or explicitly (with higher wages). In Argentina, the pension law requires that supervision employees receive a salary greater than or equal to that of the average paid by the 50 per cent of pension-fund management companies with the highest wages.

A second issue is the agency's human-resources policy. In many countries, hiring and firing government employees is a complex, bureaucratic process. The need for flexibility means that the supervision agency should operate more as a private company, hiring and firing employees as allowed in the law. This is easiest if the agency is financially autonomous.

In most of the countries where new funded systems have been introduced, the supervision agency has been staffed with many civil servants seconded from other areas of government. Employees with expertise in other areas, for example, from the central bank, public pension system or insurance regulator can be recruited. Nevertheless, existing agencies and departments will often use secondment as a way of transferring less skilled or motivated employees. Officials of the new agency need to be flexible and dynamic to adapt to a new activity. Professionals new to government should be recruited alongside civil-service secondees.

3.6 *Practical experience*

The normative guidelines presented above showed how the supervision *should* be organised. Here we draw on the experience of several countries that have funded pension systems. Seven countries in Latin America — Argentina, Bolivia, Chile, Colombia, Mexico, Peru and Uruguay — now have fully functional systems. Others

have begun designing reforms (Venezuela, Brazil) and others are implementing them (Costa Rica, El Salvador).

Comparing the performance of Latin American agencies with other regions is not easy, since their design is quite different. First, Latin American regimes tend to be proactive, while others are more reactive. For example, Charpentier (1997) reports that the United States Department of Labor reviews just one per cent of pension-related documents each year. Secondly, Latin American agencies are uniquely devoted to pension funds, whereas in OECD countries, supervision of funds tends to be part of a larger organisation (see Table 2). One of the main reasons for these different approaches is historical: privately managed pension schemes had existed for some time before the supervisory agency was created in developed countries. Therefore, the supervision structure had to be adapted to the shape of the pensions industry. In contrast, Latin American pension funds were created after or, in some cases, at the same time as supervision agencies, giving more time to develop the regulatory and supervisory infrastructure. Although Austria, Ireland, Italy, the Netherlands, United Kingdom and United States have comprehensive pension laws as in Latin America, in other OECD countries, regulations are found across a range of legal provisions.²

The new Latin-American supervisory agencies, although set up in similar contexts, are organised in quite different ways. In three of the seven countries with fully implemented reforms, the supervisory agency is part of the ministry of the economy or the treasury (Table 1). In two countries, the agency is part of the ministry of labour and social security. In the remaining two countries, it is part of the central bank.

There are also significant differences in financing and the degree of autonomy enjoyed by the agency. The supervision agency has a significant degree of autonomy —

² Laboul (1997), p. 58.

both in terms of administrative and political status — in three countries. These three agencies are financed directly by supervised pension companies, through the payment of a fee. At the other extreme, the agencies in Colombia and Uruguay are a department of the central bank. Chile is a halfway house, since the supervisory agency is separate but with (administrative, political and financial) dependence on the ministry of labour and social security.

Table 1. Institutional characteristics of pension-fund supervisory agencies in Latin America

<i>Country</i>	<i>Area of government</i>	<i>Administrative and</i>	<i>Funding source</i>
Argentina	Ministry of labour and social security	Autonomous	Supervision fee
Bolivia	Treasury	Dependent	Supervision fee
Chile	Ministry of labour and social security	Dependent	National budget
Colombia	Central bank	Dependent	Supervision fee
Mexico	Secretary of treasury	Autonomous	Supervision fee (partial)
Peru	Ministry of economy	Autonomous	Supervision fee
Uruguay	Central bank	Dependent	National budget

Source: based on Bertín and Perrotto (1997)

Table 2 shows the situation in OECD countries. Pension-fund supervision is usually the responsibility of a separate agency, although Ministries are directly involved in Austria, Finland, Greece, Japan, Spain and the United States (first column). In 17 countries, the supervision of pension funds is part of the supervision of other insurance markets (second column). Pensions and insurance have a number of common characteristics, such as similar organisation and operation. Insurance companies have a major role in the pension sector in many countries, managing 20-30 per cent of total pension assets across the OECD. They often offer group-insurance plans and act as investment and benefit managers.

The agency responsible for pension-fund supervision also sets regulations in fourteen countries (third column). The penultimate column shows the predominant plan type in a country. These can be either defined benefit (where the pension value depends on some measure of earnings and years of contributions) or defined contribution (where the pension depends on the value of accumulated contributions

and investment returns). The final column gives a rough indication of the size of the private pension sector in the country.

Table 2. Supervisory authorities in OECD countries

<i>Country</i>	<i>Supervision</i>	<i>Insurance</i>	<i>Regulation</i>	<i>Main plan type</i>	<i>Coverage</i>
Australia	Insurance and superannuation commission	same	same	DC	high
Austria	Ministry of finance	same	same		
Belgium	Insurance supervisory office	same	Ministry of economic affairs/ same	DB	medium
Canada	Office of superintendent of financial institutions	same	same	DB	medium
Czech Republic	Department of supplementary pensions and insurance, ministry of finance	Insurance supervisory authority	Ministry of finance	DC	
Denmark	Financial supervisory authority	same	same	DC	high
Finland	Ministry of social affairs and health	same	same	DB	
France	Pension funds control commission	Insurance control commission	Ministry of finance/ social affairs	DB	high
Germany	Federal insurance supervisory office	same	Ministry of finance	DB	medium
Greece	Ministry of development	same	same		low
Hungary	State private funds supervision	Insurance supervisory authority	Ministry of finance	DC	medium
Iceland	Banking supervisory authority	Insurance supervisory authority	Ministry of finance	DC	
Ireland	Pension board	Irish insurance federation	Ministry of enterprise and employment	DB	medium
Italy	Supervisory committee for pension funds	ISVAP	same	DB	low
Japan	Ministry of health and welfare/finance	Ministry of finance	same	DB	medium
Korea	Financial services commission	same	Ministry of finance and economy		
Luxembourg	Insurance commissioner's office	same	same		medium
Netherlands	Insurance supervisory body	same	Ministry of social affairs and employment	DB	high
Norway	Banking, Insurance and Securities Commission	same	Ministries of finance/health and social affairs/same		medium
Portugal	Insurance Institute	same	same		low
Spain	Ministry of finance	same	same		low
Sweden	Financial supervisory authority	same	same		high
Switzerland	Federal office of social insurance/federal office of supervision of private insurance	same	Federal ministries		high
United Kingdom	Financial services authority and occupational pensions regulatory authority	same (financial services authority)	Departments of trade and industry/social security	DB/DC	medium
United States	Department of labor (Pension and welfare benefits administration)	Department of commerce and National association of insurance commissioners	same	DB/DC	medium

Source: Laboul (1998), Tables 4 and 13; Turner and Watanabe (1996); Palacios and Whitehouse (1998)

Note: Under 'Insurance', 'same' indicates that same organisation is responsible for supervising both pension funds and other insurance and, under 'Regulation', that same body covers supervision and regulation of pension funds. Under 'Main plan type', 'DB' is defined benefit and 'DC' is defined contribution. Coverage: 'high' is greater than 75 per cent, low is less than 25 per cent. **Canada:** the provinces also have pension superintendents, commissions *etc.* **France:** the insurance control commission and the control commission for welfare and mutual associations have representatives on pension-funds control commission. **Germany:** coverage is about 90 per cent in the west. **Italy:** the plans shown are funded schemes, generally limited to a small number of senior executives. **Korea:** recently introduced a unified supervisory authority. **Mexico:** although an OECD member is included in Table 1 with other Latin-American countries. **Poland:** reforms under discussion. **Switzerland:** coverage universal above income floor (SFr 23,280). **United Kingdom:** coverage 45 per cent by employer DB plans, 2 per cent employer DC and 28 per cent in individual DC accounts ('personal pensions'). **United States:** coverage divides evenly between DB and DC schemes.

3.7 Performance of supervisory agencies in Latin America

Comparing the performance of Latin American agencies is complex, due to the different characteristics of national systems. Table 3 presents a few indicators. The Mexican is the largest of the seven agencies in terms of number of employees. But this reflects the fact that over 11 million employees are covered in Mexico, compared with about 6 million in Chile and Argentina, 2½ million in Colombia, just over 1 million in Peru and fewer than half a million in Bolivia and Uruguay. Consequently, Mexico's employee-to-fund-member ratio is the second lowest, after Colombia. The very high ratios in Bolivia and Uruguay probably result from the relative youth of their systems and the small number of pension-fund members, which may cause problems due to lack of scale. In contrast, the high ratio in Peru may indicate inefficiency.

Comparisons of ratios to the value of the fund are dominated by the relative maturity of the systems: funds in Chile are nearly twice as large as all other countries put together. The ratio of the budget to the revenues flowing into funds is less distorted. This measure shows how much of workers' contributions go to finance supervision (in systems where fees pay for supervision). Because the supervision agencies in Colombia and Uruguay are part of the central bank, it is unfortunately not possible to isolate their budgets from that of the parent institution. On this measure, the cheapest agencies are those in Chile and Argentina, which spend between a quarter and a half of one per cent of total revenues. The ratio of employees to the number of operating pension funds appears to be the most consistent indicator. Its value is close to 10 in most cases. The exceptions of Colombia and Uruguay reflect the fact that supervision is part of the central bank, and so support services are part of the larger organisation and outside the supervision agency.

Table 3. **Performance indicators of pension supervision agencies in Latin-American Countries**

Country	Employees	In direct control areas	Budget	Employees/ fund members	Employees/ funds	Budget/ funds' assets	Budget/ fund revenue
	<i>number</i>	<i>%</i>	<i>\$million</i>	<i>per million</i>	<i>number</i>	<i>%</i>	<i>%</i>
Argentina	183	43	12.5	30.5	10.2	0.14	0.36
Bolivia	21	43	1.9	63.9	10.5	1.80	1.80
Chile	134	69	7.0	23.2	10.1	0.02	0.28
Colombia	30	73	—	11.9	3.3	—	—
Mexico	214	25	26.3	19.1	12.6	0.42	0.95
Peru	85	19	5.1	73.9	14.2	0.34	1.23
Uruguay	21	81	—	45.7	4.2	—	—

Source: authors' calculations based on information obtained from supervision agencies

Note: Bolivia: budget/funds and budget/revenue are equal because the figures cover only one year of operation. The figures exclude the Bonosol/Bolivida programme

4. Areas of supervision

4.1 Introduction

We have divided the regulatory activities of the agency into four main areas. The discussion in this section covers each in turn.

- **Institutional control** covers the functioning of the pension-fund management companies, from its authorisation and licensing to its eventual dissolution, by merger or liquidation. This area also includes vetting managing-company officials and sales forces and branch registration.
- **Financial control** supervises contribution-collection and investment procedures of the private pension funds
- **Membership control** looks at the enrolment process, transfers and compliance. This area also needs a strong, efficient member complaints department.
- **Benefits control** requires monitoring of benefit calculations and disability and survivors insurance, if these are part of the reformed system.

An efficient supervisory agency should concentrate its efforts on these problems, giving maximum priority to its front-line work. We will concentrate on this substantive

work, although support areas, such as information technology, human resources and legal advice are, of course, important.

4.2 *Institutional control*

This area is particularly important in the initial years of the system of private pension funds. In subsequent years, its importance to supervision scheme will decline for a number of reasons. First, the large initial effort in licensing new pension fund companies will naturally diminish. Secondly, uncertainty is greater when the new system is introduced. Some pension funds may fail to obtain their projected rates of return. Thirdly, pension-fund mergers or eventual liquidation will be more widespread initially, until the market stabilises. Fourthly, as pension funds become more familiar with the regulations, control can become more selective. Finally, as the number and value of benefit payments increase as the scheme matures, the third area of control becomes relatively more important.

Eight key activities are covered in this section:

- Licensing new pension funds
- Merger and liquidation of funds
- Fund marketing
- Fund advertising
- Disclosure
- Evaluation of financial and operational performance
- Collecting institutional information
- Inspections and audits

4.2.1 Licensing pension funds

The licensing procedure will be of crucial importance when the new system is introduced. It should include

- Scrutiny of the feasibility of pension-fund managers' investment projects
- Enforcing legal requirements, such as the constitution of an entity whose principal or sole objective is pension-fund administration
- Enforcing financial requirements, such minimum reserves and capital. Note that the capital of the fund-management company is separated from the pension fund itself. This distinguishes pension funds from other financial institutions, such as banks.

4.2.2 Merger and liquidation

The first years of operation are likely to be unstable, until experience of the new market is gained and equilibrium is reached. So, although rare in a mature system, merger and liquidation may be regular at the beginning.

In Argentina, seven of the 25 funds authorised have disappeared through merger in the first three years of the new regime. This was a consequence of financial deficits in funds that failed to obtain the market share they anticipated. Some of the remaining 18 funds are still operating below their break-even points. A small number of mergers could still take place in the next few years. The precise regulation of the merger processes and timing and effective supervision of these regulations meant there were practically no costs to affiliates, who were simply transferred from the old to the new funds.³

³ This provides another practical argument for separation of assets between the pension fund and its administrator.

In both Chile and Argentina, the supervision agency acts as liquidator of the pension fund. There have been no bankruptcies in Argentina, but three in Chile. Liquidation involves two processes: the liquidation of the fund-management company and the transfer of the pension fund to one or more other administrators. It can be useful to treat these two processes separately. In two of the Chilean cases, the Supervision agency acted as liquidator of the pension fund and the fund-management company as well, whereas in the third case, an external liquidator was designated by the courts according to normal commercial law. The latter allows the supervision agency to concentrate on the fund's problems rather than those of its managers.

4.2.3 Marketing

Marketing regulations can have a significant impact on the level of administrative costs. Most Latin-American countries that adopted private pension funds show very high intermediation costs. Much of this is due to the size of marketing expenses. High marketing expenses, as well as increasing overall charges can also reduce the efficiency and transparency of the whole system.

High intermediation costs may result from

- excessive spending to improve market share
- a too permissive regime on switching from one pension fund to another
- necessary expenses of intermediaries or promoters
- independence (and sometimes divergence) of objectives between sales forces and fund managers

Table 4 looks at the cost structure in Argentina and Chile. For ease of comparison, the information refers to the first three years of operation — 1981-83 for Chile and 1994-97 for Argentina — along with the latest data, 1996, for Chile. In Chile

the number of affiliates per fund employee increased very slowly over the first years of operation, whereas in Argentina it fell in the third year after an increase in the second. This reflects the difficulty funds encounter in reducing the size of the sales force after the enormous initial affiliation process. By 1996, the funds' labour force was almost six times larger than in the first few years of the system.

Analysis of the structure of funds' costs shows a continuous increase in the importance of marketing in Argentina, whereas marketing's share of total costs fell in Chile in the first few years, but recovered strongly later on. Setting aside differences in data collection, this reflects the effect of a significant reduction in non-salary marketing costs in Chile during the first few years, and a significant increase in remuneration of the sales force in recent years.

While Peru limited the number of transfers directly, Argentina has followed an indirect route, maintaining the number of possible transfers. This new regulatory strategy puts the main responsibility for transfers on branches of the fund-management company rather than on the sales force. Preliminary statistics reveal a one third fall in monthly transfers. This might reduce costs.

Table 4. Marketing-costs indicators, Argentina and Chile

<i>Years of operation</i>	<i>Argentina</i>			<i>Chile</i>			
	<i>1</i>	<i>2</i>	<i>3</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>16</i>
Pension-fund employees	14,094	18,588	22,749	4,101	3,753	4,932	23,798
Fund members/employees	285	328	309	351	398	409	234
Marketing/total costs (%)	31	41	50	33	24	23	48
Employee costs/ marketing costs (%)	71	68	66	47	65	61	89

Source: SAFJP, Argentina; SAFP, Chile

Note: 1995-97 for Argentina, 1981-83 and 1996 for Chile

4.2.4 Advertising

Rules for advertising are especially important in the early years after reform. The population needs to be informed about the new system. However, the mass media can misinform, or induce potential members to make their choice based on incorrect information.

Fund-management companies should be obliged to send every advertisement to the supervision agency. The agency should have the powers to reject them or require revisions. Controls need not be exhaustive, and as time passes, they can gradually become more selective.

It is important to establish the power to reject advertising clearly in law or regulations: the supervision agency should not act as a censor of public information. In Argentina, general restrictions cover

- providing information that could cause members to make errors (*i.e.*, projection of benefits based on extremely optimistic assumptions, identifying the fund-management company with partner firms)
- selecting, omitting or manipulating information to show that the pension fund is in a better position than it really is
- cross-selling, *i.e.* forcing individual choice by linking fund membership with non-pension products (such as loans, credit cards, *etc.*)

4.2.5 Inspections and audits

Inspections must verify appropriate behaviour of pension-fund management companies, such as crediting contributions to individual accounts, deducting commissions, advertising, affiliation and transfers, *etc.*

Most of these are 'on-site' activities, verifying supporting documents and are complementary with controls inside the supervision agency. In some cases, inspectors

have to make decisions on site, but, generally, documents are later analysed inside the supervision agency: in Argentina around one third of supervisor's time is spent on analysis within the agency.

There are a number of special difficulties relating to inspections and audits

- The focus on controls within the pension funds means the diversity of subjects encountered is great. The inspectors must therefore be well trained and their tasks precisely defined
- As inspectors represent the agency when on site, personal deportment is also important
- Although audit software can help to stratify samples improve information processing, inspection and audit is a very labour intensive activity
- Interaction with other divisions of the supervision agency is crucial, since inspections or audits prompted by their activities will be important. About 50-60 per cent of time should be devoted to regular controls, and 40-50 per cent to unanticipated activities.

Inspections should be divided into programmes. For each, the following needs to be clearly set out

- **objectives** of the corresponding control activity
- **frequency** of controls and whether regular or irregular
- **activities** to achieve the objective
- **procedures**, indicating routines and criteria for the activities
- **resources** to be allocated to the programme
- **circumstances** that prompt an action of control, insofar as they can be described objectively
- **results** and execution of disciplinary policy, for prevention, correction and deterrence

The annual inspection plan consists of a comprehensive group of programmes. Each pension-fund company should be inspected at least annually under each programme.

The Argentine agency in 1994-95 followed an 'integrated' strategy: once the inspectors visited a company, they completed the whole set of inspections. Since 1996, this strategy was changed, so that the controls would be less predictable to the companies and to guarantee the presence of the agency at the fund managers' offices throughout the year.

A tentative list of possible inspection programs is given below, based on Argentine experience but generalised as much as possible.

- **Control of individual accounts** aims to examine a sample of individual accounts of each fund, verifying that the information is consistent, particularly that credits are given and commissions deducted properly and on time
- **Control of information to members and beneficiaries** should verify supporting documentation of the requirement to provide regular information
- **Control of accounting practices** should check that the pension-fund company can support the financial information on assets *etc.* provided to the supervision agency
- **Control of affiliation** verifies, for a sample of members, that affiliation forms have been completed correctly (*e.g.*, no forms signed blank or incomplete). In special cases, the programme could include direct monitoring of the affiliation process
- **Control of documentation on investments and reserves**, complementary to financial controls within the agency
- **Control of fund-management-company branches** includes site visits to branches, and checks of the information provided to members and revisions to affiliation and transfer books
- **Complaints and claims procedures** must be checked, and their implementation and verified. Again, this is complementary regular checks inside the supervision agency on the accuracy of solutions to complaints

- **Verification of payments to life-insurance companies** is important when life insurers provide disability and survivorship pensions. Again, inspection focuses on checking supporting documents

All of these programs should be completed at least once a year for each pension-fund company, but repeated under special inspections as necessary. These special inspections, however, should follow the same control procedures as regular audits.

4.2.6 Evaluation of financial and operational performance

The financial performance of pension-fund companies can be evaluated using methods adapted from those used to assess the efficiency of banks and insurance companies. Checking minimum-capital and reserve requirements is an important part of the financial-evaluation routine.

It is also useful interesting to evaluate pension-fund companies operations. Some funds may have few or no financial problems, but they may be inefficient. This can be identified from the results of all control activities. A database of such information is a useful input to developing performance criteria and evaluating operational results.

4.3 Financial controls

The financial flows of contributions, investments and benefits in the new system need to be monitored. These include

- Collection of contributions and transfers between funds
- Investment supervision, including information sources and information-technology systems
- Asset-valuation procedures, particularly for instruments with no market price
- Investment limits, if any, by type of instrument, risk-rating level, issuer, *etc.*

- Custodianship
- Calculation of returns
- Minimum guarantees

These seven areas are investigated in turn.

4.3.1 Collection

There are two basic models for the transfer of contributions from workers to pension funds: centralised and decentralised. The first is more common in countries where a ‘first pillar’ of pay-as-you-go, public pensions with universal coverage is maintained along with the funded ‘pillar’, such as Argentina and Uruguay. Alternatively, in the absence of a first pillar, a decentralised collection scheme is more reasonable, as in Chile, Colombia and Peru. Table 5 summarises the basic arguments for the adoption of a centralised or decentralised collection system.⁴ Although many of them are not relevant here, the regulation and supervision of collection is central to this paper.

⁴ For an extended discussion of these issues, see Rofman (1997) and Demarco and Rofman (1998).

Table 5. Comparison of collection systems

<i>Criterion</i>	<i>Centralised collection</i>	<i>Decentralised collection</i>
Economies of scale	High	Overlapping structures Duplication of costs
Efficiency	Traditional systems can be inefficient	New, technologically updated system can be more efficient
Timing	Lags possible	Usually instantaneous
Control mechanisms	Simple	Complex
Cross controls	Tax contributions	None
Incentives	Fiscal	Profits
Policing power	Absolute	Indirect
Costs	Economies of scale BUT monopoly	Profit motive BUT diseconomies of scale
Financing	State Problem of valuation if funds pay	Pension fund

Figures 2 and 3 show the flow of funds in a multipillar and in a single-pillar pension system respectively. In the second case, centralised collection makes the process unnecessarily longer, but in the first, there are close connections between public and private institutions. Centralisation appears at least convenient.

The centralised approach also appears more appropriate from the regulatory point of view. With a single organisation collecting contributions, usually a government agency, regulation and supervision can be the same as those applied to other arms of government. In some countries, such as Argentina, the tax-collection agency collects contributions. In others, such as Mexico and Uruguay, it is the old social-security administration. In the United Kingdom, contributions are collected by the contributions agency of the department of social security, but this has recently been merged with the tax-collection administration. In both models, economies of scale can be reaped but further positive externalities derive from the possibility of cross-controls when tax administrations are used.

With decentralised collections, each pension-fund managing company tends to establish its own structure. Supervision is therefore more complex. A special procedure must be established and the task is multiplied by the number of management

companies. In most cases, collection is organised through the existing banking system, but some managing companies may decide to collect the contributions directly. In either case, clear regulation of responsibility for the safekeeping of contributions before they are credited to pension funds and proper supervision to ensure compliance are necessary.

The supervision of collection is closely related to the transfer of contributions to individual accounts. While the former will not be the exclusive competence of pension-fund supervisors, the latter clearly forms part of supervisory financial and institutional controls. If the collecting agency is not regulated by the pension-fund supervisory agency, close co-operation between the two agencies is vital for effective control. In Argentina, this co-operation is based on two flows of information

- The collection agency gives monthly information of movements into individual accounts, allowing the supervision agency to control affiliation and individual accounts as outlined above
- The supervision agency informs the collection agency of irregularities detected through audit or affiliates' complaints

Additional information can be derived from cross-controls of tax and social-security contributions when collected by the same office.

A final collection issue, especially in a centralised system, is the design of a good identification system for affiliates. This affects the timing of the collection and distribution of contributions, and the detection and solution of any problems. It is important to have an identification system in place from the start, particularly where social-security or tax identification systems are inadequate.

Figure 2. **Flow of funds in a system with a public pillar**

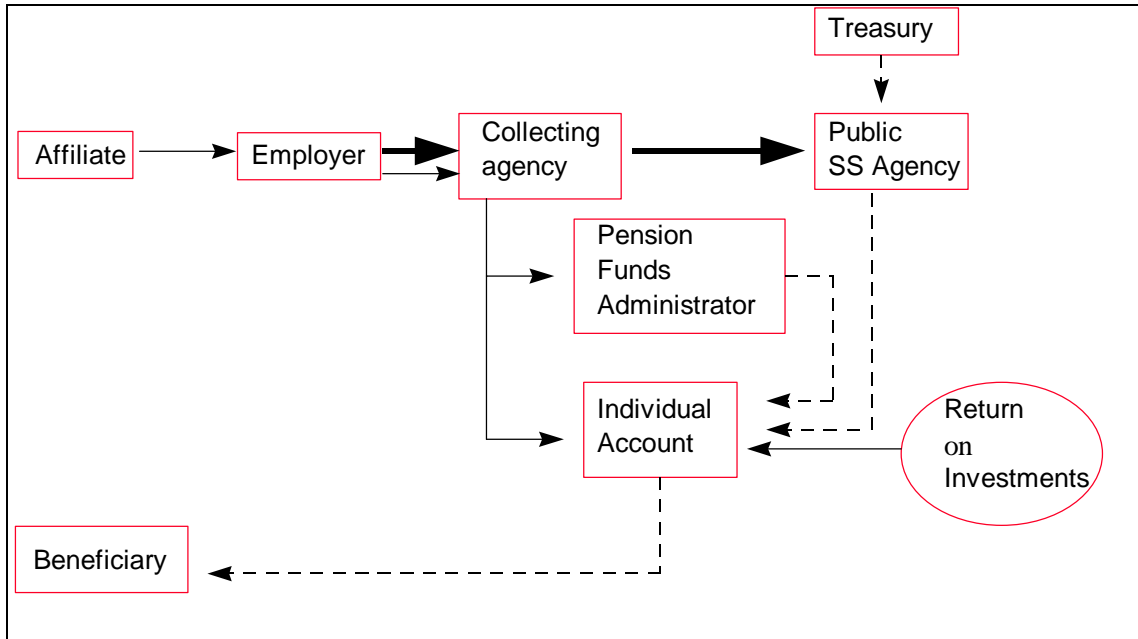
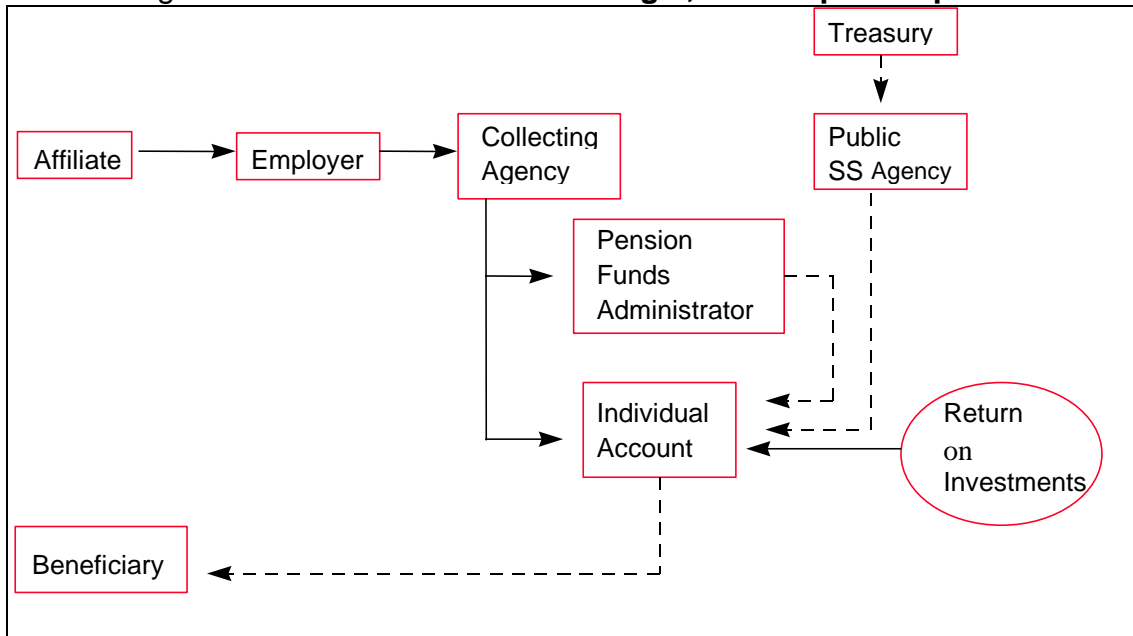


Figure 3. **Flow of funds with a single, funded private pillar**



4.3.2 Reporting

Regular reporting is critical. Reports must be filed with the supervision agency on a monthly, weekly or even daily basis (as in Argentina and Chile). These reports should include full details of investment policies, portfolio composition and revenues and expenditures. Reports from custodians (see below) and the stock exchange or financial institutions should also be collected. Reports on the finances of managing companies is also necessary, especially where they have a role in guaranteeing minimum returns or are required to hold a minimum amount of capital.

4.3.3 Asset valuation

Although the majority of pension funds assets will be invested in instruments with a clear market value, a transparent valuation system is needed to ensure the fund is able to pay benefits.

Most of the Latin-American systems have a valuation system based on daily prices. In some cases, such as Argentina, the supervision agency is responsible for calculating daily prices. In others, such as Chile, each manager calculates values using rules determined by the supervision agency. These methods have similar results, because they follow similar procedures

- valuation is based on market prices
- daily information is provided by pension funds (and in Argentina, this is cross-checked with information from financial markets)
- clear rules are established by the supervision agency to value of non-traded assets

In either scheme, the book value of funds is approximately equal to market value, and fund members own a number of shares in the fund. Table 6 shows the diverse range of valuation methods used in OECD countries.

Table 6. Valuation bases in OECD countries

<i>Country</i>	Equities		Bonds		Loans	Property
	quoted	unquoted	high quality	low quality		
Australia	market	market	market	market	market	market
Austria	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase
Belgium	market	market	repayment	mkt/purchase	outstanding	market
Canada	adjusted market	mkt/purchase	amortised	amortised	amortised	adjusted market
Denmark	mkt/purchase	mkt/purchase	amortised	amortised	amortised	mkt/purchase
Finland	adjusted market	adjusted market	amortised	adjusted market	amortised	adjusted market
France	mkt/purchase	mkt/purchase	amortised	amortised	mkt/purchase	amortised
Germany	lowest ever	lowest ever	lowest ever	lowest ever	mkt/purchase	mkt/purchase
Greece	lowest ever	lowest ever	mkt/purchase	mkt/purchase	lowest ever	lowest ever
Iceland	market	mkt/purchase	market	mkt/purchase	mkt/purchase	mkt/purchase
Ireland	market	market	market	market	market	market
Italy	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase
Japan	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase
Luxembourg	market	market	outstanding	market	market	market
Mexico	adjusted market	adjusted market	market	market	market	market
Netherlands	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase	market
Norway	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase
Portugal	market	market	amortised/mkt	market	market	market
Spain	market	mkt/purchase	market	market	mkt/purchase	market
Sweden	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase	mkt/purchase
Switzerland	adjusted market	adjusted market	amortised	amortised	market	—
Turkey	lowest ever	mkt/purchase	lowest ever	lowest ever	mkt/purchase	mkt/purchase
United Kingdom	market	adjusted market	market	market	market	market
United States	market	market	amortised	mkt/purchase	mkt/purchase	mkt/purchase

Source: OECD (1996)

Note: 'mkt/purchase' means the lower of the market or purchase price for quoted investments and lower of purchase price or written-down book value for unquoted. **Belgium:** repayment value used for securities issued or guaranteed by the public sector; lower of market or purchase value applies to other high-quality bonds. **Finland:** mortgages are amortised, other loans adjusted market value. **Netherlands:** bonds and loans can also be valued on an amortised basis. **United States:** data apply to New Jersey and Delaware.

4.3.4 *Investment limits*

The issue of portfolio restrictions on funds is controversial: they may force managers to choose sub-optimal risk-return combinations, but they can guarantee some level of conservatism in investment decisions and force diversification. Limitations are usually set in several dimensions: by type of assets, by issuer, by risk category (established by the supervision agency or private rating agencies) and by potential conflicts of interests.

The first is most important and, in principle, the simplest to supervise. Maximum amounts or percentages of the fund are that can be invested in classes as government bonds, equities, certificate of deposit, corporate bonds, foreign assets *etc.* may be set. Minimum levels, since they force funds to invest part of the portfolio in certain assets, are best avoided. Bolivia and Uruguay force funds to invest the majority of their assets in government bonds. No OECD country currently imposes such minima.⁵ To ensure that managers have a wide choice of investments, the sum of the maxima should exceed 100 per cent (probably as much as 200 per cent) of the total size of the fund. Managers may then avoid one specific type of asset if they wish.

Most controversial in this area are maximum limits for foreign assets. These limits force fund managers to invest more than optimally in domestic instruments. However, existing limits in Latin America have not been binding. For example, the maximum in Argentina is 17 per cent of funds, while actual investment is less than one per cent. Similar results obtain in Chile.

⁵ OECD (1996).

Table 7 shows the structure of portfolios in Argentina, Chile and Peru in June 1997 along with the legal maxima by type of instrument. For some instruments, restrictions have been binding.⁶

Many OECD countries — Australia, Belgium, France, Germany, Italy, Japan, Sweden and Switzerland — also set these kinds of portfolio limits. In other countries, such as Canada, Denmark, Ireland, the Netherlands, the United Kingdom and the United States, there are no quantitative restrictions. However, pension funds are obliged to invest as a ‘prudent person’ would with his or her own money. Data covering the period 1967-90 show a 1.8 percentage point higher annual rate of return on pension-fund investments in countries with prudent-person rules compared with those with quantitative limits. More recently (1984-96), the gap has widened to 4.3 percentage points a year.⁷ However, Vittas (1998) argues that the prudent-person rule may be sufficient protection for defined-benefit plans, but that defined-contribution plans require greater protection.

Table 7. Pension-fund portfolios in Argentina, Chile and Peru, June 1997

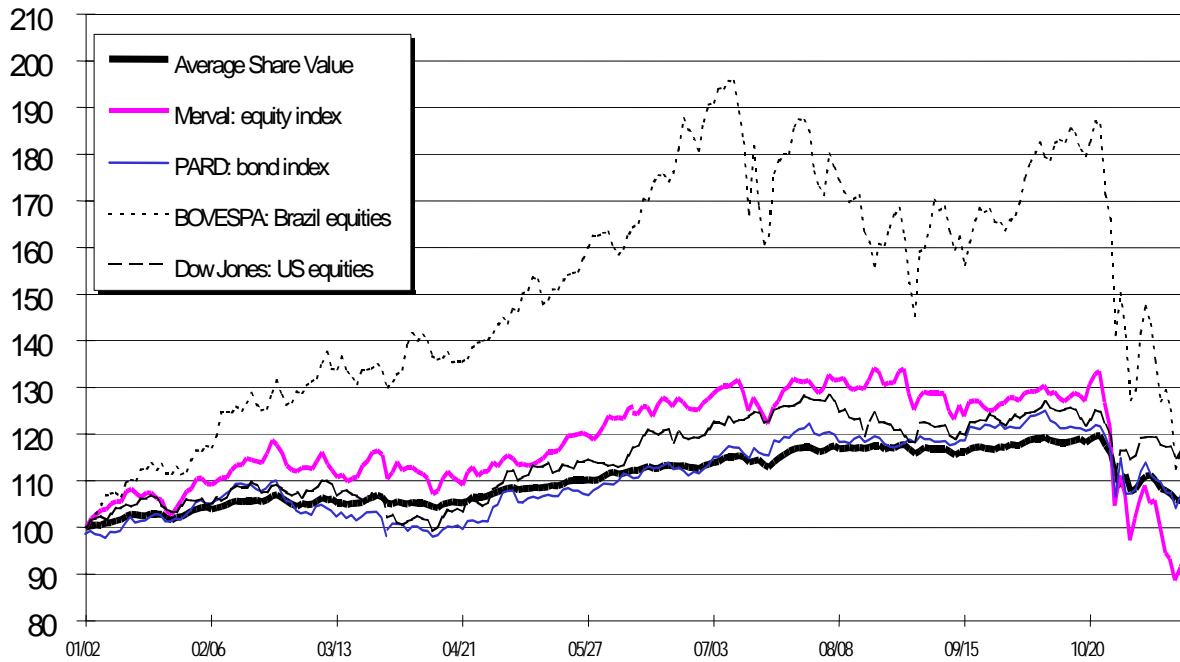
Assets (% fund)	Argentina		Chile		Peru	
	Actual	Maximum	Actual	Maximum	Actual	Maximum
Public-sector bonds	49.3	50	37.7	35/50	11.5	40
Private-sector bonds	4.8	28	3.8	30/50	16.2	35
Certificate of deposit	17.8	28	8.4	30/50	33.6	50
Equities	21.8	35	29.3	35/50	34.8	30
Mortgages	0.4	28	17.0	35/50	0.5	40
Others	5.9	—	3.8	—	3.4	—
Total	100.0	169	100.0	165/250	100.0	195

Source: SAFJP, Argentina; SAFP, Chile; SAFP, Peru

⁶ Information refers to aggregate portfolios. Restrictions do not necessarily require the aggregated amount to coincide with the legal upper limit. Also, individual funds usually establish lower-than-legal upper limits of their own, to avoid incurring the costs of asset liquidation when changes in the portfolio are required. Another reason for lower-than-legal limits in Argentina is that the supervisor values the funds, and, in exceptional cases, this may result in differences between official prices and those assumed by the pension-fund managers.

⁷ OECD (1998), Table V.2.

Figure 4. Pension-fund values and market indices, 1997



Source: SAFJP, Argentina

Investment limits have been useful in gaining public confidence in the new systems. They might also have prevented a more dramatic impact on pension funds from the 'tequila effect' of 1994 and the recent East-Asian crisis. Figure 4 shows the evolution of different capital-market indicators in Argentina during 1997. Pension funds proved much more stable than broader market indices.

The second type of limit (by issuer) is designed to avoid concentration of investments and the associated risk. The third (limits by risk) are designed to avoid assets with poor risk ratings. Finally, the fourth type of limit aims to avoid conflicts of interests between the fund and other activities of fund managers by prohibiting or limiting investment in assets issued by companies with strong economic relations with the managing company.

These four types of limitations cause some difficulties in implementation and supervision. The creativity of financial markets can rapidly make irrelevant differences between pre-defined categories such as bond, equity, deposits *etc.*, especially when different types of derivatives are used. Supervisory agencies must be able to alter categorisations rapidly, for example, of a certificate of deposit in a bank with the return linked to the performance of a number of stocks, domestic and foreign.

Limits by issuer pose the definitional problem of defining issuers as either individual companies or economic groups. If the goal is to force diversification, then limits should be established for the whole of economic groups, but it is not always clear which companies belong to them.

Limits by risk level are less problematic, but effective supervision of risk-rating agencies is essential.

The fourth limit, relating to conflicts of interest poses two problems. The first, as outlined already, is in defining and identifying economic groups. Secondly, not all investments in assets issued by a company belonging to the same economic group as the managing firm will create a conflict of interest: market mechanisms may generate fair prices.

4.3.5 Custodianship

Custodian institutions, acting as a depository for assets and guaranteeing the integrity of the fund is a central part of the financial regulation of pension funds. Custodians should report to the supervisory agency with the same frequency as managers, and data from the two sources should be cross-checked. Also, custodians should be informed of investment limits and be required to refuse any transaction that would violate these limits.

In Argentina, banks may act as custodians if they are specially authorised by the central bank. An institution regulated by the securities and exchange commission (CNV) may also act as custodian, but banks are predominant. Five of the biggest banks have been chosen as custodians by 17 of the 18 pension funds. Custodians and pension funds should not of course belong to the same economic group to avoid conflicts of interest.

4.3.6 Calculating returns

Calculation of the returns of the fund will be a critical task of the supervisory agency when there are minimum or relative rate-of-return guarantees. Clear regulation of methodology is necessary and calculations must be made at the supervision agency, either definitively (*i.e.*, as the official calculation) or as a control (*i.e.*, verifying the managers' calculations). Even in the absence of guarantees, a regulation defining the methodology for calculating returns should be specified to increase transparency and comparability between different funds.

4.3.7 Applying guarantees

Several different types of guarantees of funded-pension benefits have been offered.

First, the government can guarantee minimum retirement incomes. No minimum return is required from the fund, and the supervisory agency does not need to implement guarantee procedures. This is the approach adopted in Mexico.

Secondly, other Latin-American countries, such as Argentina and Chile, set a minimum relative rate of return. Each fund must generate a minimum return over certain period (usually 12 months) defined as a proportion of the average return

obtained by the industry. The managing companies are responsible for compensating fund members if the return is insufficient. The supervisory agency must implement a mechanism to calculate the minimum return, verify if a fund has fallen below it and oversee the compensation process. A third approach offers a minimum rate-of-return guarantee, but this is underwritten by a guarantee fund financed by all the pension funds. The guarantee fund operates as type of insurance scheme. The supervisory agency should carefully monitor the investments of a guarantee fund to ensure that the necessary resources will be available as required.

4.4 Membership and benefits

Initially, much of the work will be concentrated on contributors' complaints, but as the scheme matures, supervision of benefits will become significant. The main areas of work, which are discussed in turn, are

- Membership procedures and transfer from one fund to another
- Disclosure
- Resolution of contributors' and beneficiaries' complaints
- Definition and control of procedures to apply for benefits
- Definition of technical bases for annuities calculations
- Control of accuracy of benefits paid as annuities or programmed withdrawals
- Procedures for disability qualification

4.4.1 Membership procedures and transfers

Regulations should cover five different issues

- formal documentation of the individual decision

- conditions for membership and transfer, and documents to support them
- role of the sales force
- responsibilities of funds and their sales forces in case of fraud or incorrect affiliation
- an institution responsible for keeping a record of affiliates

The third and fourth issues are crucial to the transparency and cost of the system. For this reason, Argentina has recently changed affiliation and transfer rules. While the previous system relied predominantly on promoters, the new system puts the emphasis on the fund-management companies' branches. Affiliates who want to transfer from one fund to another now have to fill out the required form in the branch office, where registration in an authorised book is required. This system is thought to have three main advantages compared with the previous one

- As the affiliation and transfer process relies less on promoters, regulations regarding the legal relationship between the sales force and pension funds can be more flexible, reducing costs
- Pension-fund managers can reduce the number of promoters as they increase the number of branches. Conditions for opening branches were also relaxed, permitting the common use of space and personnel with other activities, such as banks
- The responsibility for fraud in affiliations or transfers now lies with the fund-management company rather than the promoter. In the previous system, the fund was only responsible when it could be proved the promoter acted on instructions of the fund or when the number of incorrect affiliations was large enough to suggest inadequate internal controls

Supervision of sales forces may consist either of detailed syllabuses for training programmes or just general guidelines. Responsibility for training is usually assigned to pension funds, but certification is regulated to different degrees in different countries. In Argentina, the supervision agency initially certified potential sales personnel on the result of a centralised examination. As the system has matured,

certification is now left to the pension-fund managers, according to a procedure approved by the regulatory agency.

Whatever the definitions and model adopted, regular inspections will be necessary, of the following

- Promoters' training and certification
- Affiliations or transfers by promoters: on-site examination of information given to potential members *etc.*
- Audit of branches, again examining information given out to potential members

Further validations are possible if a centralised system of affiliation is developed. If contributions are collected centrally, as in Argentina, this is a task of the collection agency, using data from the supervision, such as identifying numbers for promoters or the head of fund managers' branches.

4.4.2 Disclosure

Regular reporting to fund members must be a priority for system designers. The new funded plans compete to offer their services. Only if contributors have clear information on costs and returns of different funds will they be able to make educated choices and transfer to the best funds. Competitive pressures will then reduce costs and increase efficiency.

Apart from the communications they *choose* to give their fund members, pension funds should be obliged to provide some basic information, such as

- General information about the new funded or multipillar pension system
- General information about the pension-fund management company, such as its partners, basic indicators of its financial situation, *etc.*

- Charges and costs of the fund compared with the system's average
- Returns of the fund compared with the system's average
- Individual members' account flows and balance
- Procedures to report irregularities and file complaints
- Procedures to claim a pension benefit
- Information about the insurance market, especially annuities

Most supervisors require funds to send a periodical report to each contributor or beneficiary. The fund manager could be required to prepare general information, or merely to distribute pamphlets from the supervision or other government agencies.

Regulations should specify the contents, design and frequency of information the funds send to their contributors and beneficiaries. Standardised formats are recommended, particularly for financial information, to facilitate comparisons between funds and to prevent manipulation of information by the enterprises.

Most Latin-American countries, following the Chilean example, require that the funds send each member a periodical report of the evolution of the individual account. In Argentina, the frequency is no less than three times a year. This provides the affiliate with precise information on the amount of contributions paid into the account, the commission deducted and the pension fund's return. In addition, funds could be required to give quantitative information on the system in general, such as average commissions, average returns, effective commission rate at the affiliate's level of income, *etc.*

Periodical reports have also proved helpful in detecting fraudulent affiliation or transfer: in Argentina, a significant number of lawsuits arise because a worker receives a report from a fund he or she has not chosen. In addition, in a centralised collection system, affiliates can verify the correct deposit of contributions by their employers, and the correct transfer of funds by the collection agency.

It is also important to avoid giving excessively detailed information that might be helpful for a small number of members, but useless, or even negative, for the rest. Argentina has recently changed the design of the standardised presentation, informative chart, concentrating basic, simplified information on the first page. This is designed for easy interpretation by non-specialists. More detailed information is on other pages. The old, detailed and new, simplified templates are shown in the Annexes.

Inspections should check that reports have been sent regularly to affiliates and that information is accurate.

Another interesting recent initiative in Argentina was the distribution by supervision agency of a booklet comparing the effective level of commissions at different income levels. The information was necessarily more limited than in individual reports, but many people saw for the first time an indication of the real cost of their fund compared with others at their own income level. Many used this information to transfer to a less expensive fund.

Disclosure requirements in Europe vary enormously.⁸ The United Kingdom and Ireland have the most comprehensive rules. Members of employer-based schemes must be told eligibility rules, calculation of contributions and the type and level of benefits. Trust deeds must be available and an annual report provided nine months after the year-end in Ireland and one year after in the United Kingdom. In the report, trustees must account for collection of contributions, investment of assets, payment of benefits and provide an actuarial valuation of assets and liabilities. Austria, Denmark, France⁹, Spain and Switzerland also have legal requirements to inform members. In other countries, such as Belgium, Germany, Italy, Luxembourg, the Netherlands, Norway,

⁸ See Fédération des Experts Comptables Européens (1995) and Laboul (1998), Table 20.

⁹ Cardon (1992) analysed the accounts of French companies and found little information on the type of scheme, contributions, actuarial methods and assumptions or breakdown of annual costs.

Sweden, there is no legal requirement to inform members, and there is a risk that plan members do not have adequate information to assess the performance of their funds.

4.4.3 Complaints

Complaints could be addressed in the first instance either to the fund-management company or to the supervisory agency. In either case, an initial opportunity for resolution should be offered to the fund.

In Argentina, pension funds receive complaints and deal with them in a standardised way determined by the supervision agency. The agency is informed of the result, and assesses whether the proposed solution is appropriate. In cases of conflict or when the solution does not appear appropriate, the supervisory agency can prescribe solutions. The agency also determines the final responsibilities of the fund or its employees and analyses the outcome of law-suits.

4.4.4 Procedures to apply for benefits

Standardised procedures, forms and supporting documentation for claiming benefits should be set up. An important consideration in multipillar regimes is the coordination between the procedures and responsibilities the fund and the public social-security agency.

Payment of benefits from different pillars may be separated or unified. The latter is recommended because it avoids unnecessary duplication of procedures. The following questions must be answered

- will beneficiaries apply to the fund, with the latter acting as intermediary between them and the public social-security agency?

- will eligibility be verified by the fund or by the public social-security agency?
- will unified benefit payments be split if the public social-security agency does not pay on time?

Unifying procedures and eligibility criteria is a complex task: in Argentina, it took almost two years.

4.4.5 Life assurance and annuities: technical issues

Insurance against disability or death before retirement ('life insurance') and the provision of annuities for retirement income ('longevity insurance') coverage are central parts of the pension system. In some countries, these insurance issues are dealt with by pension companies, along with the accumulation of contributions and investment returns. In others, insurance issues are dealt with separately. This has the advantage of allowing separate evaluation of pension-fund administration and the insurance companies' coverage of personal risks.

An important regulatory issue is the relative competencies of the pension-fund supervision and the insurance supervision agencies, and ensuring co-ordination between the two by one of a number of means

- Common dependence of both agencies on a co-ordination agency or committee
- Having the pension-fund agency also supervise retirement-insurance companies
- Separating supervision of insurance companies from that of their products, such as annuities

We recommend the last two approaches since the first may be excessively bureaucratic, reducing both agencies' freedom of manoeuvre. The third has been the most common, as a means of accommodating existing insurance agencies in the new regime. The second has not been adopted in Latin America, although it would be

feasible and convenient where these companies are prohibited from offering other insurance products.

Argentina adopted the third approach: the pension-fund supervision agency controls life-insurance and annuity contracts, but the companies themselves are regulated by the existing insurance supervision agency. The two agencies have subscribed to a co-operation agreement, which governs exchange of information and allows the pension agency to require the insurance agency to inspect a particular insurance company.

The key issue in regulating insurance contracts is specifying the technical, actuarial bases on which calculations are made.

4.4.6 Accuracy of benefit payments

Most Latin-American private pension plans allow pension members either to withdraw their whole fund and purchase an annuity, or to follow a programme of 'scheduled withdrawals' from the fund. In the first case, a retirement-insurance company will be involved, but in the second, the individual account at the pension fund remains open. Benefits could therefore be supervised separately — by different agencies with different regulatory criteria — depending on the withdrawal route taken. The risk is that the choice of annuity versus scheduled withdrawal could be affected by regulatory asymmetries rather than simply by their different intrinsic economic characteristics.

The three options for co-ordination between insurance and pension-fund supervision apply here. A fourth approach would be to eliminate the scheduled-withdrawal option and force people to choose annuities. This is not recommended, because it involves a major restriction of choice for the individual pension member.

4.4.7 *Disability qualification*¹⁰

In some countries disability qualification remains the responsibility of the pre-existing state social-security agency. At the other extreme, responsibility can be passed to pension funds or insurance companies. The first is risky when existing institutions have been discredited, or proved to be inefficient and lacking transparency. The second lacks the necessary objectivity for a fair disability-insurance regime.

In Chile and Argentina, disability qualification is in the hands of special ‘medical commissions’, which are autonomous to other areas of the system, although in Argentina, they are co-ordinated by the pension-fund supervision agency. To guarantee the necessary objectivity, clear rules for disability qualification must be established.

4.5 *Information*

An essential part of the role of the supervisory agency is the collection and dissemination of information on the new funded-pension sector, probably by a statistics and research division. Data should include institutional arrangements of pension fund managers, membership, compliance, benefits, fees, revenues, fund investments, returns, performance of managing companies, *etc.* In addition, economic information related to the pension system should be collected, such as labour-market statistics, social security, capital markets, public finances, internal and external debt. Finally, information on domestic and foreign legislation should be gathered.

Timely dissemination as well as collection of these data is important, since they form an important input for independent researchers and analysts. This is a vital part

¹⁰ See Grushka and Demarco (1998) for a detailed discussion of disability pensions.

of ensuring that the new pension system is transparent. The data are, of course, useful internally as an input to the regulatory divisions of the supervisory agency additional to regular inspections and audits. Finally, the supervision agency will also want to carry out research on the evolution of the new pension system and its prospects in the medium term.

A regular statistical report, widely distributed, with basic data on membership, fees, revenue, investment, returns, *etc.* is a crucial output. Press releases with general information and information brochures for members, covering fund portfolios and returns, should be issued regularly.

4.6 *Legal issues*

4.6.1 *Fines and penalties*

The results of inspections, audits and other controls can be divided into three categories: first, 'all clear'; secondly, some revisions required which do not constitute errors; and, thirdly, irregularities or errors. A database of these results should be built, which is particularly helpful in ensuring that penalties and fines are levied on fairly, equitably and objectively. A pre-determined scale for fines is useful for consistency.

4.6.2 *The supervision agency and the courts*

Some irregularities might exceed the competence of the pension-fund agency. In these cases, which should be clearly established in the law, the agency would file the corresponding legal complaints. Examples of such cases include fraud, attempts to force individual choice, forgeries, *etc.*

4.6.3 Regulations

The agency responsible for drafting regulations is often separate from the supervision agency, (see section 3.1 above). But in practice, the supervision agency must design its own regulations, at the covering procedures and controls. Legal professionals within the supervision should assist in this process.

5. Conclusions

The debate over regulation of mandatory funded pension systems is far from closed. The experience of the small number of countries that have recently implemented funded systems is useful, but these models may not be generally applicable. The degree of professional expertise, the transparency and the independence of regulators and supervisors is essential to the success of the pension system. Starting from first principles, it is useful to reprise the basic arguments for special regulation of pension funds against broader institutional arrangements.

The widespread belief in reforming countries that inefficient and ineffectual regulation and supervision was at least partly responsible for past failures suggests that a new agency would be best placed to regulate funds effectively and build confidence in the new system.

We have argued that financial and organisational autonomy is most likely to lead to effective supervision and that salaries must be competitive with the private sector to recruit sufficient qualified personnel and to limit the risk of corruption.

We divided the substantive work of the supervisory agency into four areas: regulating institutional structures, finances, membership and benefits of funds. Two further areas were also discussed. First, the collection and distribution of contributions between funds might be part of the supervision agencies' tasks. Secondly, the

qualification for disability benefits was often one of the least satisfactory parts of pre-reform pension systems. We recommend that clear qualification rules be defined, that new, independent institutions are established to implement them and that these institutions are accountable to the pension-fund supervisory agency, where responsibility for disability pensions is transferred to the private sector.

Finally, concrete means of co-ordination and collaboration with other agencies must be established. These might take the form of formal agreements to exchange information, request inspections or participate in joint inspections.

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Annex 1. Standardised report form: old model

CUENTA DE CAPITALIZACION INDIVIDUAL ESTADO CUATRIMESTRAL							
LOGO AFJP		PERIODO DD/MM/AA - DD/MM/AA					
APELLIDO Y NOMBRES: DOMICILIO: D.N.I./E./L.C.: C.U.I.L./C.U.I.T.:							
SALDO DEL ESTADO ANTERIOR AL: DD/MM/AA	SALDO EN CUOTAS	VALOR DE LA CUOTA	SALDO EN PESOS				
INFORME DE LOS PAGOS EFECTUADOS EN EL PERIODO							
	MONTO EN PESOS	VALOR DE LA CUOTA	MONTO EN CUOTAS	SALDO EN CUOTAS			
APORTE OBLIGATORIOS PAGADOS EN EL CUATRIMESTRE: REMUNERACION DEVENGADA MM/AA PAGADA DD/MM/AA REMUNERACION DEVENGADA MM/AA PAGADA DD/MM/AA REMUNERACION DEVENGADA MM/AA PAGADA DD/MM/AA REMUNERACION DEVENGADA MM/AA PAGADA DD/MM/AA IMPOSICIONES VOLUNTARIAS - DEPOSITOS CONVENIDOS: CONCEPTO (I.V. o D.C.) PAGADA EL DD/MM/AA CONCEPTO (I.V. o D.C.) PAGADA EL DD/MM/AA CONCEPTO (I.V. o D.C.) PAGADA EL DD/MM/AA CONCEPTO (I.V. o D.C.) PAGADA EL DD/MM/AA COMISIONES COBRADAS EN EL CUATRIMESTRE: COMISIONES FIJAS POR APORTE OBLIGATORIOS POR IMPOSICIONES VOLUNTARIAS-DEPOSITOS CONVENIDOS OTRAS COMISIONES PORCENTUALES POR APORTE OBLIGATORIOS - COSTO ADMINISTRACION POR APORTE OBLIGATORIOS - COSTO DEL SEGURO POR IMPOSICIONES VOLUNTARIAS - DEPOSITOS CONVENIDOS OTRAS BONIFICACIONES APLICADAS (Según detalle) OTROS DEBITOS Y CREDITOS (Según detalle)							
SALDO INDIVIDUAL OBLIGATORIO:	CUOTAS:	VALOR DE LA CUOTA:	SALDO EN PESOS:				
SALDO INDIVIDUAL VOLUNTARIO:	CUOTAS:	VALOR DE LA CUOTA:	SALDO EN PESOS:				
SALDO DE LA CUENTA DE CAPITALIZACION INDIVIDUAL:	CUOTAS:	CUOTAS:	SALDO EN PESOS:				
INFORMACION SOBRE SU AHORRO PREVISIONAL							
VARIACION DE LA CUOTA							
CUATRIMESTRE	MES 1	MES 2	MES 3	MES 4	RENTABILIDAD DEL FONDO DE JUBILACIONES Y PENSIONES	RENTABILIDAD PROMEDIO DEL SISTEMA	COMISION PROMEDIO DEL SISTEMA
SECTOR LIBRE							

Annex 2. Standardised report form: new model

"LOGO AFJP"	CUENTA DE CAPITALIZACION INDIVIDUAL ESTADO CUATRIMESTRAL RESUMEN	
	Período DD-MM-AAAA al DD-MM-AAAA	Hoja N° 1 de
<Titular/Beneficiario>		CUIL/CUIT:
<Domicilio>		DNI/LE/LC:
<Código Postal/Localidad>		Cuenta N°:
Saldo de su Cuenta al : DD-MM-AAAA		\$ 0,00
Aportes Obligatorios Ingresados en el cuatrimestre		\$ 0,00
Incluye todos los aportes obligatorios ingresados en el período		
Aportes voluntarios o depósitos convenidos		\$ 0,00
Ingresados voluntariamente por Ud., su empleador o tercero		
Saldo de Traspaso		\$ 0,00
Ingresado a esta AFJP o remitido a otra AFJP si Ud. se cambió de administradora		
Integración de Capitales (sólo en caso de fallecimiento o invalidez)		\$ 0,00
Previsionales o de riesgos del trabajo, en caso de corresponder		
Prestaciones (sólo para beneficiarios de prestaciones)		\$ 0,00
Egresos por pago de jubilación, retiro definitivo de invalidez o pensión por fallecimiento		
Comisiones Cobradas		\$ 0,00
De acuerdo con el Régimen de Comisiones vigentes		
Bonificación por permanencia		\$ 0,00
Rebaja sobre las comisiones cobradas de acuerdo con el Régimen de Bonificaciones vigentes		
Otros Conceptos		\$ 0,00
Incorporados o deducidos de su cuenta		
Rendimiento del período		\$ 0,00
Obtenido por la inversión de sus fondos		
Saldo de su Cuenta al : DD-MM-AAAA		\$ 0,00
<i>Nota: Se acompaña información IMPORTANTE y el Estado Cuatrimestral Detallado</i>		