IV. INTEGRATED FINANCIAL SUPERVISION AND PRIVATE PENSION FUNDS

by
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Introduction

This study analyzes the cost and benefits of integrating the supervision of pensions with that of other financial activities and services. The literature has dealt with the integration of the supervision of banking, insurance and securities markets (Llewellyn, 1999, Demaestri and Guerrero, 2003), the joint supervision of insurance and pensions (Davis, 2001), the supervision of pension funds (Shah, 1997, Srinivas *et al.*, 2000, Demarco *et al.*, 2000, Rocha *et al.*, 1999, OECD Working Party on Private Pensions, 2002 and 2003), and the separation of banking supervision from central banking (Demaestri and Guerrero, 2003). This study seeks to expand on these issues, focusing on the integration of pension regulation. In particular, it seeks to make a conceptual contribution with respect to the reforms in financial supervision and pension systems in Latin America.

The subject is an important one. The financial problems afflicting pay-as-you-go pension systems have led to the promotion of complementary private capitalization schemes (both voluntary and mandatory) or substitutive ones (mandatory). The reforms that began in Chile in 1980 have been applied in a score of Latin American countries and "transition economies". Discussion on pensions is also a key theme in Europe and the United States. At the same time, the amount of resources intermediated by pension systems is substantial. In 2000, close to 30% of financial assets of the countries belonging to OECD were accumulated in pension funds.[1]

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Numerous countries have integrated financial supervision.[2] There are integrated regulators in Australia, Austria, Canada, Denmark, Estonia, Germany, Hungary, Iceland, Ireland, Japan, Latvia, the Maldives, Malta, Nicaragua, Norway, Singapore, South Korea, Sweden, the United Arab Emirates and the United Kingdom. Countries that are considering or are actively involved in switching to an integrated approach include Finland, the Netherlands, Switzerland and South Africa. Most of these integrated entities regulate banking, insurance and securities (Demaestri and Sourrouille, 2003). Some of them also regulate pension funds (*i.e.* Australia, Canada, Denmark, Iceland, Norway, the United Kingdom and Sweden).

The approach adopted here is conceptual and analytic. A methodology is proposed to analyze the advantages and disadvantages of integrating pension supervision,[3] paying attention to the specific nature of private pension systems in Latin American countries. This methodology involves the analysis of the relative efficacy and efficiency of integrated and specialized approaches with respect to the achievement of three objectives of financial regulation: i) consumer protection ii) systemic stability and iii) the efficiency of the financial system.[4]

Following this introduction, Section 2 looks at the literature to discern why financial intermediaries in general and pension funds in particular require regulation, focusing the discussion about the need to address market failures and to provide merit goods. Section 3 summarizes the discussion over the advantages of integrating supervision of different financial intermediaries in relation to banking, insurance and securities. Section 4 presents a methodology and uses it to analyze the advantages and disadvantages of integrated as opposed to specialized supervision of pension funds. Deepening the analysis on pension markets and specificities of financial intermediaries working in them, Section 5 examines the goals and instruments for regulating pension funds. A distinction is drawn between the “reactive” regulatory systems in operation in OECD countries that focus mainly on prudential regulation and problem solving, and the “proactive” systems common in Latin America and some East European countries which regulate along prudential lines, but are more intrusive with regard to the structure and performance of the industry. Section 6 extends the use of the methodology for analyzing the advantages and disadvantages of integrating pension fund supervision by considering the peculiarities of intermediaries in the pension market. The study ends with some concluding thoughts.

The regulation of financial intermediaries and pension funds

Without an analytical grasp of the logic and goals of regulation, any institutional structure may seem *ad hoc* and arbitrary. This section discusses the reasons that justify the regulation of financial intermediaries, the objectives, the risks involved and the generic forms that this takes, along with some specific aspects that relate to the regulation of pension funds.

Regulation of financial intermediaries

In the discussion about the regulation of financial intermediaries, key questions include whether financial markets are different from other markets, whether market failures are relatively pronounced, and whether there are forms of government intervention that improve the functioning of markets and impact positively on overall economic performance.

The main functions of financial markets are to transfer resources from those who save to those who borrow; to mobilize capital; to assist with the selection of investment projects; to oversee performance; to transfer, share and spread out risk; to register transactions; and to manage the means of payment. Financial markets not only deal with inter-temporal transactions but basically with risk and information.

In the view of some authors, financial products and contracts are different from other goods and services, particularly because consumers determine quality and place a value on a product within an environment of information asymmetries. Others, however, argue that financial products are not so different from other products, stressing that the principal protection for consumers against the risky behaviour of firms is similar to that of other industries: competition, reputation, dissemination of information and legal redress in case of damages.

Following Stiglitz (1994), seven failures or characteristics of financial markets can be identified that may justify government intervention in terms of welfare economics.

a) Monitoring by financial markets has some elements of a public good.

b) Externalities in the evaluation of projects.

c) Externalities associated with financial crises.

d) The possibility of market loss because of information problems.

e) The existence of imperfect competition arising because of the specialized information that each intermediary has on its client base.

f) The financial risk market being incomplete.

g) The financial education of retail consumers could be considered a merit good.

Looking at each in more detail:

a) Economic performance depends on the efficiency with which capital is allocated. Financial markets take part in monitoring the activities of those responsible for the management of firms, and this contributes to the more efficient allocation of resources. Monitoring is a public good. For instance, if a lender does something that reduces the chances of a default on the part of a debtor, this benefits all lenders, and vice-versa. As with any public good, there is sub-optimal production on the part of the market. Improved supervision by the relevant authority is likely to be beneficial where the financial system does not adequately oversee financial intermediaries.

b) Being able to see that another lender is willing to allocate funds in similar projects is an information signal that underscores the potential for investment. It has an externality for the next investor. Some externalities spread out from one market to another; for instance, problems in credit markets can affect stock markets and vice-versa.

c) The bankruptcy of a financial intermediary can have wider effects. Its essential asset is its information capital, which is not readily transferable; such information can be dissipated. To offset this failing, the government may be able to supply insurance protection. However, this can alter people's conduct by reducing the incentive for the ensured to proceed with due caution (moral hazard).

d) Effective transaction costs in small financial markets (securities) or new ones (pensions) can be so high that they limit transactions or result in the loss of such markets. The market cannot make the dissemination of information or its production at low cost mandatory. Private markets cannot manage the social risks associated with macroeconomic disturbances. While it is possible to distribute risk within generations, only government intervention can distribute transfers between generations. Financial transactions also imply incomplete contracts whose value is determined largely by the behaviour of the provider after the point of purchase. All this can lead to opportunistic behaviour.

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Regulation and effective collective monitoring can reduce transaction costs and raise welfare.

e) Each intermediary has specialized information on its client base. At the extreme, each can monopolize a specific market. Consumers can delegate the task of monitoring to a regulatory agency. There are good reasons based on efficiency grounds to delegate monitoring and supervision to a regulatory agency. There are potential economies of scale to be achieved through authorization, supervision and collective monitoring of intermediaries. An additional role for regulation is to establish minimum standards and therefore to encourage poor quality intermediaries to leave the market. Regulation can provide a guarantee that market participants will observe certain minimum standards (Llewelyn, 1999).

f) Many risks remain uninsured, resulting in incomplete financial risk markets.

g) The financial education of retail consumers of financial services can be considered a merit good. Information asymmetries can be more harmful for the party that is least informed. In that regard, there are a number of reasons why it is rational for consumers to demand regulations: i) lower transaction costs where a regulator is used to collect and disseminate information, ii) provision of a reasonable degree of safety in financial transactions, iii) past experience of bad behaviour by financial firms, iv) high net-worth exposure because of the financial transaction, v) timely prevention of problems is cheaper than dealing with them subsequently through a new contract, and vi) they can take advantage of economies of scale in monitoring.

Regulation can be of good or bad quality. If it is good quality, the costs of its implementation and the degree of distortion it introduces will be less than the damage caused by imperfections or failures in the system. In this respect, what matters is how institutions and markets operate in practice. Similarly, regulatory design should not lose sight of the structure of incentives facing firms; market discipline must be made to work. Regulation has the potential to improve the functioning of markets with failures, but this depends on the quality of the regulation[5].

Objectives, risks and generic forms of financial regulation

Following Demaestri and Guerrero (2003), the correction of financial market failures is connected with achieving three essential objectives of financial regulation:

a) Protection for consumers of financial services

b) Systemic stability

c) Efficiency of the financial system.

The first objective refers to the combination of information asymmetries and long-term and often sporadic decisions by not very sophisticated consumers. Intermediaries can affect the wealth of their customers since firms can go bankrupt or can operate imprudently, negligently, incompetently or fraudulently.

The goal of systemic stability is important because financial systems are unstable. They are subject to runs, bouts of panic, manias and bubbles. The instability of financial systems translates to the wider economy and financial crises have a high cost.

The efficiency of the financial system impacts on the real economy through investment evaluations, risk management, and the provision of a payments system. If the sector works efficiently, it is to be expected that there will be better investment decisions, improved risk management and more effective mechanisms for payments. In Latin America, promoting the efficiency of the system has to do with the elimination of distortions, problems of scale and the inefficient use of financial intermediaries for purposes of redistribution. If the costs are excessive, a net burden is placed on the real economy which regulation can help alleviate.

Regulation may prevent three types of risks (Srinivas, Whitehouse and Yermo, 2000): agency risk; systemic risk; and investment risk.

Agency risk relates to incompetence, negligence or fraud, problems that may arise in any relationship that involves delegation (in this case, from consumers to intermediaries).

Systemic risk is especially evident in banking, where a crisis can lead to contagion and possible disruption of the payments system. Although safety nets can help reduce systemic risk, they also create potential for moral hazard among consumers and financial firms. Securities firms, pension funds and insurance companies generally keep liquid assets, and the adjustment of positions is less complicated than for bank assets. Banks fund themselves short-term, whilst other financial institutions have long-term liabilities. As the assets of most non-bank financial institutions consist principally of publicly quoted securities, their market value and disposal value differ little. In banking, it is much more

difficult to value assets, whilst the value of liabilities is exogenously determined (a deposit has a face value that has to be respected).

Investment risk refers to the probability of capital loss. It has a component that can be reduced through diversification, taking advantage of the fact that there are assets whose risk is negatively correlated with others. However, there is also a risk component that cannot be reduced by diversification: macroeconomic risk.

These risks can be dealt with through two generic types of regulation:

- Prudential (solvency, safety and soundness of financial institutions).
- Conduct of business (how firms conduct business with their customers).

Prudential regulation is required because of the imperfect information available to the consumer, problems of agency inherent to the nature of financial institutions, and because the behaviour of a financial firm after consumers have dealt with it could affect the value of the contract signed. The incompetence, negligence or dishonesty of an intermediary may reduce the value of contracts to the detriment of the consumer. There are arguments that justify prudential regulation of financial firms when the institution has a fiduciary role, when consumers are not in a position to judge the safety and solvency of institutions, when the post-contractual behaviour of an institution affects the value of contracts, and when the cost of risk-taking by a financial firm can be transferred to others.

Regulation of conduct of business focuses on obligatory reporting requirements, the encouragement of honesty and integrity on the part of firms and their employees, the degree of competence expected, fair business practice, and the ways in which products are sold.

General issues on pension fund regulation[6]

Private pension funds are a way of organizing the pension system, which in turn forms part of the social security system. Social security involves those actions that society undertakes to confront problems of need caused by the biological diminution of human capital as a consequence of old age, invalidity, death and the survival of dependents, accidents at work, sickness and unemployment. The pension system covers those 'claims' related to old age, invalidity and the survival of dependents. There are four characteristics of a pension system in so far as it is adopted as a mandatory solution to such

problems, thus replacing the more traditional system of voluntary arrangements (family support, charity, and voluntary savings). It is considered a merit good. In modern societies, resort to the family or charity is considered inappropriate or insufficient, and the argument is made that voluntary savings would not be sufficient to substitute for a general and compulsory scheme. Pensions-related savings may also constitute an important part of personal assets.

The mandatory nature tends to avoid the risk of 'adverse selection'[7] that occurs in a free access market with participants with different event risks. This risk would raise the cost of insurance because it would tend to make the system bear the worst risks.

- A mandatory system reduces moral hazard, by which individual pension savings would diminish if people think that the state will subsidize them in the future.
- Individual behaviour (short-sightedness, incapacity to perceive personal risk or lack of information) can involve making pension savings mandatory.

Taxonomy of financial services

Why should pension funds be considered alongside other financial intermediaries? Table IV.1 presents a taxonomy of different financial intermediaries, identifying the sort of business that each conducts, the specific type of contracts involved, the terms over which assets are realized and liabilities called in, and the types of risk involved.

Notwithstanding the specificities of the business, contracts, terms and risks involved, financial services — pension funds included — have some similar characteristics: i) they have similar associated risks, although their degree depends on the sort of intermediation undertaken, ii) they have similar overall objectives although these differ in specifics, and iii) they are affected by similar sorts of market failure.

Table IV.1. Taxonomy of Financial Services

Intermediary	Main business	Contracts	Maturity	Risk involved
Banking	Loans and investments from deposits.	Fiduciary. Heterogeneous assets.	Long-term assets. Short-term liabilities.	Credit, term and market risks. Important systemic risk.
Insurance	Management of investment portfolios. Liabilities determined actuarially.	Fiduciary Protection with premiums.	Short-term assets. Long-term liabilities.	Protection through the pooling of risk. Possibility of catastrophic risks.
Securities	Capture of investment funds (primary market). Risk management (secondary market).	Fiduciary, through commissions (brokers). On their own account, through spreads (dealers).	Short and long-term.	Underwriting or best effort (primary market). Trading (secondary market). Medium systemic risk.
Pensions	Management of investment portfolios.[1]	Fiduciary through commissions.[2]	Short-term assets. Long-term liabilities.	Agency risk. Significant market risk.[3] Medium systemic risk.

1. This contemplates two extreme varieties and combinations between them: *a)* obligations that are actuarially defined (under defined benefits); *b)* obligations that result from the manager's best efforts (under defined contributions).
2. The fact that pensions are a merit good has led to differentiated tax treatments and the promotion of mandatory participation.
3. This risk can only be distributed between generations.

Source: Authors' own elaboration.

Integrated or specialized supervision?

The main factors (evaluated in Demaestri and Guerrero, 2003) that have driven integrated financial supervision in various countries are:

- financial innovation (new products and greater complexity);
- the rise of financial conglomerates;[8]
- the quest for regulatory coherence;

- gray areas in the attributions and powers of specialized regulators; and
- growing globalization in the provision of financial services.

In this section, the arguments are examined with reference to specialized versus integrated regulation, and, thereafter, there is a brief examination of the international experience of regulatory integration.

Advantages and disadvantages of integrated and specialized regulation[9]

Although the need for coordination between regulators is clear, some institutional frameworks restrict information flows between them. At the very least, the institutional system should encourage regulators to share information and promote coordinated actions between the different agencies involved. At one extreme, there could be a single combined regulator, although integration may not be justified in all cases. It is important to recognize the differences between intermediaries, the nature of their business, the type of contracts they produce, the maturity of their debts, and the sorts of risk involved.

Demaestri and Guerrero (2003) suggest a methodology and analyze the advantages and disadvantages of both approaches, linking these to the core objectives of financial regulation as well as the situation of countries in Latin America. Table IV.2 summarizes the expected strengths and weaknesses of an integrated approach.[10]

Having identified the factors that drive integration, the similarities and differences that persist among intermediaries and the pros and cons of integration, the main arguments in favour of integrating regulation in Latin America can be summarized as follows:

a. economies of scale and scope;

b. prevalence of financial conglomerates and the lack of clearly defined boundaries between products;

c. competitive neutrality;

d. transparency and accountability; and

e. the coherence of the regulatory framework.

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Table IV.2. Pros and cons of integrated supervision

Pros (of integration)	Cons (arguments for specialization)
1) Financial products are increasingly difficult to distinguish. Specialized regulation can deal in a heterogeneous way with similar products, duplicating regulation and causing loopholes in consumer protection.	1) Intermediaries differ in terms of their business, activities, and risks.
2) Filling loopholes, correcting inconsistencies and eliminating overlapping regulation. It avoids regulatory arbitrage and use being made of 'gray areas'.	2) It may result in excessive risk taking among the public if the spectrum of risk between one sort of intermediary and another disappears.
3) Segmented regulation can result in closed clusters where information is not shared (Bureaucratic Leviathans).	3) To avoid the 'Christmas tree effect', (the number of heterogeneous and secondary objectives to be fulfilled by a regulatory agency).[1]
4) With segmented regulation, each regulator can monopolize certain activities. From the point of view of regulatory capture, it is no worse to have a unified regulator who concentrates regulatory activity.	4) To avoid the Leviathan (danger that a mega-regulator turns into an omnipotent bureaucracy).
	5) Reduce the chances of regulatory capture. To capture a number of regulators may be more difficult (and expensive) than to capture just one, if there is competition between them.
	6) Possible political economy reasons.

1. In Latin America, it is common for financial regulators to be involved in many heterogeneous activities with regard to financial regulation. Therefore, the objective of consumer protection may be ignored.

Source: Own elaboration on the basis of Demaestri and Guerrero (2003).

a) Economies of scale

There are economies of scope in regulation if the joint costs of regulating two or more financial activities simultaneously are less than the sum of the costs of regulating each financial activity separately. There are economies of scale if, for a single financial activity the average cost of regulation and supervision falls as the volume of that activity increases. Integration helps both types of economies to be achieved. For instance, a sole agency can be more efficient in eliminating overlaps in requests for and the processing of information. Integration also encourages the development of a single system of supervision based on risk. Regulatory resources can be directed towards those business areas that involve higher risks to the goals of financial regulation.

The costs subject to savings that arise from regulation can be classified thus: (i) Institutional cost (the costs of running regulatory agencies); (ii)

Compliance costs (the costs imposed on firms through regulation); (iii) Structural costs (such as excess burdens, stifling of innovation).

The savings on institutional costs can be achieved by i) establishing a limited and clearly defined set of objectives; ii) budgeting the consolidated supervisory activities at an amount that is lower in real terms than the total of the costs of differentiated activities in previous years; iii) developing joint administrative, information and technology and other support functions; iv) recruiting and retaining qualified personnel; v) using specific know-how in special areas; and vi) achieving efficiencies in the deployment of staff with expert intellectual capital.

Compliance costs can be reduced by means of i) introducing a single system for dealing with information requests for regulated firms; ii) having a single database for the registration, authorization and operation of firms; iii) establishing a consolidated set of rules; iv) introducing a centralized system for managing complaints and claims, and v) creating a single system for compensation.

Structural costs are those arising from the design of each specific intervention. Minimizing them contributes to the quality of regulation.

b) The importance of financial conglomerates and the blurred boundaries between products

The growth in financial conglomerates requires that that the risk of the group be assessed on a consolidated basis and that its supervision is comprehensive. Supervision on an individual basis of the different institutions that make up a group is ineffectual. A centralized regulator is in a better position to achieve the aims of consumer protection and systemic stability.

c) Competitive neutrality

Specialized regulation means that firms with the most diverse range of products will have a more onerous supervisory burden. There are also more incentives for regulatory arbitrage.

d) Transparency and accountability

Unification provides an opportunity to strengthen control mechanisms in the legal and regulatory framework. A single system for dealing with complaints can be introduced, as can mechanisms for improving powers of investigation and discipline. Internal procedures can be established to ensure that enforcement is

seen to be fair, including a separation of functions between the staff who investigate a case and those who make decisions related to enforcement actions.

e) Coherence in the regulatory framework

A single regulator with clear and consistent objectives facilitates coherent supervision that focuses on the relevant risks. Coherence also helps in the adoption and adapting of internationally accepted standards and codes of practice.

International experience in integrated regulation[11]

This conceptual analysis is borne out in practice. In the ten countries with integrated supervision studied in Demaestri and Sourrouille (2003) — Australia, Canada, South Korea, Denmark, Iceland, Japan, Norway, the United Kingdom, Singapore and Sweden —all regulate banking and insurance. Except Australia and Canada, they also regulate securities. In Australia, Canada, Denmark, Iceland, Norway, the United Kingdom and Sweden, a variety of pension funds are also regulated.

Responsibilities involved, albeit to varying degrees, are prudential policy and regulation, market performance, information dissemination, and payments systems. The United Kingdom, Sweden and Iceland cover the majority of these functions. Among the regulatory objectives are the building of confidence, the setting of standards for sound practice, the introduction of timely correctives, and the promotion of competition, equity and honesty.

The powers that regulators have at their disposal include the licensing of financial entities, the establishment of norms and standards, the preparation and enactment of regulations, the removal of directors, the removal of auditors, the withdrawal of licenses, the suspension of operations, the imposition of penalties, and the transfer of engagements. The unified regulator in the United Kingdom encompasses all these regulatory powers, whilst the rest of the agencies studied have at least some of them.

Most agencies cover their costs from contributions from the industry they regulate and have the right to set their own budgets, although some require government approval. This enhances their degree of autonomy from government upon which they depend functionally in many instances. The agencies mostly report to an executive board, although in some cases directly to government. In all cases where there is an executive board, this is appointed by government.

There is no standard structure. Supervisory agencies may organize themselves so that their structure corresponds to an 'institutional' model of integration in which they maintain divisions that relate to different types of institutions. On the other hand, they can adopt a 'functional' organization whereby regulation is geared principally to correct specific market failures. The first of these is easier to implement, but tends to preserve the identities of their predecessors. Because of their importance, the following three issues require special attention.

a) Conglomerates

In most countries, conglomerates are limited exclusively to carrying out financial activities. In all the cases studied, capital adequacy requirements are set as well as limits to the excessive exposure to risk by the group as a whole. The integrated agencies in Australia, Canada and the United Kingdom have special divisions to supervise conglomerates, whilst elsewhere institutional units do so.

b) Risk evaluation

The objective of determining risk for banking and insurance is something that is common to most countries. Analysis for determining risk includes credit risk, market risk and operational risk. The aim of the agencies is to have a system that is applicable to all institutions.

c) Crisis management

All the supervisory agencies that were subject to analysis are able to intervene to resolve a crisis in an institution within their purview. In most of the countries looked at, the central bank or finance ministry also takes part in crisis management, in particular where systemic risk is present.

Analysis of the advantages and disadvantages of consolidating pensions under an integrated regulator

This section presents and applies the methodology proposed in Demaestri and Guerrero (2003) so as to evaluate whether it would be appropriate to integrate pensions under a unified financial regulator.

The overall goals of regulation have been identified as consumer protection, systemic stability and promoting the efficiency of the financial system. Achievement of these goals is facilitated and strengthened by certain regulatory practices that can be considered sound in both contexts (integrated or

specialized regulation) or that are particularly associated with the integration approach. The best practices that are applicable in both contexts include:

- With respect to the three goals: i) introduction of a group of limited and well-defined obligatory objectives, including the three core ones discussed here; and ii) depoliticization, financial autonomy, and the achievement of high technical capacity. The work of supervision is eminently technical and it is necessary to build up high-quality human capital and to provide it with training and continuity. Those in charge should have legitimacy (for example by means of legislative scrutiny of appointments and overlapping periods for political renewal) and a reasonable amount of autonomy (both political and financial). Political autonomy should bring stability, whilst giving the legislature the power to remove officials in instances of corruption through procedures that are simple, transparent and pre-determined. It should also involve rules and procedures to undertake investigations and disciplinary actions, maintaining the separation of these two functions.
- With respect to consumer protection, i) the legislation should specify that the regulator has a mandate to educate the public with regard to the risks and benefits of different types of financial contract, and ii) the operational procedures for regulation and the method for dealing with complaints and claims should be published.

In turn, the integration of supervision is associated with the following sound practices:

- With respect to systemic stability: i) employ a mechanism for information dissemination that involves the central bank, so as to reduce the costs of separating out banking supervision from the monetary authority; and ii) devise systems for particularly rapid dissemination in times of crisis.
- With respect to the goal of the efficiency of the system: i) budgeting of the savings arising from the fusion of regulatory roles; and ii) setting as an objective a single risk-based system of supervision in which regulatory resources go to those areas where risk is highest.

Overall objectives of financial regulation

The goal of consumer protection is always relevant, both because of the meritorious nature of some financial contracts and the externalities derived from financial intermediation for the economy as a whole. It is especially relevant when the savings being administered are of a compulsory nature (as in the case

of pensions), are of long-term maturity (as in the case of pensions and life insurance), or where the participants are small-scale consumers of financial services. Owing to the small scale of the latter, they are less likely to acquire the information and specific knowledge required or their participation may only be sporadic, which also is a disincentive to systematically acquiring the necessary information. The mandatory nature of participating in pension schemes is designed to avoid adverse selection, (participation in insurance for old age only of "bad risks"). Here there is a trade-off in which moral hazard is present. When participation is compulsory and there are few alternatives that involve any real choice, consumers of financial services may have little incentive to understand what they are doing and therefore levels of caution may be undermined. In such specific cases monitoring has a social value.

The goal of systemic stability has specific applicability in certain sectors and regions. It is to be expected that it is more important in banking and securities, where the chances of systemic crisis is greater and where the potential for negative externalities on other intermediaries and the rest of the economy is also likely to be significant. It is also more important as a goal in countries like those of Latin America, where macroeconomic instability is a more distinctive feature than in more developed economies. In the case of pensions, a systemic crisis may affect those with savings, but more directly those cohorts caught up in the period of the crisis. The longer the terms, the easier it is to isolate the risk from those cohorts that are furthest away in terms of time from accessing the benefits.[12]

The goal of efficiency is particularly relevant for emerging economies like those of Latin America. Both the quality of intermediation and the economic and institutional context is better in developed countries. This is also the case of the level of competition in the financial industry, and there is a presumption (usually borne out by empirical evidence) that financial markets work more efficiently. In developing countries it is expected that the degree of efficiency will be less and that the objective of improving the efficiency of the system has greater importance. This is because more efficient financial intermediaries and markets allocate capital better, evaluate projects in a more efficacious manner, and therefore contribute more towards raising overall productivity in the economy. Additionally, there is a question of scale. In emerging countries, intermediaries work with lower transaction levels, which implies higher costs than, would be the case in developed countries. Efficient financial intermediaries nurture good practice and improve the workings of economic institutions. The example of pensions in Chile is well known. Initially, when accumulated capital was scarce, most funds were invested in government bonds. As the accumulated funds continued to expand, a better functioning capital market came into being with a greater diversity of vehicles for savings.

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Table IV.3. Efficiency and efficacy of the integrated and specialized approaches to supervision in meeting the core goals of financial regulation in Latin America

Issues	Goals	Integrated vs. Specialized Approaches			
		Efficacy		Efficiency	
		Banking, Insurance and Securities	Banking, Insurance, Securities and Pension Funds	Banking, Insurance and Securities	Banking, Insurance, Securities and Pension Funds
1. Less risk of moral hazard	Consumer protection	+/-	+/-		
	Systemic stability	+	+		
	Efficiency of the system				
2. Less chance of regulatory capture	Consumer protection	+	+	+	+
	Systemic stability				
	Efficiency of the system				
3. Absence of 'Christmas Tree Effect'	Consumer protection	+	+		
	Systemic stability				
	Efficiency of the system				
4. Less chance of bureaucratic Leviathan	Consumer protection				
	Systemic stability				
	Efficiency of the system	+/-	-	+/-	-
5. Achieving economies of scale and scope	Consumer protection				
	Systemic stability				
	Efficiency of the system	+	+	+	+
6. Treatment of financial conglomer-ates	Consumer protection	+	+	+	+
	Systemic stability	+	+	+/-	+/-
	Efficiency of the system	+	+	+	+

Issues	Goals	Integrated vs. Specialized Approaches			
		Efficacy		Efficiency	
		Banking, Insurance and Securities	Banking, Insurance, Securities and Pension Funds	Banking, Insurance and Securities	Banking, Insurance, Securities and Pension Funds
7. Greater competitive neutrality	Consumer protection	+	+	+	+
	Systemic stability	+/-	+/-	+	+
	Efficiency of the system	+	+		
8. Greater transparency and accountability	Consumer protection	+		+	
	Systemic stability	+		+	
	Efficiency of the system	+		+	

Source: Columns 'Banking, Insurance and Securities' from Demaestri and Guerrero (2003). The column "Banking, Insurance, Securities and Pension Funds" elaborated by the authors.

Analysis of the advantages and disadvantages of integrating pension supervision

At this point we turn to presenting the main results from the analysis of integrating pension supervision into the framework of joint supervision of banking, insurance and securities. Using the methodology proposed and applied by Demaestri and Guerrero (2003), we start from the results identified by these authors (in relation to the relative efficacy and efficiency of reaching the main goals of financial regulation under an integrated system of supervision and a specialized one) and extend the analysis to considering the impact of adding pension supervision. Table 4 summarizes the main conclusions reached. In each case, the results are grouped in columns, following the criteria set down by Demaestri and Guerrero (2003) (for banking, insurance and securities) adding a new column that includes pension funds.

A plus sign (+) indicates advantages of this approach in achieving a set objective, whilst a minus sign (-) indicates that the opposite approach would be better. A (+/-) sign indicates ambiguity where neither approach seems better. It is worthwhile making clear that these results are strictly qualitative in character and may not be free from a degree of subjectivity. Also, the Table IV.3 does not give a weighting as to the relative importance of each question or goal. This will depend on the institutional context and other features of the country under

analysis. Nor does it bring together empirical evidence as to the relative weight that each one of these and the results presented may have in specific situations.

1) Less risk of moral hazard. Discussion on this refers to the goals of consumer protection and systemic stability. In the case of the former, there is ambiguity in terms of efficacy when pensions are excluded. There do not appear to be conclusive arguments that change this finding when pensions are included. For this reason, the ambiguity remains. With regard to systemic stability, it is clear that the integrated approach is better when pensions are excluded. This result is strengthened when pensions are added. This is because the overall contribution of the pension system depends on the stability of that system, as well as the stability of banking and securities markets. In the case of banking, this is the payments system and a safe monetary refuge in times of crisis. In the case of securities it is because investment portfolios are based on publicly quoted instruments. On the other hand, the smooth working of the pension system reduces the chances of parafiscal rescue operations.

2) Less likelihood of regulatory capture. This affects both the efficacy and efficiency with respect to consumer protection. An integrated approach (without considering pensions) gives better results in reducing the chances of regulatory capture, both with respect to efficacy and efficiency. If pensions are included in the analysis, the result does not change. A bigger and more powerful regulator is more difficult (expensive) to capture (corrupt) than various smaller ones (even though once captured and corrupted the danger could be greater)[13]. Similarly, it could be more efficient (cheaper) to try to control against eventual capture in the case of a unified regulator than would be the case of various specialized supervisory agencies.

3) Absence of the "Christmas Tree Effect". The superiority of integration remains with regard to efficacy in the case of consumer protection when pension funds are included. For this, it is of key importance that the goals and activities of the regulator are properly attuned to these intermediaries. The consolidation of supervision provides the possibility of refining goals, avoiding secondary objectives and maintaining the focus on the core ones.

4) Less chance of building a bureaucratic Leviathan. This has to do with the efficiency of the system. The relative advantages of both systems are ambiguous, both with regard to efficacy and efficiency when pensions are excluded. The inclusion of pensions increases the doubts about integration. The risk of creating a bureaucratic Leviathan increases when the supervision of pension funds is included.

5) Achievement of economies of scale and scope. When pensions are not included, there was a definite benefit in terms of efficacy and efficiency. Savings on resources increase, as do the chances of reducing the regulatory burden on the private sector. The superiority of integration is maintained or further enhanced by the incorporation of pensions.

6) Treatment of financial conglomerates. In this and the following two items all three goals of financial regulation are affected. Before including pensions, the integrated approach was more efficacious. In relation to efficiency, there were also advantages, although the result was ambiguous for systemic stability. When pensions are included, the results were the same.

7) Greater competitive neutrality. The results were similar to the preceding item since the problems are closely connected. The result was ambiguous for efficacy without pensions, but not for efficiency when systemic stability was considered. Adding pensions made no difference to the results.

8) Greater transparency and accountability. The advantages of the integrated approach were clear before pensions were added, as well as afterwards.

In sum, the most conclusive results for the integrated approach are to be found with 5) achievement of economies of scale and scope; 6) treatment of financial conglomerates; 7) greater competitive neutrality; and 8) greater transparency and accountability. The only comparative advantage of the specialized approach refers to 4) the bureaucratic Leviathan.

Ambiguous results remain on some points that were present before pensions were included in the analysis: 1) Less risk of moral hazard (consumer protection); 6) treatment of financial conglomerates (systemic stability); and 7) greater competitive neutrality (systemic stability). One way of evaluating the relative importance of these ambiguities about the integration of specific regulators is to assess the importance of each goal with respect to the activities that each of the intermediaries under its supervision carry out. A preliminary analysis suggests that consumer protection is particularly relevant for pensions, but is relatively less important for banks and insurance, and even less so for securities. Systemic stability is especially important in banking as well as in securities, and somewhat less so for insurance and pensions. The goal of the efficiency of the system is relevant in insurance and pensions, more relevant in banking, and less so in the case of securities. (Table IV.4).

Table IV.4. Primacy of Core Goals in the Regulation of Different Intermediaries

Core goals	Banking	Securities	Insurance	Pensions
Consumer protection (important in both developed and emerging economies).	Medium importance	Relatively low importance	Medium importance	Relatively high importance
Systemic stability (important in both developed and emerging economies).	Relatively high importance	Medium importance	Relatively low importance	Relatively low importance
Efficiency of the system (important in emerging economies).	Relatively high importance	Relatively low importance	Medium importance	Medium importance

Source: Authors' own elaboration.

Consideration of the relative importance of each goal to each intermediary allows us to re-examine the ambiguities identified above. For instance, if we take into account the ambiguities found with respect to less incentive for moral hazard, the discussion should highlight consumer protection. From Table IV.4 we can see that this is something that is especially important for pensions, and of somewhat less importance for banking and insurance. With regard to the treatment of financial conglomerates and to competitive neutrality, ambiguities were to be found in systemic stability, a goal that has particular importance in banking.

Specific aspects of pension regulation

In the previous section, the integration of pension fund regulation was analyzed in the context of the discussion over regulatory integration of other financial services (banking, securities and insurance). So as to continue the study of this issue, taking into account explicitly the supervision of pension funds, this section now aims to analyze pension fund regulation. First, it explores the existing arrangements with respect to private pensions. Then it examines the objectives and instruments of pension regulation (owing to its importance a sub-section is dedicated to investment regulation). Finally, it considers the approaches followed for pension regulation.

The private pension fund industry

An explicit purpose of reforms to the state pay-as-you-go systems and the establishment of private pension funds have been to build financial security for

those who have retired. This has involved making use of professional intermediaries to achieve higher rates of return consistent with prudent levels of risk. Supervision of pension funds involves multifaceted connections between the social security system and financial markets, especially that of insurance.[14] This is because pensions are long-term contracts frequently based on tax incentives and subject to eligibility criteria set down in social security legislation.

In accordance with the taxonomy of the OECD, pension funds can be public or private, mandatory or voluntary, with defined contributions or defined benefits, and occupational or personal. It is helpful to classify pension funds by their governance structure into four types, as does Rocha *et al*. (1999):

- Accounts in banks or insurance companies.
- Participation in insurance company funds.
- Accounts with pension fund administrators.
- Foundations, trust*s* and mutual arrangements.

Most of the pension schemes that exist in Latin America come under one of these headings, particularly the last two. Accounts in banks and insurance companies are common in developed countries. A fund member has an insurance contract to provide for his pension. These funds have defined benefits and are treated more or less as a deposit, although many carry additional restrictions and performance conditions. In some cases, the only distinction between pension accounts and other types of deposit is the tax status of the account (income tax exemption up until the pension funds are withdrawn). The quality of corporate governance and administration depend basically on the quality of the institution and the regulatory framework in force for banks and insurance companies. There is no clear segregation of assets with respect to other products on offer.

Participations in insurance company funds are allowed in some OECD countries. This type of fund is set up with a separate profit-making firm with shareholders and plan participants. There is a board of directors, but those buying into the fund are not represented on it unless they are also shareholders. The fund is constituted separately from other accounts. However, this type of fund also has the problem of the lack of any segregation of assets (between participants and shareholders).

Pension fund administrators are the only form of pension provision allowed in the majority of Latin American countries that have private pension systems. Brazil is the most notable exception here. They operate basically as

mutual funds without the right to vote. They have defined contributions, although the regulatory framework frequently imposes some performance conditions on the asset administrator. The quality of the governance and intermediaries depends basically on the legal and regulatory framework incumbent on the administrators. Transfers between funds are usually allowed, although restrictions and penalties may apply. In relation to the two previous categories, they tend to be more transparent and there is a clear segregation of assets since the assets of the funds have to be maintained separately from those of the administrator. A major problem that has arisen in most countries has been the high cost of administration, in part owing to the marketing techniques used, illegal sales practices and excessive transfers of those affiliated from one administrator to another. Regulation and supervision have tried to tackle these problems, but only to a limited degree of success.

Foundations, trusts and mutual arrangements are very common in OECD countries. Normally they are occupational, but may also be open. They can be both with defined benefits and defined contributions. The problem of agency is normally mitigated by three factors. First, employer management is usually a member of the plan and has an interest in how it is managed because it includes its own retirement pensions. Secondly, employers habitually compete in the labour market offering a package of benefits and lose competitiveness if the value of the benefits on offer fall owing to poor fund administration. Third, the boards of directors of many occupational funds with defined contributions represent both employers and employees, encouraging the alignment of investment policies with the interests of the members of the plan. In the case of plans with defined benefits, the employer normally guarantees the defining of the benefit and also makes contributions into a guarantee fund. This provides an incentive for the employer to interest himself in the performance of the fund, since poor performance will increase his costs.

Goals and features of pension regulation (what to regulate?)

In general terms, the regulation of the pension industry is guided by the same regulatory objectives of other financial segments. However, the regulatory framework for pension funds involves consideration of their special features in covering social objectives, namely the provision of retirement income. They are considered as a merit good, and for this reason attract tax advantages. Participation tends to be mandatory so as to avoid moral hazard.[15] Finally, pension schemes have a degree of regulation that, depending on the circumstances, is either more reactive or proactive.

Insurance and pensions to some extent have a shared logic with respect to liabilities and coverage. In life insurance companies, the portfolio is made up of

assets to cover obligations to policyholders plus the capital of the company. Debts depend basically on actuarial calculations based on mortality tables and assumptions about the return on assets. Errors in such assumptions and calculations are sources of risk. Sometimes, life insurance companies have faculties to issue their own debt in order to fund themselves. The risks they run concern their projections of mortality, the discontinuation of policies, their liquidity and investment (Davis, 2001).

Pension funds with defined benefits are similar in their logic to insurance contracts. There exists a category of actuarial risk, even though if participation is mandatory there is no risk of the policy being discontinued. On top of the actuarial risks, there is the risk that increases in the real incomes of the participants may increase the replacement rate (income after retirement/income while in work) that is required. By contrast, funds with defined contributions have as an objective the maximization of returns subject to a given risk, reaching the highest possible replacement rate. Investment risks are present in both forms of pension fund, but only those with defined benefits can be transferred to the net worth of pension fund shareholders

In this way, the schemes with defined benefits have similarities to life insurance companies, and those with defined contributions to mutual funds. Other differences are that pension funds do not necessarily have a capital base like an insurer, for whom excess returns on portfolios turn into profits for life insurance companies (Davis, 2001).

Pension funds are subject to risks that are common to other financial intermediaries: investment risks, agency risks and systemic risks. The objectives of regulation have to do with how best to confront these risks.

Investment risks have elements capable of being diversified and market elements (macroeconomic) that cannot be diversified. An appropriate degree of diversification of a portfolio will tend to eliminate the risk that is diversifiable, whilst maintaining market risk. One of the key aims of regulation is to encourage the diversification of portfolios. Funds are almost exclusively occupied in strategies to optimize their portfolios, focusing on diversification, selection and exploitation of premiums, rather than seeking profit from the spreads between rates or the administration of exposure to liquidity. Regulators have to ensure that the potential for diversification in a portfolio is exploited to the full extent.

Non-diversifiable or market risk arises with pensions because the efficient allocation of risk between generations cannot take place (current generations cannot negotiate with those that have not yet been born). This can only be

reduced by dividing up the risk and to share in the returns to investors over the long term. One of the ways of diluting non-diversifiable risk in pensions is through a "multipillar" or "multitier" system. Other ways to deal with it are to introduce the definition of benefits, to offer guarantees with respect to yields or minimum benefits, and to introduce variable annuities or a sequence fixed annuities.

Agency risk appears when the interests of fund administrators and managers are not properly aligned with the interests of fund members. It may arise from incompetence, inefficiency, negligence or fraud. Agency risks appear because transactions take place between parties with different levels of information, leading to problems of moral hazard and adverse selection (*hidden actions and characteristics*). Interventions to limit agency risks take the form of prudential regulations and guarantees applied to financial markets and intermediaries. They include the following objectives:

- To avoid fraud arising from the manipulation of accountancy and auditing standards through the dissemination of information and rules against insider trading.
- To reduce over-exposure to specific risks by requiring minimum levels of diversification with regard both to the issuer and the instrument.
- To mitigate conflicts of interest by placing limits on self-investment.
- To limit market powers by restricting concentration in the ownership of shares.

Finally, systemic risks arise out of the nexus between the pension industry and the rest of the financial system (and the economy as a whole). While pension funds are not subject to systemic runs and consequent bankruptcies, they can still suffer the effects of a financial crisis through other channels. In particular, they can experience rapid falls in the nominal and real value of their portfolios. The calming effect of having holdings over long periods can generally be taken for granted, although it should be recognized that fluctuations in asset prices can lead to differences in average returns and renewal rates among cohorts with the same level of income. Evasion or avoidance (elusion) of contributions is also a possible consequence. They can fall victim to negative externalities from other areas of the financial system and economy. Investment in capital markets depends crucially on possibilities of safe exit from liquid monetary markets.

Following Demarco *et al.* (1998), the following are typical components of pension fund regulations:

a) Criteria for licensing and authorization.

b) Rules on governance.

c) Rules concerning the segregation of assets and independent custody.

d) External auditing and actuary.

e) Requirements regarding dissemination of information.

f) Regulations about investments.

g) Guarantees, minimum capital and reserves.

h) Regulations regarding costs and commissions.

a) Licenses: those systems that use the trust/foundations impose more lax rules and rarely require minimum levels of capital or reserves. They seek to minimize costs and barriers to entry so as to attract participants. In Latin American the requirements are higher and minimum capital is required. In the United States, no specific license is required for occupational pension funds. These are built on the basis of contracts between private parties and do not have to receive approval from state authorities. The only action that resembles a license is the request to the tax authorities for preferential tax treatment. Although this is normally conceded, it is discretional. Many other OECD countries fit into this category (Demarco *et al*., 1998).

b) Rules on governance: the same provisos apply as in point 1.

c) Segregation of assets: the degree of segregation differs according to the typology of pension funds. In Latin America, it tends to be at its highest.

d) External auditing: This is required in all countries, though its scope varies a great deal. Auditors should inform the regulators of problems that they find and are legally responsible if they fail to do so. External actuaries fulfil a similar role in schemes with defined benefits or defined contributions with guarantees.

e) Requirements on information dissemination. OECD countries, with the occupational and closed systems, tend to be comparatively less demanding than new mandatory systems.

f) Regulations about investments: there are two criteria: the 'rule of the prudent man' (OECD), versus 'quantitative and draconian' (Latin America). The first is minimally intrusive in the formation of a portfolio, whilst the second typically includes limits in the holdings of the issuer, types of instrument, risk,

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concentration of ownership and asset type. Owing to its importance, this point is dealt with below.

g) Guarantees, minimum capital and reserves. It does not make a lot of sense to refer to the concept of capital in relation to funds constituted as trusts, foundations or those with defined contributions. If a fund has an explicit obligation to produce minimum returns, then it becomes essential to impose capital requirements commensurable with the obligation. Some countries have introduced schemes with guarantees, but these imply that thought is given to viability, costs and incentives. Relative guarantees are usually far from ambitious and do not appear to create financial problems of moral hazard. However, they are blamed for herding behaviour in those countries where they are adopted. Absolute guarantees raise more substantial problems about sustainability and incentives.

h) Regulations regarding costs and commissions: these are a common feature in Latin America and the countries of Eastern Europe. Systems based on trusts generally do not explicitly regulate charges. The systems that typify the OECD have lesser marketing costs. In the new schemes in Latin America and Eastern Europe, competition for participants is left to a group of providers with incentives to win over participants from other operators. As investment regulation (as we shall see) leaves little scope for the differentiation of portfolios, the need of administrators to differentiate their products generates substantial costs in marketing, advertising, direct sales and commercial networking (Ferro, 2003).

Investment regulations

In the OECD countries, the criteria adopted for regulating investments are more lax than in the new private pension systems of Latin America. Although there are important variations between them, the OECD countries (of which the purest examples are the United States and United Kingdom) tend to rely on a form of asset regulation that has an important self-regulatory component (the rule of the prudent man). Portfolios are not subject to limitations; rather there is a general obligation for those administering investment portfolios to work with prudence, aptitude, probity and responsibility. Fund managers are expected to use fund resources with the same diligence that they would use their own money (the incentive so to do increases when fund managers, as employees, contribute to the same fund). There are those who operate their own portfolio selection, and those that subcontract to mutual funds. The 'rule of the prudent man' is more common among pension funds than life insurance companies. Only the United States, United Kingdom and Holland use 'the rule of the prudent man' for both institutions. Canada, Finland, Italy and Japan use it only

for pension funds. In Germany and Switzerland neither follow the “prudent man”. (Davis, 2001).

The other way of regulating assets involves quantitative controls, with ceilings for different types of asset and their distribution across a portfolio, floors for risk qualification, etc. It is common to employ differential treatments. These tend to be favourable in the case of public sector bonds, but less so in the case of foreign assets.

Almost all the regulatory systems in Latin America include five types of limits on assets:

- Ceiling on asset types.
- Ceiling on ownership concentration.
- Ceiling by issuer.
- Ceiling on the proportion of certain instruments within a portfolio.
- Floor for risk qualification.

The limits on investments are established because of the existence of possible conflicts of interest. These limits are fixed by type of asset, by issuer, and by category of risk (established by the regulatory agency or private risk assessment agencies). With regard to asset type, some OECD countries (Australia, Belgium, France, Germany, Italy, Japan, Sweden and Switzerland) set portfolio limits of one sort or another. In others (Canada, Denmark, the United States, Ireland, Holland and the United Kingdom) there are no quantitative restrictions. However, funds are obliged to invest on the basis of prudence. The limits by issuer are designed to avoid investment concentration and the risk associated with it. Limits on risk are designed to avoid assets of poor credit quality. Finally, the fourth limitation prohibits investment in assets in companies with close ties to the administrator (Shah, 1997).

With quantitative regulations, attention is focused on the investment itself. This is related to the continental legal tradition. The 'rule of the prudent man' focuses on the process by which an investment is made. The proof (of good performance) is the behaviour of the asset manager, the institutional investor and the process of decision-making. The rules governing decision-making tend to be accompanied by the presumption (explicit or implicit) that the diversification of investments is a key indicator of prudence (Davis, 2001).

In regulatory contexts of 'the prudent man', it tends to be the case that the distribution of shares within a portfolio is relatively important (and pension

funds hold a major proportion of total shares in the economy, a third in the case of the United Kingdom). Shares tend to have a higher return and more marked volatility than assets with a fixed yield. Consequently, these portfolios tend to perform better on average than those subject to quantitative regulations.

Quantitative regulations include limits on building up portfolios with assets considered illiquid (like real estate) or relatively volatile (like shares). At the same time, the bias towards public sector bonds is connected with the introduction of a capitalization system to replace or complement a pay-as-you-go system. This means that resources from the latter will be quickly capitalized whereas the obligations contracted by the pay-as-you-go system will be maintained possibly for a generation. This involves a fiscal gap and the idea is that this can be filled through public debt acquired by the new private administrators. In fact, the regulatory suasion exerted by regulators on pension administrators to invest in public debt has no additional justification at all.[16] With regard to foreign assets, the limits imposed on investing abroad provide domestic protection to those in need of funds by limiting the universe of options for local pension funds to domestic assets.

Advantages and disadvantages of the two schemes

The 'prudent man' approach implies greater institutional development, self-regulation, good practice, and the ability to settle disputes in the courts. It is superior in as much as the ultimate goal of a system of capitalization is the management of portfolios that generate savings for use in old age. A portfolio with a higher yield results in a higher pension.

Quantitative regulation in countries where capital markets, institutional practices and the court system are weaker imposes stricter controls, especially if the number of intermediaries involved is small. However, it has undesired effects since the optimization of risk/yield in portfolios will not square with what models for portfolio selection in the financial economy would recommend. Portfolios are chosen from a sub-optimal universe, with greater risk per unit of yield or lower yield per unit of risk. By eliminating or severely restricting certain asset classes from selection, it reduces the chances of finding assets with the opposite correlations that are needed to achieve adequate diversification[17].

At the same time, where there is quantitative asset regulation, the attempt to achieve greater uniformity while seeking greater regulatory control over the industry. In this sense, policy becomes "a contributor, an administrator, and a fund". This makes it harder to take advantage of differences in affiliates' preferences that could otherwise have been the case if every administrator was allowed to offer, for example, an aggressive fund (better for young people and

those less risk-averse) alongside a more conservative one (designed more for older and more risk-averse people).

Is it possible to determine the net superiority of any one system?

Both systems have strengths and weaknesses. There is a degree of consensus in the literature on the extent to which experience, institutional improvement and the passage of time lead to a shift from quantitative regulation towards 'prudent man', easing the restrictions on assets, allowing more shares and foreign assets in portfolios, and offering a wider range of options to participants.

It is extremely unlikely that regulators can systematically undertake the task of estimating the frontier of efficiency for portfolios any better than professional fund managers without restrictions. The regulation that seeks to encourage optimal portfolio performance implies very strict control being exercised over private investment administrators, with the state taking on a major responsibility for the results. A rather less ambitious objective than direct controls on investments might be simply to set a maximum limit to the risk of a fund portfolio.[18] Even so, this is not an easy way to regulate the risk of a portfolio overall.

Regulators in practice may try to restrict altogether investments in certain types of securities, or to limit them to a certain proportion of investments allowed. Under such restrictions, portfolios would be built up with interest-bearing securities and which are highly correlated. By eliminating the possibility of combining less correlated assets, most of the opportunities for reducing risk and increasing returns would also be eliminated.[19] If regulation prevents the selection of certain assets on the basis of their individual risk, the possibilities for reducing risk across a portfolio are eliminated.

Additional restrictions that concentrate investment in even more highly correlated assets mean that the frontier is shifted further away from the region of maximum efficiency, the opposite of what is desired. Similar undesired effects arise by restricting assets such as stocks of companies where the capital is highly concentrated in few owners or that are affected by low rotation.[20]. Once again, such restrictions as they are tightened remove investments disproportionately from the frontier of efficiency, perhaps even making it impossible to build up an efficient portfolio.

Why do regulators impose limits on investments?

It is possible that the use of these sorts of restrictions arises from the extension of prudential regulation for banking or insurance (which correctly stressed the need for adequate solvency and liquidity to cover a predetermined level of liabilities) and extrapolating them to pension systems with determined contributions whose aim is to optimize the trade-off between risk and return. However, this sort of extrapolation is mistaken. Restrictions do not necessarily produce a ceiling on risk. On the contrary, they can cause a disproportionate loss of anticipated income, while it is by no means clear that the portfolios that result would be less risky.

Problems of agency may require strong prudential regulation in less developed markets and may justify direct intervention in investments. If this is the case, a similar sort of regulation should be brought to bear on mutual funds and insurance (Shah, 1997). However, here the specificities of the pension industry come into play. The higher volumes involved, as well as the mandatory nature of pensions, may be factors that explain the setting of limits. However, the optimal choice between yield and risk is thus abandoned with quantitative portfolio regulations, because apparently it is more important to deal with agency risk arising from the mandatory nature of participation, the meritorious character of pension provision and the scale that the system acquires with the passage of time and the build-up of assets.

Schemes for pension regulation (how to regulate?)

Supervision of pension funds can, in general terms, be characterized by two basic models (Demarco, Rofman and Whitehouse, 1998): proactive or reactive.

The basic difference between these two styles of supervision arises from the way the industry is organized. In developed countries, there are a greater number of funds, less intrusive practices in occupational pension systems, a higher level of development in both capital markets and legal systems, asset administration through other financial intermediaries that are already highly regulated (banks, insurance companies, securities firms), and well developed practices of independent auditing. This is not the situation in Latin America.

The reactive approach, applied principally in developed countries, is based on self-regulation with much less detailed prescriptions from the regulators. The proactive model is associated with systems that are based on a small number of open funds like those that operate in the majority of Latin American countries. The regulators adopt a more interventionist stance. In general, the proactive

approach involves detailed regulation of most of the activities of pension fund administrators.

The reactive approach is associated chiefly with occupational systems organized as trusts and foundations. Typically, they are voluntary pension systems and ones based on employment. There are a large number of funds operating and higher levels of competition. They focus mainly on corrective measures. The regulator intervenes only when problems emerge, operating more in a remedial capacity. The system is based on trust that other participants will carry out monitoring and that will act upon it when the rules are broken. It presupposes a certain level of institutional development (audits, courts, etc) to help reinforce the exercise of market disciplines.

Extending the analysis of advantages and disadvantages of integrated supervision, taking into account the peculiarities of pension funds

As made clear above, the justification for regulating financial intermediaries stems from market failures or from the fact that certain products or sub-products of financial intermediation are merit goods. The more 'special' or 'unique' the intermediaries or their activities seem to be, the more reasons there appear to be to have specialized supervision. Similarly, the more similarities there appear to be between different sorts of business, contracts and financial intermediaries, the more the reasons to have an integrated system of supervision.

What specific characteristics do pension funds have *vis-à-vis* other intermediaries that might justify the need for specific analysis of the advantages and disadvantages of integration over and above those for intermediaries dealt with above?

Parting from the analysis in the previous section, some peculiarities can be identified on the basis of these four aspects:

- Importance of regulatory objectives (Need to protect a captive and not very sophisticated consumer of what is considered a merit good).
- Legal status of pension funds. (Pension funds involve contracts that combine insurance with closed mutual funds or with high exit costs).
- Taxonomy of the funds (Regulatory treatment of private funds, mandatory and with individual personal accounts).
- Ways in which funds are regulated (Shift emphasis from conduct of business regulation towards reactive prudential regulation).

In what follows, the methodology proposed in Demaestri and Guerrero (2003) is used to analyze these aspects with a view to the efficacy and efficiency of the integrated versus those of the specialized approaches in achieving the core objectives of pension supervision and that of other financial services. Table 6 summarizes the main findings. Once again, it is worth making it clear that the analysis is basically qualitative and that consequently it does not involve empirical measurement of the relative importance of the aspects under consideration or of the regulatory objectives involved.[21]

The first objective relates to market failures and the substantive regulatory goals relative to mandatory participation, pensions as a merit good and the fact that consumers of financial services are relatively unsophisticated. This is important for the core goal of consumer protection and relates to the efficacy and efficiency of regulation. An integrated agency with adequate legal powers and highly qualified staff would appear to be more efficacious than a specialized agency with less reach and more specialist staff. However, it could be argued that a specialized regulator could put more determination into protecting small-scale savers, who are captive and ill informed, than could a mega-regulator. The latter may have wider powers but has not only to concern himself with the protection of small-scale clients, but also has to protect savers, investors and consumers of financial services that are provided by more complex institutions that may eventually turn into conglomerates. Given these two arguments, the efficacy of the integrated approach is rated as ambiguous (+/-). However, with regard to efficiency, the correction of this ambiguity would be less costly under an integrated system. The costs arising from introducing changes in an integrated entity (including among key objectives the protection of pension fund contributors, the allocation of trained staff for supervisory functions) would be less than those arising from the need to analyze and control the chances of regulatory arbitrage and supervising appropriately how pension funds are managed within financial conglomerates.

The second aspect relates to the legal profile of pension funds. Internationally, pension funds take a range of forms, from those that are not very specific, such as trusts, foundations and mutual arrangements, participation in insurance companies to those that are highly specific, such as individual accounts in fund administrators. If the veil of the legal formality is removed, we see that the funds are basically contracts that combine savings with insurance in mutual funds, where participation is either compulsory or voluntary but where the cost of withdrawal is high. Analysis of the advantages or disadvantages of integration rests on the efficacy with which the core goal of consumer protection can be achieved. An integrated agency that regulates securities, banking and insurance would be better placed to regulate mutual funds than a specialized one. For reasons of scale, then, to avoid regulatory arbitrage and to

cope with the activities of multi-intermediary and multi-product conglomerates, it would be better to have an integrated regulator that takes charge of pension funds as well.

The third aspect has to do with the taxonomy of the funds as to whether they are private, mandatory, and personal and have defined contributions. Here, the core goal of consumer protection is in play with regard to the efficacy of the approach adopted. This combination approximates to that of the pension fund administrators, the form most common in Latin America. The main exception to the rule is Brazil where occupational funds predominate. It was mentioned in the previous point that the juridical form a pension fund takes makes no difference to the need to have integrated or specialized supervision. But as before, it is more efficacious for consumer protection to have a powerful integrated agency with a purview over all financial intermediaries where highly qualified staff can be amassed. In the specific instance of plans with defined benefits, a point arises with respect to systemic stability. With defined benefits, there is a potential for a parafiscal rescue if private funds are hit by a crisis. Here there is an argument similar to that of having a lender of last resort for banking. With respect to systemic stability, the system gains in efficiency when there is integrated financial supervision.

The way in which funds are regulated (prudential or conduct of business, proactive or reactive) is related to the efficiency of the financial system. Performance regulation is justified in situations where the institutional development is poor and the proactive approach suits those situations where the system is organized in pension fund administrators (few intermediaries). However, both performance regulation and the proactive approach (which are related to one another) can be seen as transitional towards the point at which institutions work better, experience of systems is built up and markets and instruments become more fully developed. At that point, it would be preferable to move towards forms of self-regulation, promoting the exercise of market discipline and supervising those areas where market failures persist. If supervision has to pass through a period of performance control and has to be proactive, it would seem more efficacious to have an integrated agency. However, since this is a transitional phase, it might be more efficient to pass through it with a specialized entity that would then disappear. Nevertheless, this type of regulation is costly. Taking into consideration both of these lines of argument, the efficiency of integration is ranked as ambiguous.

Table III. 5. Efficacy and efficiency of the integrated approach to supervision in achieving specific goals of pension regulation in Latin America

Issues	Goals	Efficacy Integration of Banking, Insurance, Securities and Pension Funds	Efficiency Integration of Banking, Insurance, Securities and Pension Funds
1) *Regulatory objectives*: Need to protect a captive unsophisticated consumer for a good considered meritorious	Consumer protection Systemic stability Efficiency of the system	+/-	+
2) *Legal profile*: Pension funds involve contracts that combine insurance with closed mutual funds or with high exit costs	Consumer protection Systemic stability Efficiency of the system	+	
3) *Taxonomy of the funds*: Regulatory treatment of private funds, mandatory and with individual personal accounts	Consumer protection Systemic stability Efficiency of the system	+ (with defined contributions)	+ (with defined benefits)
4) *Forms of regulation*: Shift emphasis from proactive performance regulation to reactive prudential regulation	Consumer protection Systemic stability Efficiency of the system	+	+/-

Source: Authors' own elaboration.

Table IV.5 summarizes the main results of the qualitative analysis undertaken on the advantages and disadvantages of integrating pension supervision regarding the four specific issues raised about: i) the importance of regulatory objectives, ii) the legal profile of pension funds, iii) the taxonomy of the funds, and iv) the way in which funds are regulated. They emphasize the greater *efficacy* of the integrated approach to supervising pension funds with respect to achieving the goal of consumer protection, the legal profile of the funds and their taxonomy (especially funds with defined contributions), and with respect to increasing the efficiency of the system, the ways in which funds

are regulated. Table IV.5 also shows the greater *efficiency* of the integrated approach to supervision relative to consumer protection vis-à-vis regulatory objectives, and to systemic stability vis-à-vis questions associated with the taxonomy of funds. On the other hand, ambiguities are revealed with regard to the advantages and disadvantages of integration versus specialization. One of these relates to the *efficacy* of integration with respect to regulatory objectives. The other relates to the *efficiency* of integration with regard to the goal of systemic stability regarding the forms of private pension fund regulation. Once again, it is worth making it clear that this is basically a qualitative analysis and consequently it does not present an empirical evaluation of the relative importance of the issues selected nor the supervision goals under consideration. It is therefore not possible to reach a definitive conclusion about the predominance of positive evaluations (+) over ambiguous ones (+/-). Nevertheless, from the point of view of qualitative analysis of the matters summarized in Table IV.5, we can conclude that the integrated approach to financial supervision is superior when we look at aspects specific to pension supervision.

Conclusion

This study aimed to analyze the advantages and disadvantages of integrating pension supervision with other financial activities and services (banking, insurance and securities). We aimed to contribute conceptually to the implementation of reforms in financial supervision and in pension systems in Latin America.

An analysis was undertaken of the advantages and disadvantages of integrated versus specialized supervision, with emphasis on the specific nature of private pension systems and the situation in Latin American countries. Taking into account a number of aspects related to financial supervision, we analyzed the relative efficacy and efficiency of integration in light of the quest for three core objectives: i) protection for the consumers of financial services; ii) systemic stability; and iii) development of the efficiency of the system.

The analytical approach was basically qualitative, and consequently there was no quantification of the issues discussed, and no opinion given as to their empirical magnitude. It makes sense to regulate financial intermediaries in general, and pension funds in particular because of the need to deal with market failures (notably informational ones) and because certain products have the status as merit goods. Regulation has the potential to improve on markets with failures, but it was recognized that this is conditional on the quality of the regulation and that many practical problems may cost less than trying to correct them.

The main factors that have encouraged the integration of financial supervision in many countries of the world have been financial innovation, the quest for economies of scale and scope, the rise of financial conglomerates, the search for consistency in regulation, the presence of 'gray areas' between the attributions and faculties of specialized regulators and the increased globalization of banking.

Differences and similarities were highlighted between pension funds and other financial intermediaries with regard to the nature of their business, the kind of contracts that they produce, the maturity of debts and credits, and the sort of risk management that they undertake. A taxonomy was developed.

The main arguments in favour of integrated supervision are the achievement of economies of scale and scope; the growing dominance of financial conglomerates and the lack of clarity in the frontiers between products; the search for competitive neutrality; and the growing transparency, accountability and coherence of the regulatory framework.

The most conclusive results of the analysis of advantages and disadvantages of integrating pensions into a single regulator along with other financial intermediaries was the superiority of the integrated approach in achieving economies of scale and scope, treatment of conglomerates, greater competitive neutrality, and greater transparency and accountability. The only comparative advantage for the specialized approach seemed to be the lower chances of creating a bureaucratic Leviathan.

The results were ambiguous on some points, as they were before pensions were included in the analysis: the approach gives rise to less moral hazard (an aspect tied to the efficacy of promoting consumer protection); the relative treatment of financial conglomerates (with respect to the efficiency of encouraging systemic stability); and greater competitive neutrality (with respect to the efficacy of enhancing systemic stability).

So as better to understand the significance of these ambiguous findings, we analyzed the importance of each objective *vis-à-vis* the respective intermediaries. Consumer protection is particularly relevant for pensions, but also for banking and insurance, whilst of lesser importance for securities. Systemic stability is especially important in banking, although also in securities while less so for insurance and pensions. The goal of financial efficiency in the system is particularly important for banking, less so for insurance and pensions, and is relatively less significant for securities. The last of these, highly dependent on the context, becomes increasingly important the lower the degree

of development of markets and institutions, the lower the scale of operations, and the greater the pre-existing distortions.

In order to detect those particular aspects of pension funds that might affect our conclusions, we deepened the analysis of the pension market and the special characteristics that the pension funds have as financial intermediaries. We examined the goals and instruments for regulating these intermediaries (what they regulate and how). A distinction was drawn between “reactive” types of supervision, common in OECD countries and which focus on prudential regulation and problem solving, and the 'proactive' schemes common among the new systems in Latin America and some countries in Eastern Europe.

By studying the peculiarities of pension funds and their regulation, we were able to confirm the validity of conclusions reached earlier. And, despite encountering some ambiguous situations, we were able to underline a number of relative qualitative advantages of integrating the supervision of financial services, including those related to pensions in countries with characteristics similar to those of Latin America. In any case, it is worth reaffirming that the quality of the institutional context, as well as the introduction of sound regulatory practice which we described in the analysis of the advantages and disadvantages of consolidating pensions in an integrated regulator (Point 4), constitute preconditions for maximizing the full potential for integration and minimizing the downsides that may arise.

NOTES

1. It is estimated that pension funds in Latin America, North America and Europe accumulated more than USD 8 billion in 1998.

2. A distinction can be drawn between regulation (the establishment of norms of behavior), monitoring (observation of compliance with those norms) and supervision (more general observation of the behavior of financial firms). In line with other authors, the terms are used interchangeably in this study.

3. The methodology suggested is similar to that used by Demaestri and Guerrero (2003).

4. Given the approach adopted here, the problems addressed are not quantified. Consequently, no opinion is given as to the empirically quantifiable magnitude of the issues discussed.

5. It should also be appreciated that some problems may be of lesser importance than the potential costs of correcting them through intervention.

6. This section is based on Ferro (2003).

7. Adverse selection implies that the participants with largest risks would be voluntarily over-insured and those of less risk under-insured.

8. Juridical forms which carry out at least two of the principal financial activities.

9. This section is based on Demaestri and Guerrero (2003).

10. Demaestri and Guerrero also discuss the merits of keeping banking supervision with central banks. They identify as "pros": i) the lender of last resort has an interest in minimizing the costs of systemic crises through banking supervision; ii) the merging of activities reduces problems of coordination; iii) more information and tools at the disposal of the banking regulator; iv) concentration of high skilled human capital in one institution. As "cons", they point out: i) in many Latin American countries, banking supervision is already divorced from the central bank; ii) conflicts of interest between monetary policy and supervisory roles; iii) a central bank with more duties increase the risk of political pressure (political pressure on monetary policy can be extended to banking supervision and vice-versa).

11. This section is based on Demaestri and Sourrouille (2003).

12. Davis (2001) suggests some responses to help protect those who are directly affected by a systemic crisis.

13. Public scrutiny of a unified entity would be more searching than of various specialized ones.

14. Pensions and insurance have various characteristics in common, as discussed below.

15. He who does not contribute may claim assistance on retirement and charge the system for his lack of foresight. As pensions are considered a merit good, the way to obviate such opportunistic behavior is to make the system mandatory.

16. In line with the objective set out at the beginning of IV.1

17. The general idea is that the benefits from diversification are not fully realized. The core goal of investment policy consists in establishing an optimal trade-off between risk and return by means of an appropriate degree of diversification. This involves achieving the frontier of efficient portfolios in the area of risk/yield. Any other portfolio is less desirable (Davis, 2001).

18. In the language of the world of two parameters, this involves placing a vertical bar in the quadrant for opportunities and avoiding all portfolios to the right of it.

19. This is because the portfolio risk is not the sum of individual risks (standard deviation of the return of an asset examined over a period of time), but rather that each asset contributes to the overall risk in as much as it co-varies with the aggregate risk.

20; The effects of creating ceilings for certain types of investments (for instance limiting the percentage of shares) can be represented graphically as vertical limits on investment possibilities.

21. Qualitative judgements with a different level of subjectivity, as well as different weightings of the relative importance of different aspects analyzed in different contexts to those raised here, could lead to less conclusive results as regards the relative advantages of integrating pensions into a unified financial regulator.

BIBLIOGRAPHY

Bebczuk, Ricardo (2000). *Información Asimétrica en Mercados Financieros. Introducción y Aplicaciones. Madrid*, Cambridge University Press.

Davis, E. Phillip (2001). *Portfolio Regulation of Life Insurance Companies and Pension Funds*. OECD.

Demaestri, Edgardo and Federico Guerrero (2003). *The Rationale for Integrating Financial Supervision in Latin America and the Caribbean. Sustainable Development Department*. Technical Papers Series. IFM-135. Inter-American Development Bank. July.

Demaestri, Edgardo and Diego Sourrouille (2003). *Integrated Financial Regulation and Supervision: Experiences in Selected Countries.* Sustainable Development Department. Technical Papers Series. IFM-139. Inter-American Development Bank. December.

Demarco, Gustavo, Rafael Rofman and Edward Whitehouse (1998). *Supervising Mandatory Funded Pension Systems: Issues and Challenges*. Unpublished Manuscript. The World Bank.

Ferro, Gustavo (2003). *Regulación y Costos Variables Endógenos en el Mercado de Fondos de Jubilaciones y Pensiones Argentino*. Documento de Trabajo CEMA Nº 231. Universidad del CEMA. Buenos Aires, febrero.

Financial Services Authority (2000). *A New Regulator for the New Millennium.*

Financial Services Authority (2000). *Building the New Regulator*. Progress Report 1.

Jordan, Cally and Giovanni Majnoni (2002). *Financial Regulatory Harmonization and the Globalization of Finance*. World Bank Policy Research Working Paper 2919, October.

Llewellyn, David (1999). *The Economic Rationale for Financial Regulation.* Occasional Paper Series No. 1. Financial Services Authority, April.

Rocha, Roberto, Richard Hinz and Joaquín Gutiérrez (1999). *Improving the Regulation and Supervision of Pension Funds: Are There Lessons from the Banking Sector?* Social Protection Discussion Paper Series No. 9929. The World Bank

Shah, Hermant (1997). *Towards Better Regulation of Private Pension Funds*. Economic Development Institute. World Bank, April.

Srinivas, P, Edward Whitehouse and Juan Yermo (2000). *Regulating Private Pension Funds' Structure, Performance and Investments: Cross-Country Evidenc*e. Pension Primer Reform. July: World Bank.

Stiglitz, Joseph (1994). *The Role of the State in Financial Markets*. Proceedings of the World Bank Annual Conference on Development Economics 1993. The World Bank.

Working Party on Private Pensions (2002). *Pension Fund Supervision Supervisory Structure*. Directorate for Financial, Fiscal and Entreprise Affairs. Insurance Committee. Organization for Economic Co-Operation and Development (OECD), Paris.

Working Party on Private Pensions (2003). *Supervisory Structures for Private Pensions*. Preliminary Survey Analysis. Organization for Economic Co-Operation and Development (OECD), Paris.

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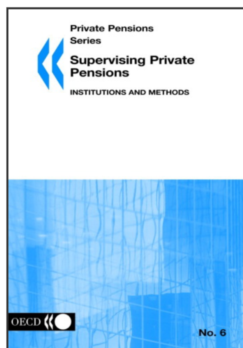

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