# Pension Funds Investment

Presentations given at the International Seminar of the same name, held in Lima, Perú, 4th november 2004 de 2004.







Corporación de investigación, Estudio y Desarrollo de la Seguridad Social

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# Presentation

# **PRESENTATION**

The barrage of pension modernization that since 1981 has invaded most of the continents in the world, has been substituting, either partially or totally, the pension schemes based on the pay-as-you-go or "defined benefits" system, for another one based on capitalization and individual saving or "defined contribution", which determines a series of challenges, both for the authorities and regulators, as well as for the industry that manages these resources.

In this saving and individual capitalization system, the financing of the transitional costs and the design and application of reasonable regulatory systems constitute, perhaps, the two essential issues in which it must concentrate its concern. Likewise, the system boosts capital markets to effectively channel the institutional resources in the interest of the internal economic agents, supporting the development of domestic economies.

As for the pension industry, obtaining yields that ensure replacement rates that are adequate to the individual effort, represents the main challenge which, in case it is accomplished, will have justified, in the long term, this actual revolution in the usual models of public policies associated with social protection.

Given the aforementioned, and as part of its strategic lines of action, the International Federation of Pension Funds (FIAP), deemed convenient to analyse the current state and the perspectives of the pension funds investments. For this reason, it organized the International Seminar "Pension Funds Investment" on the 4th of November, 2004 in Lima, Peru.

The objectives of the seminar were to diagnose the regulation of pension funds investments in Latin America; to analyse

improvements to such regulations, especially tackling Multifunds in Chile, Peru and Mexico; to deeply delve into the development of capital markets; and, to analyse the political risks of the pension funds investment in the region.

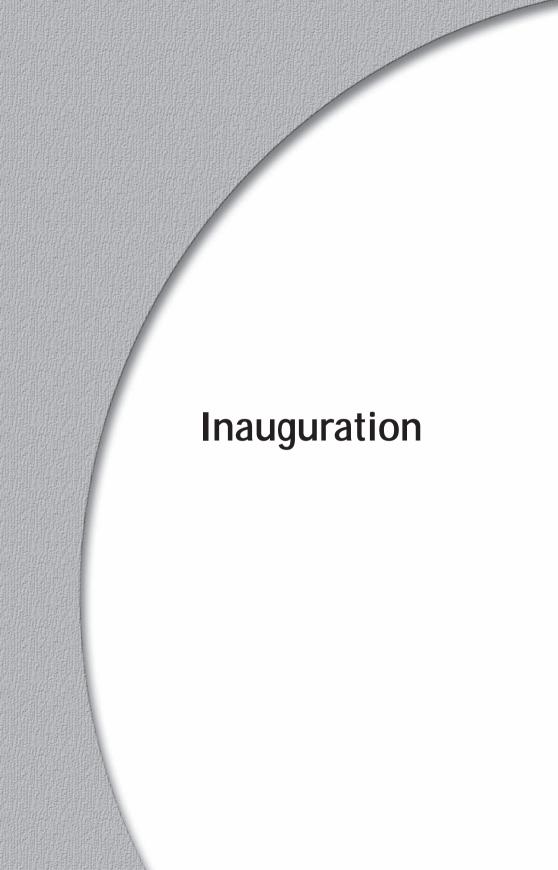
Among the participants were representatives of international organisms such as the World Bank, OCDE, the International Association of Pension Funds Supervisory Authorities (AIOS), and representatives of the pension funds industry.

Among the most important conclusions of the seminar, it is worth mentioning the role of the yield of the investments, as a determinant factor in the improvement of pensions. To achieve this objective, it is necessary the widest diversification, including investment abroad. All the material exhibited at the seminar is presented in this book.

On behalf of FIAP, we would like to thank everyone who made this Seminar possible, especially the speakers and panelists, renowned specialists and/or directors of pension management institutions or international organisms. Likewise, we thank all who attended the seminar, either representing the entities linked to the Federation, or the institutions of the financial sector, as well as the sponsoring companies without which it would have not been possible to make this event, and whose conclusions, we believe, will be fundamental to continue perfecting our pension systems, particularly in those aspects such as efficiency and yield, that are among the major ethical challenges that justify the action of our trade union.

GUILLERMO ARTHUR ERRÁZURIZ

President of FIAP



# Inauguration



Andrés von Wedemeyer, President, Association of Private Pension Fund Administrators, Peru.



Guillermo Arthur, President, International Federation of Pension Fund Administrators, FIAP.

# **INAUGURATION**

ANDRÉS VON WEDEMEYER President of the Association of Private Pension Fund Administrators, Peru

Good morning, distinguished panel members, and attendants.

On behalf of the Association of Pension Fund Administrators of Peru, I would like to give you a warm welcome to this event and to our country. It is a great pleasure for us to have such eminent guests who, within the framework of the International Federation of Pension Fund Administrators (FIAP), the International Association of Oversight Organisms (AIOS) and all the institutions related to the Private Pension Funds industry worldwide (we even have 24 FIAP members), are attending the first event of this nature held in Peru. Welcome to our country, we are pleased to have you here, and if there is anything we can do to make you feel at home, please let us know.

An event of this particular magnitude is of paramount importance to our country, because it is held at a time when some sectors in Peru are trying to stop the growth and strengthening of the private pension funds system —which has been in operation for 11 years now— to the detriment of the owners of those funds, that is, the affiliates of the system.

Increasing the pension funds is the raison-d'être of every Pension Fund Administrator. Investment generates the necessary yield to increase the pension fund in a sustainable manner, which allows to provide members with a dignified pension upon retirement. It is, precisely, the respect for the investment of our pension funds, –for every investment in the country for that matter, but especially for the most visible one: the investment of our pension funds, securing them with market yield, and a situation that enables them to develop within favorable market conditions—, which also secures a

country with domestic and foreign investment in the long term. Therefore, a good management of the parameters in which these funds –I repeat, so visible funds, and particularly important in Peru– are invested, will be the way to ensure in the long term the investment needed for the development of a country like Peru. The respect for the funds, for all of us who save in the pension funds, is the indication and the security for every investor that accompanies us in the investment path to develop this country.

I would like to welcome you and leave you now with Guillermo Arthur, President of the International Federation of Pension Fund Administrators. Welcome and thank you very much.

# **INAUGURATION**

Guillermo Arthur President of FIAP

Good Morning, Mr. Andrés Von Wedemeyer, President of the Peruvian Association of Pension Funds; Mr. Guillermo Larraín, President of AIOS; Superintendents of Colombia, Peru; dear friends.

I do not think I need to say anything further about the importance of a seminar on investment for the development of the Pension Funds. We tend to forget that we are immersed in a pension funds system whose main objective is to pay contributors, the workers who have contributed to their individual accounts, the best pension. Therefore, investments made by Pension Funds Administrators, acting as the Trust Funds they are, have to be guided basically by two basic criteria: yield and security, understanding that a good development of the investments will have a decisive impact on the future pension.

A 1% higher yield through the working life of a worker can mean a better pension by 25% or 30% depending on the assumptions used. In Chile, and I do not mention this because I am a Chilean but because we represent a system with already a vast experience. Two thirds of the US\$52,000 million of the pension funds account for the yield they have provided, whereas only one third represents the workers' contributions. Therefore, that speaks by itself as to the importance of trying to identify the challenges we face investmentwise.

As I said at the beginning, the fact that the main objective is to pay better pensions is usually forgotten. Yesterday, I came across a debate in the Peruvian press about the investment margin abroad, and there were many arguments, all of which valid, with regard to the need of maintaining the price of the dollar, and the need for the financing of domestic projects. In my mind, the main argument, which is that the ownership belongs to the workers and, therefore, those of us who manage those funds must have yield and safety criteria that oblige us,

among other things, to offer the best diversification possible for the savings. By not doing so, we are allowing that the flow of the workers' savings push scarce domestic assets, raising their value to the detriment of the yield that funds must have.

One of the basic criteria when the system was created in all of our countries was not to have minimum limits, but only maximum limits. However, we have to accept, as time goes by, that implicit minimum limits have been created. When the authority does not accept to widen the margin of investment towards some industries, it is, somehow, focusing or forcing the pension funds to be invested in certain kind of assets which otherwise would not have been picked in the first place.

Nobody argues about it. We even wrote a document prepared by Vittorio Corbo and Klaus Schmidt-Hebbel on the impact the system has had on the economic development of countries, and I think that is important. No one doubts the effect we wish to achieve with this. Nevertheless, I think that in order to accomplish it we must respect these criteria of freedom with which managers invest the resources of the workers. Only that way we will have a good resource allocation towards the most profitable activities. Thus, the collaboration to the economic growth will be bigger if we are trying to focus the investments on specific industries, maybe for legitimate reasons, but they do not represent the needs of those who have entrusted their savings.

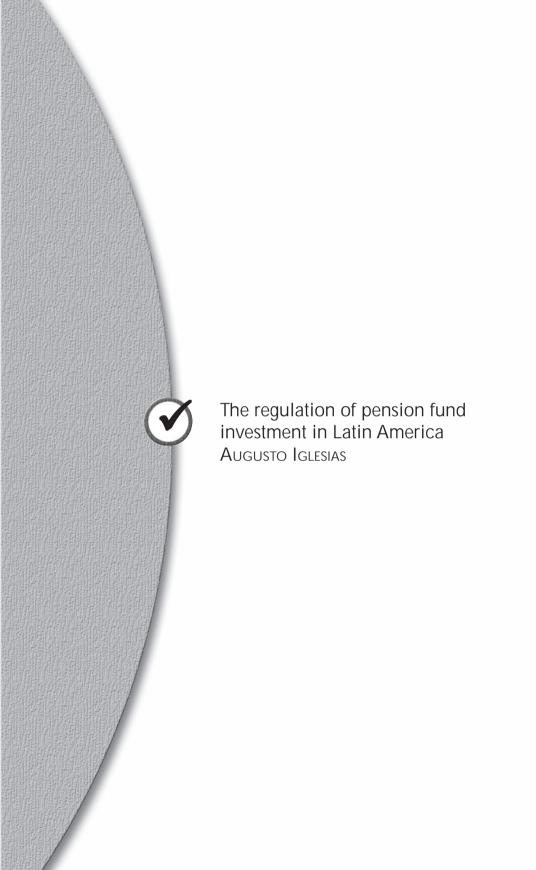
In this seminar we will examine a number of topics and, especially, we are going to see some challenges. Among them, the margins of investment abroad and, in general, the diversification the funds must have, particularly, the creation of the multifunds that, as Andrés said before, are currently underway in Mexico, Peru, and Chile, allowing workers to have more latitude within the system, which means picking the best investment combination with different risk-reward combinations.

I will wrap this up by thanking the Peruvian Association, especially Andrés, the warm welcome they have given us, and thanking each one of you, particularly our eminent speakers for the vital importance the investment subject has within the development of the private pension systems.

Thank you very much.

# Chapter I

Diagnosis of the investment regulation in Latin America



# THE REGULATION OF PENSION FUND INVESTMENT IN LATIN AMERICA

Augusto Iglesias<sup>1</sup>

### 1. PRELIMINARY COMMENTS

I would like to thank FIAP and the Peruvian Association of Pension Funds for the invitation to participate in this Seminar.

In my presentation I will first describe the regulation model of investment funds prevailing in Latin America; I will then point out which, in my opinion, are the strengths and weaknesses shown by this model; and, finally, I will propose some possible improvements.

The debate on this issue is relevant since investment regulation has a great impact on the results of the pension funds yield, and these, in turn, have an important effect on the level of the pensions.

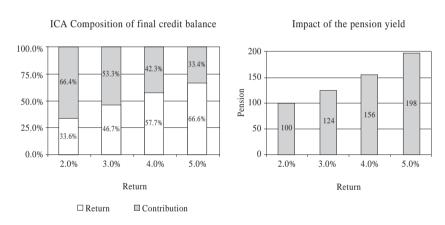
Comercial Engineer, Graduated in Business with an Economics Major from Pontificia Universidad Católica de Chile; and Master in Economics at UCLA, USA. Partner and Director of PrimAmerica Consultants.

Professor of Economics in several academic institutions: Pontificia Universidad Católica de Chile, Universidad de Chile, Universidad Gabriela Mistral, Universidad Adolfo Ibáñez, Universidad de Los Andes and Universidad del Desarrollo.

He has participated in many publications on economics and pension funds. Some of them are: "Economics: Principles and Problems", together with H. Cortés and A. Holuigue, edited in El Salvador; "The Pensions System: 7 years of history" with Rodrigo Acuña and Sergio Sepúlveda, edited by Habitat PFA; "Chile: Experience with an investment scheme 1981-1991", with R. Acuña, edited by CEPAL (Chile); "Managing Public Pension Reserves, with R. Palacios (Social Protection Discussion Paper N° 0129, The World Bank); "Payout choices by retirees in Chile: what are they and why", together with E. James and G. Martínez (June 2004).

Thus, for instance, with 2% of accumulated yield, the accumulated credit balance upon retirement would account for 66% of the contributions and 33% of the return on earnings. With one percentage point more in accumulated yield during the period, the composition of the credit balance changes approximately to a 47% return, and 53% of the contributions. With a 5% yield, the sum of the contributions would represent only 33% of the accumulated credit balance, while the remaining 66% could be explained for the return on earnings. On the other hand, one percentage point in accumulated return on earnings during the lifetime of a worker accounts for a change in the pension of roughly 26% (see Table N° 1)<sup>2</sup>.

Table Nº 1
IMPACT OF THE YIELD



Source: Personal information.

As a consequence, in the context of an investment system, the amount of the pensions, together with the level of contributions, depend mainly on the results of the accumulated investments yield during the saving period.

Estimates for a member who starts contributing at 22; retires at 65; does not contribute for 10% of that period, and has a wife who is two years younger.

In addition, the argument of investment regulation is relevant because pension funds have a significant impact on the capital market and this, in turn, affects the economic growth of a country. The issue has been well documented in different researches, and I think it requires no further explanation. For example, in those countries with more mature reforms like Chile, the assets accumulated by pension funds in 2002 accounted for more than 50% of the GDP. It is estimated that by 2015 pension funds assets will reach a volume greater than 20% of the GDP in practically all countries that have put in place reforms in the region. Finally, in many countries in the region, the investment of pension funds in government debt securities accounts for more than 50% of that market, while investment in bonds represents more than 60% (see Tables N° 2 and N° 3).

 $\begin{tabular}{ll} Table~N^o~2\\ Accumulated~assets~in~the~investment~system \end{tabular}$ 

	Assets 2002 (millions of US\$)	Assets as proportion of GDP in 2002	Assets 2015 (millions of US\$)	Assets as proportion of GDP in 2015	Assets as % of investment of securities market	% of ownership of Government debt
Argentina	11,923	10.4	57,023	30.9	14.5	6.5
Bolivia	2,749	33.5	5,884	43.5	171.8	37.0
Colombia	5,327	6.5	26,825	24.7	40.6	n.a.
Chile	35,832	56.2	95,388	89.7	65.8	64.6
El Salvador	1,061	7.7	n.a.	n.a.	69.4	13.0
Mexico	317,437	5.2	247,887	26.0	37.1	14.7
Peru	4,083	72.0	26,813	28.1	39.8	3.0
Uruguay	804	7.7	1,942	13.3	962.5	7.6

Source: Palacios (2003).

 $\begin{tabular}{ll} Table~N^o~3\\ Share~of~pension~funds~in~financial~markets~as~of\\ December~each~year\\ \end{tabular}$ 

		Chile				Argenti	Argentina		Peru			
	Corporat	te Bonds	Sto	cks	Corporate Bonds		Sto	cks	Corporate Bonds		Stocks	
	PF Investments (%)	Market size (US\$ billions)	PF Investments (%)	Market size (US\$ billions)	PF Investments (%)	Market size (US\$ billions)	PF Investments (%)	Market size (US\$ billions)	PF Investments (%)	Market size (US\$ billions)	PF Investments (%)	Market size (US\$ billions)
1992	60.3	2.0	10.0	29.1		0.5		18.3				
1993	54.9	2.1	9.9	51.4		0.9		42.9			0.0	5.1
1994	57.2	2.5	10.6	68.2	4.3	0.7	0.0	36.5	10.1	0.1	0.5	8.2
1995	53.9	2.4	10.5	72.2	10.8	2.0	0.4	37.1	26.4	0.2	0.9	11.7
1996	53.8	2.3	10.5	70.0	14.1	2.9	2.3	44.4	44.5	0.5	2.2	13.8
1997	53.2	1.9	9.7	73.8	13.8	2.6	2.9	54.3	44.9	0.7	3.0	17.4
1998	46.6	2.3	8.2	51.9			4.7	45.3	40.6	0.8	5.2	11.0
1999	48.6	2.6	6.1	68.2			2.9	83.9			6.7	13.4
2000	36.4	3.6	6.2	60.4			1.5	166.1			7.5	10.6
2001	36.6	5.6	6.3	56.3			1.1	192.5			8.1	11.1
2002	51.9	4.9	7.4	47.6			0.7	103.4			10.6	13.4

Source: Roldos (2003).

# 2. DESCRIPTION OF THE INVESTMENT REGULATION MODEL IN LATIN AMERICA

# 2.1 Background information

The observed structure of the pension funds investment portfolios is the result of three combined elements: First, the characteristics of the capital market, in particular, the offer of existing papers. Second, the investment policies that each administrator establishes. Third, the characteristics of investment regulation.

Setting aside each one of these structural elements of any portafolio in particular is a complex task. For instance, pension funds in Latin America invest little (compared to those in Europe and in the USA) in domestic fixed income securities,

and a great deal in fixed income instruments. Chile is the country with the greatest proportion of its portfolio -41% of domestic and foreign investment- in variable income, followed by Peru with 33.8%, and Argentina with 10%. Three countries in the region have no investments in variable income at all. However, this situation can be explained mainly by the lack of sufficiently developed markets for this kind of papers rather than by the preference of institutional investors for fixed income instruments, or because of any legal restrictions for that matter. Furthermore, the high concentration in government papers, with the exception of Chile and Peru, can be explained by a combination of regulations that forces to invest pension funds in public debt securities, and also by the dearth of a market for private income. Finally, the observed high concentration in domestic securities, with the exception of Chile where 27% of the pension funds is invested abroad, can be explained mainly as a result of the regulations rather than by the conditions in the domestic market, or by the preference of the Pension Fund Administrators (see Table N° 4)

SECTOR	ARGENTINA %	BOLIVIA %	CHILE %	COLOMBIA %	EL SALVADOR	MEXICO %	PERU %	URUGUAY %
Government	68.48	65.08	21.17	47.79	84.18	80.70	19.09	57.14
Time deposits	4.0	6.41	18.18	8.66	10.22	4.27	18.03	8.98
Mortgage bonds	0.02		8.25	0.09			0.08	1.30
Corporate Bonds								
(ST and LT)	1.52	17.35	7.07	13.64	0.35	14.26	11.68	
Stocks	10.38	7.94	14.35	5.13	0.27		33.80	
Investment Funds	S		2.47				0.62	
Foreign Sector	9.51	0.00	27.54	8.66	4.98		8.25	
Others	5.91	3.22	9.21	16.12	0.00	0.78	8.53	33.88
US\$ billions	16,101,260	1,613,251	48,991,810	8,327,413	1,819,419	38,337,018	18,431,411	1,322,505

Source: FIAP.

Even though, market conditions and investors' preferences change in each case, the fact that pension funds are strictly regulated constitutes a common element for every country in the region. Although the design of many specific regulations varies from country to country, there is at the same time a sufficiently wide set of shared elements which allows us to talk about a common "regulatory model" for the reformists of the region. In particular, the regulation only permits the investment of pension funds in previously authorized instruments. There are maximum investment limits depending on the kind of instrument, categories or "sets" of instruments, issuer, and risk. There are compulsory regulations related to valuation and custody of the pension funds assets. There are also mandatory account plans, and finally, there are regulations that control any conflicts of interest, and make sure the wealth of the fund is separated from that of the administrator. This regulatory model is commonly known as "Quantitative" or "Draconian Limits".

### 2.2 Objetives of the investment regulation

The main objective of the investment regulation of pension funds is to control three types of risk:

The first of which is originated by the so called "agency problems". Here, the objective of the regulation is to control the potential conflicts of interest that might arise between the administrator –PFA, RPFA, RFA, etc.— and the affiliates. In addition to imposing fiduciary obligations on the administrators, the main instruments used by the current regulatory model so as to reach this goal are the explicit limitations for the pension fund to be invested in assets that appeal to the administrator; the limits to cross operations between the administrator (and its representatives) and the funds; the obligation to maintain the confidentiality of vital information; and the obligation to make transactions in transparent markets, and under market conditions.

The second risk this regulation tries to control is the "variability risk in the final wealth". Although new pension systems of individual investment and "defined contributions" do not guarantee an investment result, it is also evident that the relevant parameters have been fixed at levels that, under allegedly "reasonable" assumptions, would make it possible for the worker to finance a pension similar to that of some shadow rate which in general is not explicitly mentioned in the regulation. As a consequence, the regulation also tries to avoid that the accumulated yield upon retirement be lower, ceteris paribus, to what those shadow rates might allow to obtain. The

instruments used by the regulation in order to reach these objectives are mainly the limits of investment on the types of instruments and the requirement of a minimum yield.

The third risk is the "short term volatility of the yield". Even though I have just pointed out that the regulation is mainly concerned about the accumulated yield during the working life of the affiliates, in reality, the regulatory agency (as well as the affiliates and administrators but for different reasons) is also concerned about the variability of the yield period over period<sup>3</sup>. This could be explained by a low political capital loss aversion in the pension funds; by how expectations on future returns are created; and because of competition among administrators. The instruments used by the regulatory agency in Latin America so as to try to control this risk are mainly the limits of investment by instrument, issuer, and the minimum yield requirements.

In addition to controlling these three main risks, other objectives have been occasionally imposed on investment regulation such as lowering the costs associated with oversight, and the information provided to the affiliates.

### 2.3 Models of regulation

As we mentioned before, the prevailing regulatory model of pension funds investment in Latin America combines a set of limits or quantitative restrictions with some reasonable regulations.

These restrictions affect directly the structure of the portfolio: every country in the region, with no exception, has imposed limitations so that administrators do not invest the resources of the pension funds in instruments that are not specifically authorized; all regulations impose maximum limits to different kinds of instruments; all regulations, almost with no exception,

This variability is the reflection of the macroeconomic conditions of the country; the inherent risks of the businesses in which it is invested; the illiquidity that every instrument may or may not have; the deficiencies that might be present in the corporate authorities of the companies that issue the bonds; etc.

impose maximum limits to sets of instruments; all regulations impose limits to issuers; practically all regulations impose limits to risk; and many regulations impose requirements for a minimum yield.

Even though the general model of regulation is similar, there are also significant differences among countries regarding the values at which the different limits have been set. The greater differences are found in the limits to foreign investment. Thus, while three countries have not yet authorized the investment of assets abroad (El Salvador, Uruguay, and Bolivia), others have set maximum limits which range from 30% (Chile) to 10% (Argentina) of the total of the funds. There are also noticeable differences in the value of the limits for variable income securities, and there is a significant difference in the limits of public securities (see tables N° 5 and N° 6).

Table N° 5
REGULATION ON INVESTMENT LIMITS

Country	Investment only in authorized instruments	Limits by instrument	Limits by sets of instruments	issuer	Limits by risk	Minimum return
Argentina	✓	✓		✓	✓	✓
Bolivia	✓	✓	✓	✓	✓	
Chile	✓	✓	✓	✓	✓	✓
Colombia	✓	✓	✓	✓	✓	✓
El Salvador	✓	✓	✓	✓	✓	✓
Mexico	✓	✓	✓	✓	✓	
Peru	✓	✓	✓	✓	✓	✓
Uruguay	✓	✓	✓	✓	✓	✓

Source: FIAP.

LIMITS OF INVESTMENT BY INSTRUMENT (% OF THE FUND) APRIL 2004

## A comparison of the property of the propert		Argentina	Bolivia	Chile(5)	Colombia	El Salvador	Mexico	Peru	Uruguay(3)
nt 50		%	%	%	%	%	%	%	%
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utions 30 10(1)  n.a. 100  ons n.a. 100  ls 30 50(1)  ls 40 50(1)  n.a. n.a. n.a.  s in Shares 40 45 (6)  s and n.a. n.a.  n.a. n.a.  ft 10 10  ce 10 n.a.  securities	ocal goverrment and								
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bis bares bis ba	Sentral Bank	n.a.	100	50	n.a.	30	n.a.	30	n.a.
ls 30 50(1)  n.a. n.a. n.a.  n.a. n.a. n.a.  s and n.a. n.a. n.a.  n.a. n.a. 30(1)  50 40(1)  t 10 10  ce 10 n.a.  securities	nancial Institutions	n.a.	n.a.	n.ap.	n.a.	n.a.	n.a.	n.a.	n.a.
## 40 50(1)  ### 40  ### 40  ### 40  ### 45 (6)  ### 45 (6)  ### 45 (6)  ### 45 (6)  ### 45 (6)  ### 45 (6)  ### 45 (6)  ### 80(1)  ### 30(1)  ### 30(1)  ### 30(1)  ### 40(1)	Deposits and Bonds	30	50(1)	50	32	40	40	40	30
n.a.     n.a.       40     45 (6)       s and     n.a.     n.a.       ns     n.a.     30(1)       50     40(1)       t     10     10       ce     10     10       securities     20     5(1)	Aortgage Bonds	40	50(1)	50	40	55	40	40	30
40 s in Shares 40 45 (6) s and ns n.a. n.a. n.a. 30(1)  50 40(1)  t 10 10  ce 10 n.a. securities	ompanies	n.a.	n.a.	n.ap.	n.a.	n.a.	n.a.	n.a.	40(4)
s in Shares 40 45 (6) s and n.a. n.a.  n.ap. 30(1)  ft 10 10  ce 10 n.a.  securities	Sonds	40			30	30	30	40	n.a.
s and ns n.a. n.a. n.ap. 30(1)  n.ap. 30(1)  50 40(1)  40(1)  11 10 10  ce 10 n.a.  securities	Convertible Bonds in Shares	40	45 (6)	45 (6)	n.a.	5(2)	5(2)	n.a.	n.a.
ns n.a. n.a.  n.ap. 30(1)  50 40(1)  (t 10 10  ce 10 n.a.  securities	Commercial Papers and								
n.ap. 30(1) 50 40(1) (t 10 10 ce 10 n.a. securities	Discount Operations	n.a.	n.a.	10	13	n.a.	n.a.	n.a.	n.a.
50 40(1) 30 15(1) 6 10 10 6 10 n.a. cerrities	curitized Bonds	n.ap.	30(1)	n.ap.	20	20	n.a.	10	n.a.
50 40(1) 30 15(1) 6 10 10 6 10 0.a. cerrities	riable Income								
30 15(1)  10 10  10 n.a.  10 n.a.	itocks	50	40(1)	40	30	20(2)	5(2)	35	n.a.
30 15(1)  10 10  10 10  10 10  10 10  10 10  10 10  10 10  10 10  10 10  10 10  10 10  10 10  10 10  10 10  10 10  10 10  10 10 10  10 10 10  10 10 10  10 10 10  10 10 10  10 10 10  10 10 10 10  10 10 10 10  10 10 10 10  10 10 10 10  10 10 10 10  10 10 10 10  10 10 10 10  10 10 10 10  10 10 10 10  10 10 10 10  10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10 10 10 10  10 10	Autual and								
te 10 10 10 scurities 200 scur	nvestment Funds	30	15(1)	25	5	n.ap.	n.ap.	15	n.a.
10 10 10 n.a.	oreign Investment								
10 n.a.	oreign Bonds	10	10	30	20	n.ap.	20	10.5	n.ap.
00	Exchange insurance	10	n.a.	20	n.a.	n.ap.	n.ap.	5	n.ap.
00	ther authorized securities								
20	Others	20	5(1)	1	n.a.	7	5	n.a.	n.a.

(1) Maximum limit permitted.
(2) Sum of shares and convertible bonds in shares.

Source: FIAP.

n.ap.: inapplicable

n.a.: not available

(3) A maximum limit is defined 60% of all that is not government bond investment.
(4) Refers to maximum in fixed and variable income securities issued by companies.
(5) Limit fixed by the Central Bank.
(6) Bonds are included.

The reasonable regulations adopted by each country that complement the set of quantitative limits show even a greater similarity. Thus, in every country in the region only companies with a special license can manage pension funds; there are compulsory regulations in every country for the valuation of assets which, almost with no exception, are based on market prices; every country has compulsory pension funds custody regulations in specialized institutions (or banks) that are independent of the fund itself: there are regulations in every country in the region for controlling conflicts of interest; in every country in the region, there are regulations that force the administrator to frequently deliver information to both its affiliates and the supervisor on the structure of the portfolios and the results of the yields; in practically every country, there are compulsory account plans that pension funds and administrators must follow to have results; and in every country in the region the capital of pension funds is separated from that of the administrator<sup>4</sup> (see Table No 7).

Table Nº 7
REASONABLE REGULATIONS

Country	License	Valuations of Pension Funds assets	•	Conflicts of interest	Information affiliates & supervisor	Account plans	Capital separation
Argentina	1	1	/	<b>√</b>	1	/	/
Bolivia	✓	✓	✓	✓	✓	✓	✓
Chile	✓	✓	✓	✓	✓	✓	✓
Colombia	✓	✓	✓	✓	✓	✓	✓
El Salvador	· /	✓	✓	✓	✓	✓	✓
Mexico	✓	✓	✓	✓	✓	✓	
Peru	✓	✓	✓	✓	✓	✓	✓
Uruguay	1	✓	✓	✓	✓	✓	✓

Source: FIAP.

In the case of Mexico, pension funds are a legal body and are not defined solely as the wealth of a third party managed in this case by the AFORE (PRF).

Undoubtedly, the similarities in the regulatory models of investment adopted by reformist countries is an interesting matter of study, specially when, as we will see later, the model has been the object of strong criticism because it would not be consistent, among other reasons, with the lessons derived from the modern portfolio theory. Nevertheless, this is beyond the scope and objective of the present talk. In any case, it is likely that at least part of the explanation is the existence of a "mimicking effect" by which countries that make reforms follow the model adopted by "pioneering countries", particularly when it looks successful, making minor changes that would be justifiable by the peculiarities of the constituted authority of the respective country, or by some appreciation vis-à-vis specific defficiencies in the original model that are intended to be improved.

# 3. STRENGTHS AND WEAKNESSES OF THE REGULATORY MODEL

Has the regulatory model of the pension funds investment used in Latin America fulfilled its objectives? It is hard to give a unique response that adequately reflects the situation of each country. As we have said before, although the general model of regulation is shared, there are differences in the specific design that may have an impact on the results of each system. Moreover, the other circumstances that also have an effect on the composition of the portfolios and the results of the yield (the characteristics of the capital market and the investment policies of the administrators) vary from country to country as well. Bearing this caveat in mind, we will next try to identify the more "universal" lessons of application that can be obtained by studying the experience of reformist countries in Latin America.

# 3.1 Strengths

3.1.1. *High yield of the pension funds*. Circumstancial evidence shows that the yields obtained by pension funds have been high compared to the alleged levels that existed at the time the systems were created.

Table N° 8 shows evidence in that regard. Each country is informed as to the annual return of the pension funds and the accumulated yield as of December 2004 by the different

generation of members (for example, in Argentina, the accumulated yield by affiliates who entered the system in 1995 is 10.2%, while the accumulated yield of those affiliates who entered the system in 1996 is 9.4%). It is worth mentioning that in every country and for every generation of affiliates, even for the youngest generations that have only been contributing for one or two years, the accumulated yield is positive, and what is more, in most cases over 5% a year.

Table N° 8
ANNUAL AND ACCUMULATED YIELD OF THE PENSION FUNDS (1)

	Arge	ntina	Bol	ivia	Ch	ile	Colo	mbia	El Sa	lvador	Me	xico	Pe	ru	Uru	guay
	Annual %	Accumulated %														
1981					12.8	10.3										
1982					28.5	10.0										
1983					21.3	9.2										
1984					3.6	8.7										
1985					13.4	8.9										
1986					12.3	8.7										
1987					5.4	8.5										
1988					6.5	8.7										
1989					6.9	8.8										
1990					15.6	8.9										
1991					29.7	8.5										
1992					3.0	7.0										
1993					16.2	7.3										
1994					18.2	6.6							8.6	7.6		
1995	17.8	10.2			-2.5	5.5	14.4	11.0					5.6	7.5		
1996	19.8	9.4			3.5	6.4	15.8	10.6					5.8	7.8		
1997	14,4	8.1	0.0	9.4	4.7	6.8	11.7	10.0					11.1	8.0	6.4	16.0
1998	-2.1	7.3	8.6	10.8	-1.1	7.1	9.5	9.7			5.6	7.2	-4.8	7.6	7.8	17.5
1999	18.1	8.9	13.5	11.2	16.3	8.5	11.7	9.8	14.1	6.4	13.1	7.4	18.7	9.8	10.9	19.2
2000	3.9	7.2	10.6	10.7	4.4	7.0	7.8	9.4	7.9	5.0	7.2	6.4	-6.7	8.1	12.2	20.9
2001	-10.4	8.0	15.6	10.8	6.7	7.6	10.5	9.8	7.7	4.2	12.4	6.1	11.1	12.1	19.8	23.2
2002	31.0	14.9	15.6	9.2	3.0	7.9	9.7	9.5	2.4	3.1	4.7	4.1	11.3	12.5	40.6	24.3
2003	11.1	7.7	7.2	6.1	11.9	10.5	9.4	9.5	4.8	3.5	6.2	3.9	21.2	13.1	31.8	16.9
2004	4.3	4.3	5.1	5.1	9.1	9.1	9.6	9.6	2.3	2.3	1.6	1.6	5.6	5.6	3.6	3.6

<sup>(1)</sup> Accumulated for different generations.

Source: FIAP & personal info.

Another way to evaluate the results of the yield is comparing them with references that are relevant. For instance, a research compared the pension funds yield in the reformed systems of Latin America to the growth in salaries and per capita income during the same periods which is a measurement of the "underlying" yield that the contributions of the affiliates might have obtained, had the pensions been financed based on a "pure" allocation system. It was concluded from that comparison that to date, the accumulated yield of the pension funds in all reformist countries of the region is, with no exception, substantially higher than the growth of the real salary and the income per capita for the same period (see Table N° 9)<sup>5</sup>.

Table Nº 9
RATES OF RETURN OF INDIVIDUAL ACCOUNTS

Country	Real return from the beginning % (1)	Growth of real salaries (same period) % (2)	Difference in funds-growth salaries % (3)=(1)-(2)	Real income growth per capita (same period) % (4)	Difference in return funds-growth income per capita % (5)=(1)-(4)
Argentina	11.70	-0.80	12.50	-0.40	12.10
Bolivia	16.20	8.80	7.60	0.40	15.80
Colombia	11.80	1.40	10.40	-0.30	12.10
Chile	10.50	1.80	8.70	4.50	6.00
El Salvador	11.30	-0.20	11.50	0.50	10.80
Mexico	10.60	0.00	10.60	2.80	7.80
Peru	5.70	1.80	3.90	2.40	3.30
Uruguay	9.50	3.60	5.90	-0.30	9.80

Source: FIAP.

R. Palacios, "Reforms to pensions in Latin America: design and experiences" (2003). These figures do not match with those of the last Table because the periods used by R. Palacios are shorter (he goes as far back as 2002 or 2001 in the case of some countries, while the last estimates are given until 2003). The yields of the pension funds might as well be compared with that of some benchmark in the financial market, for instance, based on interest rates terms, or on the estimated return for an "optimal" unregulated portfolio.

Based on this circumstancial evidence, it can be then concluded that the investment regulation would not have been costly in terms of a lower yield, or at least that such costs —if any— had not hindered the results of the return from being significantly better than the expectations one might have had at the time the reform was decided.

- 3.1.2. The regulation has promoted a responsible management of the funds and has facilitated their oversight. The likelihood of capital losses for the affiliates due to fraud or conflicts of interests in every reformist country, has been the main argument of criticism against the new pension systems. However, ten countries have already established investment systems, and in more than one hundred years of experience there has been no case of this nature. Given the magnitude of these problems in other areas of the financial activity, particularly in this region, it seems to me that this result is admirable and important to highlight because it speaks well for the quality of the regulation, the stability of the oversight, and the resposibility of the institutions.
- 3.1.3. The limits could have helped avoid (some) capital losses. It is also argued that at least in some countries, the investment limits, particularly those which depend on credit rating, have protected pension funds from suffering capital losses due to insolvency of some of the issuers.
- 3.1.4. The existence of a detailed set of regulations might have helped increase public trust in the new systems. The adoption of individual investment systems meant a profound break with the tradition of social security in the region. Neither regulatory nor oversight agencies, let alone the public had first-hand experience with this kind of institutions, which brought about a feeling of uncertainty, and eventually insecurity, specially when the new systems began to operate. Besides, in many cases this feeling has been reinforced by the bad experiences the public has had with other financial institutions (banking crises; strong cycles in the stock market, etc.). In this context, the existence of a strict regulatory framework and a severe oversight agency have helped to overcome many doubts, and to increase public trust in the new pension systems.

#### 3.2 Weaknesses

3.2.1. The regulation would have had a negative impact on the pension funds return. It is argued that even though the yield of the funds has exceeded expectations and some market shadow rates, the investment regulations have not allowed administrators to choose from efficient portfolios, which is manifested in lower return levels than those that would have been possible within a different regulatory framework, and at a greater risk.

For instance, a recent study on the Chilean case concludes that in the absence of investment limits, pension funds in this country would be 10% higher than its current effective level. This contends that on average, the "costs" of investment limits would be between 500 and 1,000 dollars per affiliate<sup>6</sup>. Another study concludes that pension funds in Chile have had a worse performance than that of a deposit rate or the stock index<sup>7</sup>.

- 3.2.2. Pension funds are not well diversified. As we have commented, pension funds in Latin America are strong in government bonds. Thus, in almost every case, with the exception of Peru and Chile, more than 50% of the funds is invested in instruments issued by the Government (see Figure N° 1). A strong concentration on national economies can also be observed with too low an international diversification of funds. (see Figure N° 2). Finally, pension funds are also concentrated on fixed income instruments with four countries in which there are no variable income investment (see Figure N° 3). The low diversification would mean that pension funds are exposed to an unnecessary greater risk.
- 3.2.3. The regulation would have led to portfolios of low differentiation ("herd mentality"). The differences observed in the composition of the investment portfolios of pension funds for each market in Latin America are low, which for some is the

S. Berstein and R. Chumacero, "Quantifying the costs of investment limits for Chilean pension funds", Dec. 2003.

P.S. Srinivas and J. Yermo, "Do investment regulations compromise with pension fund performance? Evidence from Latin America", 1999.

(JUNE 2004)

90.0

80.0

70.0

60.0

50.0

40.0

30.0

20.0

10.0

0.0

Uruguay

Peru

Figure N° 1 Investment of pension funds in latam (June 2004)

Argentina Bolivia Chile Colombia El Salvador Mexico Peru Uruguay
Billions of US\$ 16,101,260 1,613,251 48,991,810 8,327,413 1,819,419 38,337,018 18,431,411 1,322,505

El Salvador

Chile

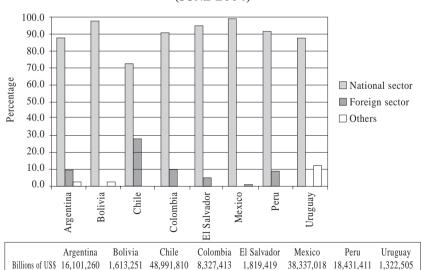
Colombia

Bolivia

Source: FIAP.

Percentage

Figure N° 2
INVESTMENT OF PENSION FUNDS IN LATAM
(JUNE 2004)



Source: FIAP.

100.0 90.0 0.08 70.0 60.0 Percentage ☐ Fixed income total 50.0 ■ Variable income total □ Others 40.0 30.0 20.0 10.0 0.0 Chile Colombia Salvador Argentina Bolivia Chile Colombia El Salvador Mexico Peru Uruguay

FigureN° 3
INVESTMENT OF PENSION FUNDS IN LATAM
(JUNE 2004)

Source: FIAP.

Billions of US\$ 16,101,260 1,613,251 48,991,810 8,327,413

result of investment regulation, particularly, of the demand for a minimum yield (see Table N° 10). The low differentiation in the portfolios is costly because it implies that affiliates cannot pick the kind of investment portfolio that best meets their preferences.

1.819.419

Although we have warned that the composition of investment portfolios of pension funds is affected not only by the regulation but also by the investment policies of the administrators and by market conditions; in the particular case of several countries in Latin America the influence of the regulation is decisive. In that regard, it suffices to recall the current limitations to invest in variable income or abroad.

3.2.4. The regulatory model used is associated to a high political risk. We have seen that the regulation defines a strict and detailed framework within which only managers can take

38,337,018 18,431,411 1,322,505

Table Nº 10 "HERD MENTALITY" IN LATIN AMERICA

	Government	Time deposits	Bonds	Stocks	Mortgage instruments	Others	Foreign
	%	%	%	%	%	%	%
Argentina (06.04)							
% average	67.4	5.1	2.1	10.6	0.0	5.4	9.3
SD	5.8	2.7	0.4	0.9	0.0	5.0	0.6
Chile (08.02)							
% average	33.9	17.3	6.2	8.7	12.6	6.2	15.0
SD	3.8	5.4	1.8	0.6	1.5	1.8	0.9
(Before multifunds)	)						
Peru (05.04)							
% average	22.9	10.4	14.4	37.2	4.1	2.3	8.8
SD	2.7	5.6	3.4	0.7	1.2	0.3	0.4

Source: PrimAmerica Consultants, Personal elaboration.

their investment decisions. This means that the authority with the power to define the content of the regulation, also has a decisive influence on the structure of pension funds portfolios. Consequently, there is the risk that the regulation is manipulated so as to use the pension funds to reach objectives different from those of the pension system.

The experience in Latin America provides good examples of this kind of risk. For instance, minimum limits for pension fund investment have been imposed on four countries in the region. In Bolivia, a percentage of the contributions of the pension funds must be invested in government bonds; a percentage of the pension funds in El Salvador must be invested in securities of the Social Housing Fund; for a long time in Mexico, a percentage of the pension funds has had to be invested in indexed securities, but at least for some time (I do not know whether this is currently the case) the only indexed securities that could be bought were issued by the Government; In Uruguay, and as a consequence of the way in which limits are combined, pension funds are forced to invest a minimum in government bonds (see Table N° 11).

These examples serve to draw the attention as to the political risk that is inevitably associated to a "quantitative" or "draconian" regulatory model.

### Table N° 11 Investment Limits

Bolivia	Both pension funds should invest a minimum of US\$ 180 million annually in government bonds between 1998 and 2013 / FCI must buy assets from FCC at book value.
El Salvador	At least 18% of the Pension Fund in securities of the housing social fund.
Mexico	At least 51% of the Pension Fund must be invested in bonds indexed to inflation. Until december 2001 only central government and Central Bank bonds were eligible to invest under this rule. From this date on, government & private bonds that are indexed by inflation are also elegible.
Uruguay	Minimum of government bond investment (lowers gradually through time).

*Note:* In Chile, there are variable income minimum limits for each kind of pension fund: Fund A (40%); Fund B (25%); Fund C (15%) and Fund D (5%).

In Argentina, Nación RPFA, has a minimum limit of 20% in social interest investment.

Source: FIAP & personal information.

#### 4. PROPOSALS FOR THE FUTURE

The choice of the most appropriate regulatory model of investment is a critical decision for the success of the pension system. Most importantly yet is the ability of the regulators to adapt the regulation in time according to the results of the system and the conditions of the economic framework. The procedure that is used to fix and change the limits is, therefore, an element that might decide the success or failure of the pension systems.

Where should the regulation be headed? Firstly, it is necessary to modify some regulations that today hamper a greater diversification of the pension funds. In particular, the limits for foreign and fixed income securities investments must be raised. At the same time, it is imperative to introduce the necessary changes so as to increase the diversification of pension funds among different issuers. Aside from the strong concentration in government bonds that, as mentioned earlier, account in many cases for 50% of the investments, it is no surprising that 5% of the funds or more is invested in one company or financial institution. Thus, it is likely that most of the funds are invested

in no more than 10 or 15 issuers. Evidently, this situation exposes pension funds to an improper risk.

Secondly, the minimum limits of investment must be totally eliminated, with the exception of the necessary limits in order to ensure an adequate diversification among the funds managed by the same institution in the case of the countries that have multifunds.

Thirdly, administrators must be also authorized to offer more than one pension fund to their affiliates. Multifunds allow affiliates to pick portfolios that best meet their preferences, and cushion the negative blow of the "herd mentality" on the capital market.

In summary, all of these proposals suggest a gradual liberation of investment regulations, particularly those refered to limits. I am convinced that a strict regulatory model is required when new pension systems start operating (particularly in cases in which capital markets are not sufficiently developed, and fund managers are new companies with neither a track record nor a reputation to protect). However, I also think that this regulatory model should be gradually replaced by another with minimum quantitative restrictions and more reasonable norms; in other words, a regulatory model in which pension funds could count with more latitude to decide the structure of the portfolio.

I would like to wrap this up by highlighting that investment regulation must not be used as an instrument to promote other objectives of economic or social policies different from those of the pension systems, no matter what the merits of such objectives might be. An old lesson in economic policies is to not use the same instrument to reach more than one objective. Pension policies is the necessary instrument to finance pensions and to not promote other activities of social or economic interest.

Most of the pension systems in Latin America started in the first half of the last century, accumulating financial reserves. Nevertheless, the design did not allow to protect them against the inevitable political pressures (also present in the current systems) to use those resources so as to finance other programs that seemed to have a greater social and economic merit. As a consequence, the

systems lost the resources that would be later needed to finance pension payments, and the financial crisis we all know was produced. With a herculean effort, these very countries have had to face the task of rebuilding those systems, providing them with new regulations —in principle, individual accounts with individual capital and a private and competitive management— in order to avoid the same problem. It would be extraordinarily irresponsible to make the same mistake of the last century, and to use again the resources that pension funds accumulate to promote objectives that seem the priority to finance pensions. Regulatory and oversight agencies of the new pension systems, together with the pension funds industry, have a major responsibility to avoid that our leaders and representatives make the same error twice.

### Chapter II

Perfecting the regulation

# Part I: Multifunds



The Chilean experience Joaquín Cortez



Challenges in lauching multifunds in Peru

JORGE RAMOS



Challenges in lauching multifunds in Mexico
ISAAC VOLIN-BOLOK

### THE CHILEAN EXPERIENCE

JOAQUÍN CORTÉZ<sup>1</sup>

When I was asked to talk about the Chilean experience with the multifunds I thought that two years of experience would perfectly fit in twenty minutes. The truth is that my enthusiasm to convey this experience has led me to go too fast. Besides, I apologize because my presentation is not as structured as Augusto's. Basically, I thought my contribution here was to provide a testimony of what this two years have been, trying to structure and carry out the multifunds

I would like to start by explaining that there was only one fund at the beginning. In May 2002 a second fund is authorized which became fund number two. It was a fund to which only individuals who were older than 55 had access. The authority was worried about the behavior of the stock markets and thought that those individuals who were close to retirement could not expose their future pensions in those markets, so they were authorized to be transferred to a 100% fixed income fund. The person who was transferred to this fixed income fund could not go back to variable income funds. But the idea was not successful among people. Only 8,000 individuals chose this fund. (See Figure N° 1). Probably,

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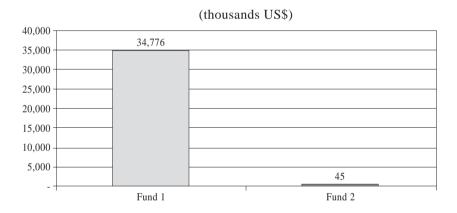
He was formerly the Vicepresident of Bankers Trust in Chile. Worked as Director for the Central Bank of Chile and as Chief Development Officer and Chief Financial Officer of Banco de A. Edwards. He was also the founder and first Chief Executive Officer of Santander Investment, among other inportant positions.

He was Professor of Economics at Universidad Católica and he has participated as speaker in several Conferences and Seminars. He also worked as columnist for Qué Pasa Magazine.

there was not a big interest neither in the authorities nor in promoting this fund.

Therefore, there were affiliates from different walks of life, different genders, and different age brackets in the funds. Table N° 1 shows that more than 70% of the affiliates were under 40 years old, which led us to believe that we were forcing very different people to share this fund, and above all, there was something we did not know: people with different risk aversions were in the same fund, and they were all obliged to fit in the same suit.

Figure N $^{\circ}$  1 Affiliates and size of funds type 1 and 2 (As of august  $31^{st}$ , 2002)



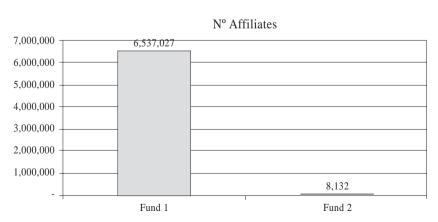
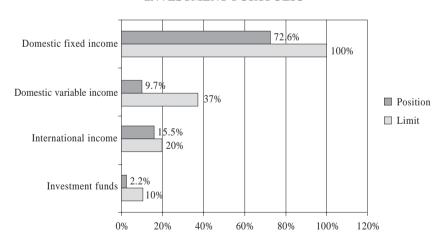


Table N° 1 Distribution of affiliates by age

Age	0/0
Under 40 years old	70.90%
Over 40 years old	29.10%

As we can see in Figure N° 2, domestic variable income accounted for at least 10% (the maximum limit by law was 37%), and international investment whose maximum limit was 20%, accounted for approximately 15%. That 15% investment was basically international variable income, the proportion of international fixed income was scarce because, as our superintendent said, we understand very well the value of domestic fixed income, the value of a domestic fixed income indexed to inflation which, therefore provides a great deal of stability to long term funds. Domestic variable income was less than 10%, basically due to an offer not a demand problem.

Figure N° 2
INVESTMENT PORTFOLIO



As I said, it was a one-size-fits-all situation for affiliates, and there was plenty of criticism, mainly, because the affiliates of the fund were young. The proportion of variable income of these funds was

scarce and we had to have more stock in the fund. Somehow, we, managers, felt that it meant elderly people and those individuals with a lower risk aversion were obligated to have more stock than they wanted.

In that scheme, then, multifunds were born out of a need for more alternatives for affiliates to adjust their portfolios in accordance to their risk preference. And two questions arose: how to differentiate the funds? And how to assign affiliates to the different funds?

As far as the first question goes, it was decided to differentiate funds according to the proportion of variable income in each fund, and we have a wide range: form fund E, with a 0% proportion in variable income up to fund A which may have between 40% and 80% in variable income. In order to avoid that funds overlap, the regulation mandates that fund A must always hold more stocks than fund B, and fund B in turn, more stocks than fund C and so on, so that those ranges did not allow funds to overlap. Consequently, the five alternatives of the funds were created which are shown in Table N° 2 differentiated basically by the percentage in variable income.

Table N° 2 Allowed range in Variable income

Fund	From	Until
A	40%	80%
В	25%	60%
С	15%	40%
D	5%	20%
Е	0%	0%

The second question was how to distribute affiliates among the multifunds, and the answer is by choice. But what happens if affiliates do not choose? This decision, in my mind, is far from trivial, it is a hard one at that, and consequently, we had to consider the fact that people might not decide. In this case, the law stipulates that those individuals who did not choose were going to

be assigned to the multifunds by age. Men below 25 were going to be assigned to Fund type B, a fund with a considerable stock component; men between 35 and 55 years old, to Fund C; and those who were older than 56 in the case of men, and 51 in the case of women, to Fund type D. No one is assigned to either Fund A or Fund E in case they do not choose. People have access to Funds type A and type E only by choice. See Table N° 3.

Table N° 3
DISTRIBUTION TO TYPE OF FUND BY AGE BRACKET

Men	Until 35	from 36 to 55	56 and up
Women	Until 35	from 36 to 55	56 and up
Type A			
Type B			
Type C			
Type D			
Type E			_

The only limitation is that people who are older than 55 years old cannot choose Fund A, the fund with the most stocks; and experience shows that given the results of these funds —which have had a better yield-, there are people who are older than 55 that are not so happy with the prohibition because they feel somewhat restricted. What they cannot invest of their mandatory saving in Fund A, is invested in voluntary savings.

What is the starting point of the multifunds? The Multifunds started at the end of September 2002, the law stipulates that those individuals who do not choose will be transferred to the funds according to their age, and it will be done in two stages: a first stage that will take place in the last quarter of 2002 and a second one scheduled for the last quarter of 2003.

I would like to make some observations. First and foremost, from Figures N° 3 and N° 4, % only the first stage had been implemented back then% it can be inferred that many people

Figure N° 3
ASSETS BY TYPE OF FUND
(AS OF DECEMBER 31<sup>ST</sup>, 2002)

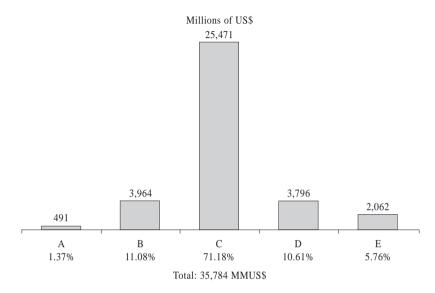
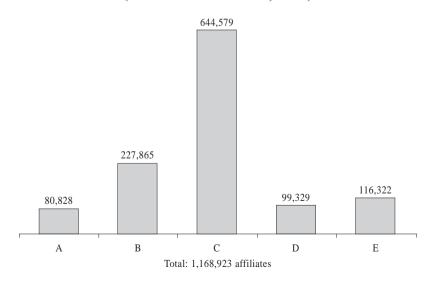


Figure N° 4 Distribution of affiliates by type of fund (as of december  $31^{\rm st}, 2002$ )



actively chose multifunds owing to an information campaign organized by the authorities and the administrators. There was a big information campaign.

Secondly, we can notice that many people opted for Fund C. From our point of view, this shows that our decision , the choice of multifund was not a trivial one, it was a hard one.

Third, in spite of the criticism that the unique fund had little variable income, we can see that a few people initially chose fund A, there were more people who opted for Fund E. We think this choice is influenced by the behavior of the markets in the period prior to the implementation of the Multifunds. We see that the indexes had fallen between 35% and 23% in the evolution of the stock markets in the six months prior to the implementation of the Multifunds. So, one had to be really brave to choose variable income funds in a scenario of these characteristics because, somehow, people tend to be influenced by past returns.

We never know how markets are going to behave. Investors know that market timing is one of the most difficult things to do, and the odds of succeeding are too low. But the authorities did it when they launched the Multifunds. This was a timely reform. Multifunds started in September 2002, and as is shown in Figure N° 5, in Octubre 2002 there was a small recovery of the markets and in March 2003, the rally started. Good luck was on the multifunds side, which was very fortunate for affiliates, because they chose funds A and B, and those with a higher risk aversion could benefit from short term earnings; it was good for managers, because otherwise we would have been critized for not having enough variable income in the former unique fund; and for regulators, because they gave people the opportunity to pick from different alternatives. I think it was good for everybody.

Now, the story can be told in many ways. Someone could say that Multifunds start when the risk/reward had risen to its maximum level. I think it was pure luck, but it also coincided when the risk/reward calculated by different methodologies, had risen significantly.

How have assets evolved? Obviously, stock market yields have affected the way in which people have moved among the assets. Fund A, that started with less than 500 million dollars, has about 4,200

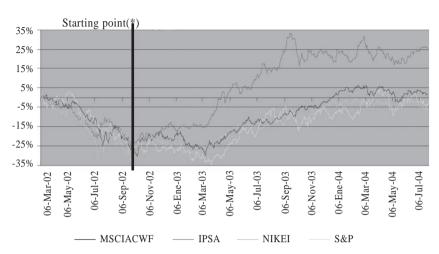
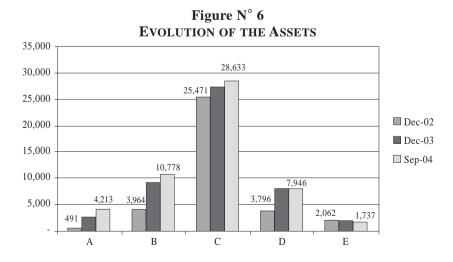


Figure N° 5
EVOLUTION OF THE CAPITAL MARKET

million dollars now (See Figure N° 6). There is something I forgot to mention before that had to be solved when the multifunds first started, once people shifted from one fund to another, and it was the fact of whether to transfer money or assets, and the authority allowed to transfer assets. A critical issue was how to do it, and both fund managers and the authorities had to figure out a way to transfer those assets without transfering the capital of one affiliate to another.



As I mentioned earlier, stock markets have affected the choice of multifunds: Fund A has grown, and Fund E has decreased. Let us see now the number of affiliates who are currently 340,000 in Fund A, as opposed to the 81,000 affiliates with whom it began. The number of affiliates of the funds with more variable income has increased.

I will ask you to draw your attention to Figure N° 7: If we add the number of affiliates in August 2004, we will have roughly 7.2 million people although we know that the number of affiliates in Chile is approximately 6.5 million, which is explained because the law allows funds to be in more than one multifund. Before, people were in the same suit, now the multifunds offer five different suits, five different sizes. In addition, -and this is verty important- it allows that someone can pick the jacket of one suit and the pants of another one. And I know this is very comfortable.

What we expected was that young people chose funds with a higher risk and, it was just like that. Logic tells you that young people, in case of a strong fall in the value of stock assets, in the value of variable income assets, have more time to compensate that fall with an increase of their savings. What we expect is that young people choose the variable income funds. But we realize there are older people who are prone to risk and, therefore, in fund A there is a fair amount of people who are older than 50 or 55 as

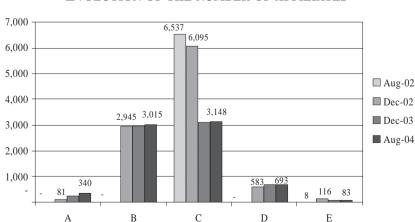


Figure N° 7
EVOLUTION OF THE NUMBER OF AFFILIATES

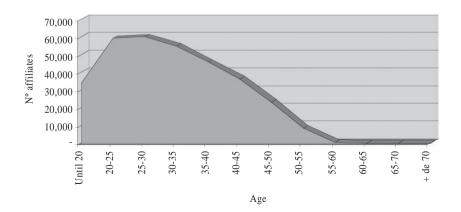
shown in Figure  $N^{\circ}$  8. In the case of those individuals who are older than 55, the funds they have represent voluntary funds.

I think that the most important point is that people must pick funds according to their risk aversion and to that end there must be an enlightening process on the part of fund managers, so that they can educate people on what this risk contends.

Where is the added value of the multifunds? I think the aggregate value of the multifunds is allowing individuals to choose from clearly different alternatives, such as the ones we have: from Fund E, only with fixed income to Fund A, with approximately 80% invested in variable income. In general, since the multifunds started, the proportion of variable income in Fund A has always been close to its cap, roughly 80%. And the logic here has always been that one has voluntary access to this fund. Consequently, those who chose this fund, voluntarily required stocks and somehow we feel we have a mandate from people: provide a high stake in stocks because otherwise they would not be in this fund.

We have five alternatives. And when we look at the offer from international markets, we see aggressive funds, balanced funds and conservative funds. Here we have five clear alternatives from which people can choose.

Figure N° 8 Distribution of affiliates by age in Fund A



Now, what we always wonder –and I talked to Jorge Ramos about this— is what would happen with the demand for variable income when multifunds started, and we had many assumptions. Obviously, the demand for variable income would depend on two things: what fund people would choose and in what range of the permitted limit would managers be in. And when we came up with the estimates the question was where would that variable income come from. Because we saw there was going to be an increase in the demand of variable income and we did not know where the offer was going to come from. One of the solutions was that it may have come from abroad, and that meant an increase in the limits of international variable income, and the other one was to let the prices of domestic assets go up. The truth is that we have to recognize that the authority was very flexible in gradually changing the limits of international variable income. Every time we were close to those limits, they were amplified. I think that without this widening it would not have been possible to create differentiated funds (See Figure N° 9). And nowadays, despite the limit is 30%, and we are still below, we are hearing of a new widening of limits.

Maybe the hardest point to explain regarding multifunds is the concept of risk. What happens with the multifunds is that affiliates by having the possibility to choose, look for more advice in the salesforce who, in turn, goes to managers to understand the concepts, and so far the returns have been so good that people tend

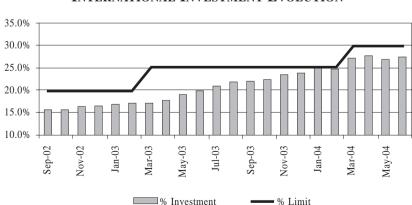
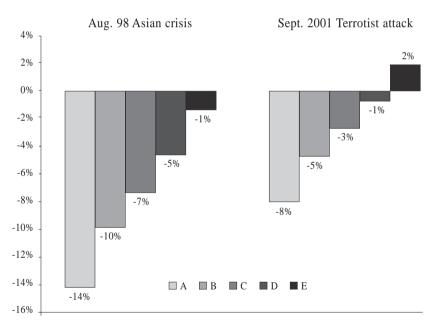


Figure N° 9
INTERNATIONAL INVESTMENT EVOLUTION

to move, as we have seen towards funds with a greater proportion of stocks, and the system has had no clear negative experience, therefore, multifunds have not been tested definitively. And we have explained to people what would have occured if the attack to the Twin Towers had taken place today with the current structure of the multifunds, and the answer is that fund A would have plummeted 8% in September, and Fund B, 5%; on the other hand, Fund E would have gained 2% due to the movement towards safer assets (See Figure N° 10). If you are capable of tolerating a plunge of 8% of your portfolio in a month, you are able to be in Fund A, if not, we do not want to give you a heart attack and we think that Fund A is not for you.





Fortunately, after the attack on the Twin Towers the markets recover from the 8% loss that Fund A would have had. In October, it would have recovered 3%, and in November, 4%. The markets recover in this case but it could have been different. I think that, probably, the most important challenge that managers have is to

teach and convey the concept of risk because we want that our affiliates have a good yield, but we want them not to have any heart disease.

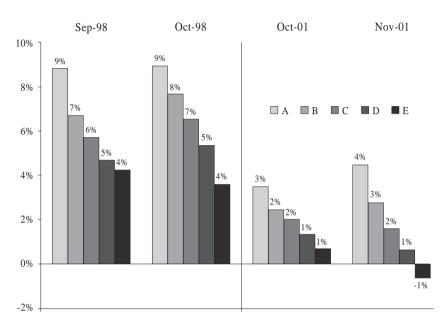


Figure N° 11 ... THE MARKETS RECOVER?

Fortune has been on the multifunds side which is reflected in the yield. Figure N° 12 shows that in 2003 Fund A yielded 26.9% in real terms above inflation; the fixed income fund or Fund E also gave a 3.3% yield above inflation. All of the funds have so far had positive returns in real terms above inflation.

I think people are satisfied and, above all, have understood something that is really obvious in financial theory. The most important factor in the yield is the choice of the asset class which is translated in the choice of the multifund, and consequently, there is a better approach from the individuals to the managers.

As regards the accumulated yield from the beginning, from September 2002 until September 2004, we see in Figure N°13 that all the funds have a positive yield and the individuals who were

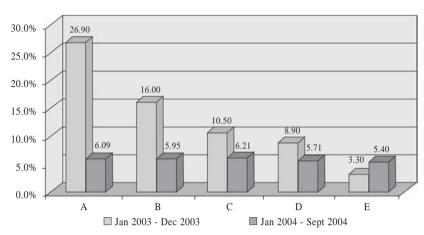
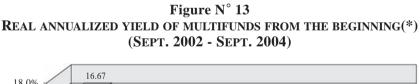
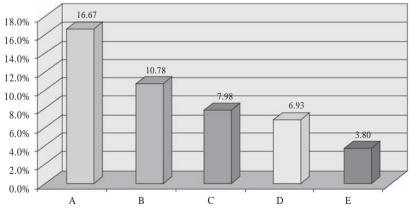


Figure N $^{\circ}$  12 Real yield of multifunds in 2003-2004

allowed to pick variable income funds have had remarkable yields which has contributed to international investment.

I would like to finish up by saying that I showed you that the amount invested in domestic variable income once the multifunds started was 10%, nowadays that proportion is between 15% and





(\*) September 27th, 2002.

16%. What was expected is that with the opening to foreign investment the demand for domestic assets would go down, but the thruth is that it has been the other way around. A big chunk of the interest of the managers over the last couple of years has been in domestic variable income assets.

I cannot develop the conclusions but I will enumerate them:

- 1. The multifunds system created a real instance for affiliates to participate for the first time in the investment of their own pension savings.
- 2. The reform was necessary to allow affiliates to choose from the investment portfolio that best suited their risk aversion.
- 3. The possibility to choose a multifund has led people to go to the PFAs. A high percentage of affiliates has participated in picking Pension Funds even though it is not a trivial decision.
- 4. The reform was timely. It allows affiliates with a greater appetite for risk to be rewarded in the short term.
- 5. The multifunds portfolio has been biased toward variable income due to the steep existing risk/reward in the market, specially during 2002 and 2003;
- 6. Which meant an increase in the demand for variable income assets. The increase in the limits of international investment allowed to satisfy this demand and create five clearly differented funds.
- 7. Fortune has been on the side of the Multifunds System. Nevertheless, the caveat is that the choice of the multifunds must not be based on past yields.
- 8. Notwithstanding the stock exchange performance over the last months, the affiliates of the stock funds have not been exposed yet to significant negative shocks.
- 9. Multifunds have improved the financial culture of the affiliates. Nevertheless, this is a continuous effort. The

most difficult part is to explain what the risk in the different multifunds are all about.

10. The reform has brought challenges for everyone: affiliates, managers and regulators.

## CHALLENGES IN LAUNCHING MULTIFUNDS IN PERU

JORGE RAMOS<sup>1</sup>

The Multifund law was published in the second half of 2003 and the regulations by the end of 2004. Although part of the operative regulations are still pending, there is a high expectation on the issue in Peru. The implementation deadline is 300 days starting the date on which the operative regulations are put in place. It is estimated that by the end of 2005 the first shifts from one fund into another will take place. For that matter, there is a series of regulations: the listing and registration of the funds before the Superintendency, the launching of the literacy campaigns for the affiliates, and the process of gathering the information of the affiliates, until finally the first changes are made

Although the first changes might be seen by the end of 2005, it is important to notice that in this process the profiles of the funds and their structures will have to be defined much earlier. It implies the complex task of anticipating the preferences of the affiliates, the number of individuals who are going to shift and where. It is also important to get to know the rules of the game ex-ante in order to structure the bonds in accordance with the limits that will prevail when the multifund system is fully operational.

The Peruvian regulation stipulates that PFAs can offer more than one fund with no limit for the total of the funds. Nevertheless, there are limits of investment in the regulation for three types of funds; consequently, PFAs have decided to start all three of the

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funds but, in reality, listing additional funds is optional. This is also important and recommendable to be faced progressively. Migrating from just one fund is a transcendent step and so is the fact that affiliates have the possibility to choose from other funds.

The three multifunds shown in Figure N° 1 will basically be an aggressive fund, a mixed fund, and a conservative fund, only for those who are older than 60 and really close to retirement, and in case they do not make up their minds, they would automatically be part of the conservative fund, but if they chose differently they could go to any of the other options. And as for individuals below 60 who do not choose, they remain in the mixed fund which will be pretty much where they currently are.

5% 55% 40% <35 years 36 and 55 years >55 years 850,000 -Fund 3 Fund 2 Fund 1 750,000 650,000 550,000 450,000 350,000 250,000 150,000 50,000 +21 <2 +56 S/I +26+31+36+41+46+51+61>6 35 55 60 65 25 30 40 45 50

Figure Nº 1
DISTRIBUTION OF AFFILIATES BY AGE

Source: SBI.

If we check the age structure of the affiliates' portfolio in Peru, we will see that the private pensions system is still quite young. We can see that the age of most of the affiliates ranges from 30 to 35 years old, which led us to believe there will be a bigger appetitite for aggressive funds. We have come up with a simulation as to how they could be split if we only considered that the age bracket

distributes individuals into the different funds. The results indicate that 55% would be in the aggressive fund. Those individuals who can take more risk are precisely the youngest who still have plenty of time ahead of them to recover from market fluctuations; 40% would fall into the mixed fund and only 5% of the individuals would qualify as those who are close to retirement.

Now, getting into detail as to how multifunds will work out in Peru, we have to be conscious of the limitations of the markets. In the case of Peru, pension funds account for roughly 7.5 million dollars. They have had an annual increase of 20%. And if we analyze some indicators of the magnitudes of the domestic market, we can see that the total capitalization of the stock exchange in Peru is 15 billion, slightly below the double of the funds that are managed in the private pension system. But with regard to transaction levels and depth of the market they are too low in relative terms. The average amount of daily transactions is 9 million dollars which accounts for 0.1% of the fund. This figure is inflated by the particular operations made (acquisitions, or the crossing of blocs). Then, the percentage of the fund that might be traded in the domestic stock exchange is very reduced.

In the fixed income market we have had a flow of more than 2,000 million dollars in new instruments. It is sort of what we have been seeing over the last couple of years. The role of the government as an important issuer in the domestic market is included in this volume. But the volumes traded are also very low (84 million dollars), we are talking about the traded volume in a month in the secondary market. This accounts slightly for more than 1% of the total of the funds managed by the system.

Serious limitations will be faced when the decision of shifting the funds from one type of asset into another is made. It is precisely then that the important role of the component of foreign investment takes place, which provides the inexistent flexibility in the domestic market.

If we analyze the evolution of the yield of the private pension funds system in Peru, as shown in Figure N° 2, we can infer the imminent need for a multifunds system. The level of volatility is quite high and represents a damage for those individuals who are close to retirement. As an illustration, the individuals who are about to retire ask their PFA what their yield will be at the end of the month, because if the pension is estimated this month they will

have one figure (life annuity), but if the yield goes down, the pension is low, and if the former goes up again, the latter increases too. This is a direct effect of the high volatility of the fund. In reality, there are cases in which a person that could go into retirement decided to wait one more year: he can be damaged and his pension may be substantially different. We are talking about variations of the yield in nominal terms of 23% to less than 1% a year. The role of the conservative fund for those individuals who are close to retirement is fundamental, and if in Chile the first thing that was done was to implement that second fund, what is being done here is implementing both extremes because we see that we have a high component of young affiliates.

30% 25.7% 24.3% 23.2% 2.5% 21.2% 18.7% 17.8% 20% 17 4% 16.6% 12.9% 15% 11 9% 11.1% 11.1% 11.3% 9.8% 8.6% 10% 5.8% 5.6% 5% 0.6% 0% -5% -3.0% -4.8% -6.7% -10% 1997 1998 1999 2000 2001 2002 2003 2004 1994 1995 1996 ■ Nominal Real

Figure N° 2
YIELD OF THE FUND

Source: Monthly Bulletins SBI.

Note: As of 2004 the annualized accumulated nominal yield of the PPS fund was 11.9% and the real was 7.57%

As regards the working of the multifunds system in the country, the elements that individuals should be taking into consideration when choosing which fund will generate their pension saving are as follows

- First, the investment horizon for each person.
- Risk aversion, because there are funds that will be more volatile than others.
- The knowledge of the market is also important for the individuals who take the risks, to be aware of what that contends.

- Definitely, the remaining years to go into retirement must be factored in.
- Diversification: There are individuals who have other sources of savings and manage their personal savings in another kind of investment and the funds they have in the private pension system should be part of that diversification.

An important issue in the Peruvian case is that even though the exposure to variable income will be a key element in the decision making process, because it is an element that will differentiate even more the three types of funds, the investment component abroad will also play a very important role. In order to structure the different multifunds, we will have to resort to foreign investment but in different proportions. Although the limit to invest abroad is applied on the basis of the calculation of the portfolios of the three funds that will go abroad, inside each fund there may be a very different percentage of foreign investment, and it will be up to each PFA to allocate those levels to each fund. Then, affiliates will face the decision of what level of variable income they want to have in their portfolios; and there will also be an important difference in the component of foreign investment abroad.

If we could push the limits provided by the regulation and differentiate the three funds to their maximum, the products that would come out of the market would have the following characteristics: basically, as shown in Figure N° 3, an agressive

Profile by type of instrument 5% 100% 10% 15% 30% 80% 45% 60% 60% 40% 20% 0% Fund Type I Fund Type II Fund Type III Preservation Mixed Growth ■ VI ■ FI  $\square$  ST VI=Variable income instruments FI=Fixed income instruments ST=Short term

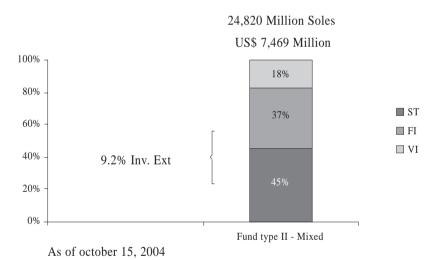
Figure Nº 3
STRUCTURE OF THE MULTIFUNDS

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fund with 80% in variable income; a mixed fund, very similar to the current one with 45% in variable income; and a conservative fund with a maximum of 10% in variable income. It must be understood that the more different the products, the better the benefit for the user because he/she has better choices.

Figure N° 4 shows the current structure of the fund managed at present, and has been dubbed fund type 2; the mixed fund is divided into three components: short term instruments, fixed income and variable income. For each short term instrument, there is a surplus of instruments in the domestic market, however, the limitations of the market are quite restrictive for both fixed income and variable income instruments.

Figure N° 4
CURRENT STRUCTURE OF PPS<sup>2</sup> PORTFOLIO



There was a simulation of what might occur in case multifunds were implemented tomorrow and the limits were pushed the furthest which is shown in Figure N° 5, with the objective of maximizing the difference of the three products that go into the market, based on three assumptions.

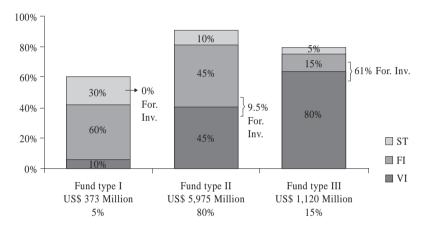
<sup>&</sup>lt;sup>2</sup> PPS: Private Pensions System.

- 20% of the affiliates is transferred;
- 5% goes to the conservative fund;
- and 15% to the aggressive one.

Figure N° 5
PROJECTED SCENARIO

20% of the affiliates transfers Fund 1:5%, Fund 3: 15%

\*Required investment abroad=17%



These assumptions are backed by the age bracket of the affiliates, and also by the analysis of the Chilean experience. Then, we think this is a likely scenario.

When putting the portfolios together we have had to make two important assessments:

In order not to overheat the markets or put bigger pressure on domestic markets of both variable and fixed income, we have assumed that the higher requirements of stocks would be covered with the international market. Given that the domestic market does not have enough offer or could generate a bubble (a heating in the prices if we want to cover this fund with domestic stocks), then, we resort to the international market to get both variable and fixed income instruments that will be required to optimize the structure of the multifunds.

 Basically, the whole component of international investment has been assigned to the aggressive fund which would have 61% of investments abroad. We have left the mixed fund at the current levels and we have not assigned international investments to the conservative fund.

The truth is, investment abroad has been assigned to the aggressive fund. It could be allocated somehow, but no matter how you do it, a greater investment abroad than that allowed by the Central Bank will definitely be required. The demand would not be lower than 40% if we want to offer these products and provide the benefits of a multifund scheme.

This implies that if we add the components of the investment abroad that will be required by the three funds, the requisite of foreign limit abroad needed if multifunds were implemented today would be 17%. And as I mentioned before, this is an element that should be known in advance so as to structure the multifunds

#### 1. IMPACT ON THE DIFFERENT MARKET AGENTS

#### 1.1 Capital market

Demand by stock will increase and so will investment abroad. Investment abroad will play a double role: on one hand, it will act as an escape valve to stop the domestic market from overheating and creating bubbles. This is a very important role, both for the variable income market as well as for the fixed income market; and secondly, the role of foreign investment is critical to allow flexibility for the transfer of funds

Timing was good for the Chilean case and so was the time in which multifunds were launched which coincided with an increase in the stock market. To starting with a positive trend in the market is an edge, but what will happen the day in which that trend goes in the opposite direction? Because there will be a correction at some point. And how will many people at that point decide not to be in the aggressive fund and shift to the most conservative funds? This is a very difficult subject to estimate on solid grounds, because so far it has not given any practical results. When that happens the liquidation of positions will be applied, and that is why the aggressive fund will be tilted toward international

investment, so that when the papers are sold the market does not collapse, which might occur in a market with the depth restrictions and limitations of our domestic market.

A greater demand for foreign currency will be another effect on the market, which is associated to foreign investment as well as to market hedging, basically exchange risk hedging. The regulation to make hedge transactions has already been implemented and it will be active as foreign investment is implemented, because the idea is to isolate the exchange risk of international diversification.

Finally, the position in short term instruments that pension funds have today will be reduced. This is very healthy because nowadays there is a suboptimization of the portfolio with regard to the absence of other investment options. A high percentage is unnecessarily concentrated on short term instruments.

#### 1.2 Private pensions system (PFA)

In terms of the impact on the PFAs, investment will have to be strengthened, and the decision making process redefined. Perhaps the most important decision will be the variable income component. The hardest part will be to decide the component of international investments each fund will be assigned.

Thus, it will be necessary to define the criteria to eliminate conflicts of interest so as to clarify that one fund will not have privileges at the expense of another one. The way in which orders will be allocated is when the buying between the different funds is executed. Another important issue is the methodology to partition Fund 2, because at the beginning this fund should be split to create the other funds. The information and control systems must be adapted, and the staff must be trained. There is an enlightenment job that must be done for affiliates to make their own decisions.

#### 1.3 The affiliates

As far as affiliates are concerned, they will have to be more knowledgeable of the alternatives and choose which funds more adequately meet their needs. Most importantly, they must decide based on their own assessment; of course, the personnel of the PFAs will have a great influence. They will have to watch the results and decisions periodically. And most importantly, the decisions must be funded and long term.

It will be a complex task. The two funds will be three: one conservative fund, one mixed fund, an another aggressive fund. The conservative fund is the one which invest the most in fixed income, so it is the most conservative from this point of view; but if we consider that the aggressive fund is the one with the most investment abroad, there might be a much more conservative element there than investing in fixed income depending on the market conditions of the country. Which is, then, the aggressive fund and which the conservative one? That will vary depending on how the affiliate sees the market, and it will be more revelant if we realize that the launching of multifunds will be during the elections in the country.

#### 2. CONCLUSIONS

The fundamental objectives of the multifunds are to improve the expected yield of the pensions, to let affiliates have more participation and, therefore, a sense of ownership of their funds, because this is another mechanism through which the affiliate can affect his or her decision to take early retirement: one way to do this is by increasing the contribution, and another way is by taking risks. Even though the age for retirement is 65, there is a possibility to take early retirement based on how the credit balance of the account evolves. Consequently, the decisions that can be made are quite important because a person could go into retirement many years before, if he or she chooses the right fund.

Another objective is the introduction of a wider array of investment alternatives, and multifunds will be the best tool to go against the crowd and to be able to design tailored mechanisms.

The bigger the differentiation between the funds, the better the benefit. What do we need in order to come up with a bigger differentiation between the funds? We need to be aware of the limitations of the Peruvian market and the risk associated with that, therefore, we need (and on that we all agree) a higher foreign investment limit so as to have the flexibility required, and most importantly, to know in advance which the investment limit abroad will be the day the multifunds begin.

### CHALLENGES IN LAUNCHING MULTIFUNDS IN MEXICO

ISAAC VOLIN BOLOK<sup>1</sup>

The objective of this talk is to comment on the following topics: first of all, what has been the evolution of the investment scheme in Mexico; secondly, I would like to show you the initiative we are about to implement to enter into the foreign securities and variable income market; and lastly, the challenges of implementing Siefores,<sup>2</sup> as this project has been dubbed.

Table N° 1 briefly shows how far we have gotten in Mexico over the last three years with regard to the investment scheme; specially in terms of the elimination of restrictions that did not contribute to the diversification of the portfolio; and, the elimination of restrictions by type of instrument and issuer which by no means represents a contribution to the investment. This is closely related to what Augusto Iglesias commented in his presentation.

This way, for example, the system started an investment scheme which used to have limitations to invest a minimum of 65% of the assets of the fund in government securities. Today, there are no

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Currently, he is the President of the National Commission of the Savings System for Retirement (CONSAR) in Mexico, and has a vast experience in financial regulation.

He has previously been the General Director of Analysis and Supervision of Methodologies at the National Banking and Securities (CNBV). He was also awarded the National Prize of Financial Investigation granted by IMEF in 1988.

Siefores.- Mutual Fund Complex specialist in Retirement Funds. These are the funds through which the resources of the workers managed by Retirement Funds Administrators (Afores) are invested.

Table N° 1
EVOLUTION OF THE SIEFORES INVESTMENT SYSTEM

Outline	Before	Now
Eliminate minimum limits and restrictions by issuer.	Governmental(65% minimum). Private (35% maximum) Financial agents (maximum of 10%).	Government, Private, States, Municipalities, Government-controlled and Financial Agents with no limit.
Regulate the concentration of risk according to credit rating.	10% by issuer. Issuers AAA and AA.	By issuer: 5% in AAA, 3% in AA and 1% in A.
Increase the oportunities to invest in foreign exchange bonds.	Only government bonds in dollars.	Governmental and Private bonds in dollars, Euros and Yens.
Allow the use of derivatives.	Cash.	Cash and derivatives of permitted asset-backed securities.
Efficiently controlled market risk.	65% minimum in bonds with maturity or rate revision lower than 183 days.	A Weighted Average Term of 900 days was temporarily used and it was later substituted by VaR.

inadequate limits. As Augusto Iglesias said before, there is a fine line between this and to say that pension funds must be invested in a specific sector, which would be the worst case scenario.

In addition, we enlarged the scope of prospective issuers in terms of private bonds, federal institutions of the Mexican Republic, municipalities, and government-controlled companies. I would also like to highlight the issue of currencies, since we have included euros and yens as well as derivatives.

These were the most important changes that were achieved over the last three years as far as the investment system is concerned.

Nonetheless, Siefores funds were still stuck to investing in "domestic debt" instruments and this evidently limited the expected returns, and generated a strong risk of concentration. That is why opening the investment system to foreign securities and variable income held water.

In April of this year, CONSAR, the caucus that must authorize the changes in the investment scheme of the Savings System for Retirement, authorized three changes to the investment system:

- 1. Create or start up the Siefores funds, with two funds that will be further explained afterwards.
- 2. Include new types of instruments so as to contribute to the improvement in their performance.
- 3. Allow the investment in new markets and new issuers to lower country risk.

Before explaining how the Siefores funds will work, I would like to go through three key elements that the Caucus established as conditions for the changes to the investment scheme and that refer to the same number of principles that are present today in the system.

The first one is the daily market value of all the instruments in the portfolio. We consider that this is fundamental because it generates the adequate incentives in the savings management, rewards and penalties to the managers who make good decisions and prevent cross subsidies between affiliates who go in and out of an administrator or change to another one. It has been argued whether or not the daily market value breeds herd mentality, and the answer we have is that there is no evidence this constitutes a herd mentality factor. From our perspective, herd mentality occurs mainly because of the way in which investment managers are rewarded in each administrator, and that determines the annual compensation of the manager. That is the real reason for herd mentality to occur.

The second principle of our system is the daily transparency of all securities in the portfolio, which allows us to verify the compliance of the Siefore to the investment scheme that is the investment vehicle of each administrator.

Lastly, the third principle is the charge to the workers of only the necessary brokerage expenses. This means the worker was not charged twice for the investment of his or her resources. The commission paid by the worker to the administrator is a general concept, an all-in commission.

As far as the Siefores funds are concerned, and specifically variable income investment, the Caucus approved a 15% exposure

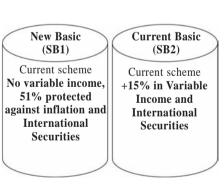
of the asset of the current basic Siefore where the money is invested at present, given that we only have one fund. It was done in this way to differentiate the current basic Siefore from the new basic Siefore. The latter will be a fund free of variable income.

Allow me now to provide some facts. In Mexico, the variable income investment issue is very controversial. It may seem unbelievable that people in Mexico invest very little in variable income, or they practically do not invest at all. This has to do with cultural factors as well as unfortunate events that took place in the Mexican stock exchange 20 years ago.

As we can see in Diagram N° 1 the fund on the right —which is now comprised of the 40 billion dollars the Mexican system is worth— will be the default option for all the workers but those who are 56 or older, or the ones who choose not to invest in variable income. One of the most important elements of the scheme is to generate variable income investment by default to increase the expected yield.

#### Diagram N° 1 SCHEME OF SIEFORES FUNDS

56-year-old workers or older who decide so, and those who are assigned will be transferred to the New Basic SB1 (with the current scheme)



The default option for all the workers, except for those older than 56 years old, will be the Current Basic SB2 (current scheme + variable income)

Variable income investment is peculiar in that it will be made through "Notes", whose capital is protected upon maturity, and its performance tied to index shares. I would like to let you know the reasons for this and its repercutions.

As mentioned above, savers in Mexico have been reluctant to invest directly in stocks. If we analyzed the composition of mutual

funds in Mexico, we can see that if we add up all the resources, only 15% is invested in variable income and 85% in fixed income.

Because of this reality we have come to the conclusion that the easiest way to introduce variable income investment is through these protected capital notes whose main characteristic is that the performance of a zero coupon bond creates the effect of protecting the capital upon maturity, which makes them appealing for risk aversive investors.

The second relevant question is why indexes and not individual stocks. The reason is that stock indexes are a pre-diversified instrument, hence, its usefulness, because there is currently no experience in investing in individual stocks in the Retirement Fund Administrators. Therefore, the Note provides a certain guarantee that there will be no mistakes in terms of investment concentration. Likewise, passive investment through indexes has low transactional costs for Siefores which is also an important advantage. There is transparency since protected capital Notes worldwide are normally linked to index shares. An additional subject of great importance is that Notes avoid conflicts of interest between the owners of RPFs and those of issuers in the Mexican securities market. Finally, Notes were chosen because empirical evidence shows that in 95% of the cases, the net performance of the commissions of a portfolio activelly managed is equal or lower to the reference index. That is the first problem, the second problem is that the remaining 10% of those which do add value, ex-ante, are unknown.

I will now refer to the subject of how we are going to solve the issue of Notes, because in addition to allowing Siefores to buy notes of protected capital, they will also be able to structure notes on their own. What are the disadvantages of these notes? They have a high structural costs, they are not liquid because they are issues tailored to the buyer and the issuer is not committed to repurchasing them. Besides, they are subject to the same regulations the rest of the bonds in Mexico are: they must be placed through public offering, and are subject to a maximum limit of 20% by issuer that every Siefore can buy.

What was the solution we came up with to avoid such hurdles? Given that Siefores per se are already investment vehicles and they have bonds galore, then they will be able to structure these notes

by themselves, fixed in accounting terms with zero coupon bonds and variable income components on the authorized index. This mimicks the behavior of the note and eliminates structural costs and liquidity problems. In a nutshell, they will be notes of protected capital synthetically created within the Siefores, which is equal to a variable income investment through index shares.

How will variable income components be structured? The answer is threefold: buying stocks that are part of each index; if this were the case, the Siefores will be able to modify the weighting of each stock in each index within a range of 1%. The advantage is the reduction of transactional costs, and the need for rebalancing an index portfolio.

The second way in which Siefores might cover variable income exposure is through vehicles, among them the so called ETFs or mutual funds; and the condition imposed by the Caucus in this matter is to be informed daily as to the composition of the portfolio for these vehicles. If costs are included, they must be paid by the administrator. This is done to comply with the Caucus principle that no additional management cost must be paid by the worker.

The third way variable income components can be acquired is through derivatives on condition that the loss (that will be recouped with the bond) is limited. Well, this basically leads to have a long position in derivatives.

How are we going to estimate the 15% limit of variable income exposure? 15% is the exposure to the Notes but in variable income. Therefore, the exposure to variable income will be calculated through deltas of options or stocks<sup>3</sup>.

As for foreign securities investment, up to a 20% exposure of the Siefores assets was allowed for this kind of instruments. It was difficult to get the authorization of this 20% from Congress, and it is an issue in which I concur with the other speakers. It is of paramount importance to include foreign securities in the portfolios of the funds; Unfortunately, from a political standpoint, however, it is hard to get this sort of authorizations.

<sup>&</sup>lt;sup>3</sup> By definition, the delta of a stock is 1.

As far as variable income of foreign issuers goes, it will also be through notes fixed to authorized indexes (see Annex 1). In terms of debt, they will be securities issued with a high credit rating for both Fund 1 and Fund 2.

With respect to authorized indexes of foreign variable income, indexes of markets from member countries of the technical Committee of the *International Organization of Securities Comissions* (IOSCO) and the European Union were established. They are more than 50 authorized indexes, and we have just authorized other 20 additional indexes from Morgan Stanley.

Variable income investment is subject to two limits: the aforementioned 15% exposure, and the 20% limit in foreign securities. In this way, for instance, if 10% is invested in foreign indexes, there is a remaining 5% for domestic indexes and 10% for foreign debt securities. That is, the two limits converge.

Debtwise, Siefores was authorized to buy securities issued by the government, central banks, and governmental agencies from member countries of the technical Committee of the IOSCO and the European Union, including, of course, companies that issue securities under the regulation and oversight of the same markets. Likewise, Siefores could invest in debt issued by multilateral financial organisms like the World Bank and the IDB.

Why the Technical Committee of IOSCO and the European Union? Because in the mind of the financial authorities of Mexico, they represent the countries whose regulation provides an adequate disclosure of information and transparency in the transactions, and this has proved to be consistent with traditional investment societies in Mexico.

How will Afores operate in the international market? In two ways:

- a) Directly: Taking advantage of the skills and know-how of the international financial groups to which many administrators belong.
- b) Through a third party. Hiring the services of a financial institution.

In both cases, Afore will pay any direct or indirect cost.

Now I will refer to the three challenges of implementing the Siefores funds. The main challenge is the disclosure issue. The challenge here is that people have enough information to make a choice. That is the most important point. We have learned a great deal about the Chilean experience in that people are not interested in their pension, which is a worldwide phenomenon that has to do with old age and with the fact that this is not a pleasant topic to think about. However, we are convinced that setting in motion the Siefores funds will increase people's interest in their pension.

This communicative effort implies sending an introductory letter to 20 million workers. The Mexican Post Office told us there had never been on Christmas season so many letters on one topic that also represented a logistic challenge for them. We will have a customized orientation through a free telephone service that works to provide information on the system. We have programmed 800 talks with the main companies and labor unions in the country, we will use mass media and we will distribute several millions of printed marketing pieces.

On September 23<sup>rd</sup> the final countdown started. That day, 20 million pieces of material were distributed. The deadline to do so expired on October 21<sup>st</sup>, and from that date on, there was a period of 60 days for the worker to receive information at home, together with an envelope with the mail postage paid with the form to make the choice of the fund of their preference. In case the worker makes no choice, he or she stays in Fund 2 unless is older than 56.

The initial date of the investment of new instruments is scheduled to begin on January 17<sup>th</sup>, 2005. That day the Siefores funds will get started. On Friday 14<sup>th</sup>, we will come up with the cross section of the current fund to generate the new fund free of variable income. This will allow to create two different identical portfolios the day before the new investment scheme begins, and it will avoid any discussion as to whether some securities were picked in favor of others.

Basically, the challenge for the industry is to take advantage of the new investment scheme and be above the efficiency line. According to our research, the investment line, and the risk/reward line, including all the changes we made 3 years ago and this year, implies an average increase of 130 basis points a year in expected returns.

As far as oversight –the last challenge– is concerned, the scope of instruments, transactions and issuers widens significantly with the changes that have been made, which implies, in turn, an oversight challenge. This means that it is necessary to have a sophisticated information technology system that allows us to oversee the parameters of the multifunds, multi-instruments and multifactors. Therefore, the challenge of this oversight system is that the gathering, storage, enquiry and the crossing of information allow us to verify on a daily basis the compliance with the investment scheme, as well as the internal reasonable regulations of every administrator. Our oversight system is almost 100% automated and it will be ready when the new investment system is operative.

I greatly appreciate your attention.

#### **ANNEX**

Stock indexes of member countries of the Technical Committee of IOSCO and the European Union

Notes and Variable Income Components could only be fixed to the permitted indexes or subindexes from which they derive.

#### **Permitted Indexes**

Country	Index
Germany	DAX, HDAX (Frankfurt Stock Exchange Index)
Australia	ASX 50 (Australian Stock Index)
Belgium	BEL20 (Brussels Stock Index)
Canada	TSX (Toronto Stock exchange)
Spain	IBEX-35 (Spanish Stock Exchange Index)
	IGBM (Madrid Stock Exchange Index)
	BCN Global-100 (Barcelona Stock Exchange Index)
	LATIBEX TOP
	LATIBEX
U.S.A.	AMEX Composite Index
	Dow Jones Industrial Average
	Dow Jones Composite Average
	Dow Jones Global Titans 50
	Dow Jones Global Titans 50 Euro
	Dow Jones Global 1800
	Dow Jones Style Indexes
	Dow Jones Stoxx 50
	Dow Jones Euro Stoxx 50
	Fortune 500 Index
	Nasdaq Composite Index
	NYSE Composite Index
	NYSE International 100 Index
	Standard and Poors Global 100
	Standard and Poors Global 1200
	Standard and Poors 100
	Standard and Poors 500
	Standard and Poors 700
	Standard and Poors 400 MidCap
	Standard and Poors 600 Small Cap
	Standard and Poors 1500 supercomposite
	Standard and Poors Europa 350
	Standard and Poors TOPIX 150
	Standard and Poors TSX 60
	Standard and Poors Asia 50

Country	Index
	Russell 3000
	Wilshire 5000
France	CAC 40 (Paris Stock Exchange Index)
The Netherlands	AEX (Amsterdam Stock Exchange Index)
Hong Kong	HANG SENG (Hong Kong Stock Exchange Index)
Ireland	ISEQ (Irish Stock Exchange Index)
United Kingdom	FTSE 350 Index
	FTSE 250 Index
	FTSE 100 Index
Italy	MIBTEL and MIB30 (Milan Stock Exchange Index)
Japan	NIKKEI, TOPIX (Tokio Stock Exchange Index)
Luxembourg	Luxembourg Stock Price Index
Mexico	IPC (Index of Prices and Quotations)
Portugal	BVL (Lisbon Stock Exchange Index )
Switzerland	SMI, SPI (Swiss Stock Exchange Index)

Regarding the Morgan Stanley Capital International Inc Indexes (MSCI), the Notes and Variable Income Components could only be fixed to the following indexes:

- MSCI Europe
- MSCI Pan Europe
- MSCI Euro
- MSCI EMU
- MSCI Pacific
- MSCI Far East
- MSCI North America
- MSCI EAFE
- MSCI EASEA
- MSCI World
- MSCI Kukusai
- MSCI UK
- MSCI Japan
- MSCI Broad Market
- MSCI Investable Market 2500
- MSCI Micro Cap
- MSCI Prime Market
- MSCI Small Cap 1750
- MSCI Mid Cap 450
- MSCI Large Cap 300

## Part II: Foreign Investment



Demythification of the macroeconomic effects of foreign investment

- Presentation
   Hernán Garrido-Lecca
- CommentsPablo Moreyra



Contribution of international diversification to the risk-reward of the portfolio

- PresentationARTURO ALEGRÍA
- Comments
   Mariano Álvarez

# DEMYTHIFICATION OF THE MACROECONOMIC EFFECTS OF FOREIGN INVESTMENT

HERNÁN GARRIDO-LECCA<sup>1</sup>

The subject I was asked to cover is the issue of investment limits of the PFAs abroad, and I will try to do it from two perspectives: first, from a strictly academic perspective, and then, from a more practical perspective which is that of the affiliate.

I am not going to bore you with details we all know. It is a pity that there is no one from the Central Bank of Reserves here, but the main objective of pension funds is to provide a dignified retirement to the affiliates of the system. And even though we might consider secondary objectives such as promoting the development of the capital markets in the country or eventually financing the investment in the country, those are subordinate objectives. At least that is my starting point.

In order to operate in benefit of the affiliates, administrators must have an adequate combination of yield and safety, and they must focus exclusively on the interests of the funds and make sure that

First and Master's degree in Economics from Universidad del Pacífico. Master in Administration from Harvard University; in Science and Technology at the Massachusetts Institute of Technology (MIT) and Peruvian and Latinamerican Literature at Universidad Nacional Mayor de San Marcos.

He is currently the President of Alpamayo Entertainment SAC and the Peruvian Society of Inventors. He is also the Past President of the Consumers and Users of Peru and Council for the Defense of the Peruvian Aprista Party.

He stood out as Executive Vicepresident of Interbank and Executive Director of the Peruvian Committee of External Debt. He was also Director of several banks and financial institutions as Investment Officer of the International Financial Corporation of the Central Bank.

He works as Professor of Economics at Universidad del Pacífico and at Universidad de San Martín de Porres.

He is a prominent journalist and has been actively participating in the publication of more than 20 books on economics, science and technology, consumer protection and literature for children.

every investment transaction is made with that objective in mind. Some other countries have gone through the debate of a unique line of business even though it is not so intense. Even though it seems as if Peru is going to a second stage in which the debate on investment limits abroad is more important, I would say that the issue of line of business is not over yet. Under the current circumstances, the existing regulation in Peru limits the possibilities of investment of the PFAs to serve the subordinate objectives with regard to the fundamental objectives of the private pension system.

We have two systems, the pay-as-you-go system and the individual capitalization system, and there are some limitations for the competition among PFAs. I think that in part multifunds have been a great step. We have discussed a great deal as to whether or not they compete, and banks have strongly criticized the degree of concentration of the PFAs. But if you calculate the degree of concentration by quartiles in the Peruvian financial system and the PFAs, you will be surprised to see that banks are a much more concentrated system or industry than PFAs in terms of sectoral concentration.

Competition is fierce and, unfortunately, not everything that entails competition translates into a benefit for the affiliate. I think the role of the regulator is precisely to make sure that competition is in the areas that are beneficial or provide added value for the affiliate.

Maybe what is most worrisome about the composition of investment of the PFAs in Peru are government securities which totaled 21.2% of the investments. Figure N° 1 shows this composition as of September 2003.

Which are, in my opinion, the weaknesses of the PFA portfolio? Short duration compared to long term obligations, high exposure to sovereign risk, high exposure to exchange rate risk, overexposure to country risk, low diversification of the risk due to insufficient development of the capital market (concentration of issuances), and low differentiation of products among PFAs. Again, multifunds will overcome some of these concerns.

In what does the public system in Peru invest, the Consolidated Fund of Reserves? Actually, it has 68% of the portfolio invested in



Figure Nº 1 COMPOSITION OF PFAS PORTAFOLIO SEPT. 2003

the Central Bank of Reserves; 16% in something called ElectroPerú which is literally a "old timer –swindler", and the rest are domestic instruments and real estate

What are the weaknesses of that portfolio? Very short duration facing long term obligations, their foreign investments have an average duration of 200 days due to the Central Bank domestic policy, high concentration in instruments of regulations to the investments of the Central Bank (for example, the PNO<sup>2</sup> cannot invest in Wall Street), and low yield owing to risk requirements of the Central Bank of Reserves (they cannot invest in instruments other than Triple A or Double A+).

The first thing I am going to set forth is that there is a clear discrimination. The State itself has created two kinds of citizens and they are treated differently. First, the CBR introduced a deep distorsion in the pension market by intially prohibiting the investment of the PFAs abroad, and on the other hand, it demands that investments managed by the pension system, FONAHPU and the Consolidated Fund of Reserves be made mainly abroad; i.e. curiously, the Peruvian State does allow this system to invest abroad.

companies

47.9%

Companies of the

financial system 22.2%

<sup>&</sup>lt;sup>2</sup> PNO: Pension Normalization Organism.

The reason of this discrimination was the objective of the monetary authority to keep the net international reserves stock, which seems to be the obssession of my friends from the Central Bank. Another reason would be to keep a captive market, and this is what it starts to be even more worrisome: allow papers at an artificially low price in order to satisfy the appetite of the government.

This way, the Central Bank promotes the investment of funds of the PNO abroad, denying the possibility to invest in mutual funds. And also within all the inconsistencies of the Peruvian State, it was forbidden to invest in Peruvian *bradies* in the public system.

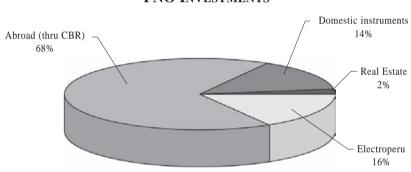


Figure N° 2 PNO INVESTMENTS

PFAs are not allowed to invest right now the 10.5 limit abroad, and that is particularly important because in the period 1998-2001 we could not protect our funds –and I apologize because I am getting deeper into the affiliate's bias– from the credit deterioration of the issuances of domestic debt papers, and there were positive results abroad. There is a period in which there has been a confiscatory framework for us the affiliates. We could not protect ourselves.

In summary, the investments in the domestic pension market were not regulated in terms of a totally different objective relative to the raison d'être of the pension system, which is to maintain a high level of international reserves by the Central Bank of Reserves and definitely, to have a captive market for State issuances thus setting an artificially low price for government endebtedness.

Obviously, that discrimination has affected both pension systems, and in times of low international interests it also sacrifices the yield and even public funds.

The reasoning of the Central Bank of Reserves is deceitful. When they run out of the reserves argument due to the exporting boom we are going through, they use the argument of promoting the development of the capital market in Peru, but I would set forth many things. If this were the main reason why, then, the PNO is not forced to invest the largest portion of its resources in domestic instruments? If the Bank were coherent it would have both systems compete under similar conditions and equally promote the development of the capital market. The reason, I insist, for this discriminatory treatment and this lack of conceptual coherence by the Central Bank lies on the accomplishment of the Central Bank's objective which is to maintain the level of reserves high.

I think the consequences of what we see today are fivefold: unrealistically high prices of domestic papers, the risk on the future yield of the investment portfolios of banks and PFAs, excessive participation in short term investment, perverse incentives for overendebtedness on the side of the government regarding PFAs, and yield differentials between the two pension systems.

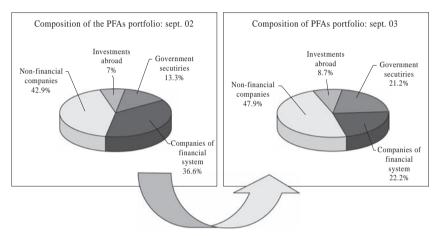
The lack of available instruments in domestic markets and the need for investment of the PFAs is creating an upward price movement of these papers. This excess in the demand reduces the yield to unrealistic levels since they would not reflect adequately the risk profile of the issuances. This is generating a process of financial desintermediation because the companies that can be located in the capital market get lower costs than in the traditional banking channel which is also applicable to government debt.

Nowadays, the prices of the instruments are high and consequently, the yield is low. This happens within an international context of low interest rates. When rates start going up worldwide, as is expected to occur this year or next, the prices of these assets will tend to go down, causing a gross dip in the price of the instruments as well as in the yield of the funds managed by the PFAs.

That is what worries me the most as an affiliate. Two years ago, the portfolio of the PFAs had only 13% of government

investments, government securities, and now it holds 21% according to what we see in Figure N° 3. That is the result of this wicked framework in which the Central Bank of Reserves is favoring its objectives instead of those of the affiliates.

Figure N° 3
INCENTIVES FOR OVERENDEBTEDNESS OF THE GOVERNMENT WITH PFAS



The stake of government assets has been increasing in the last year, replacing the assets of the banking system

It was precisely the regulatory framework that hindered foreign investment which did not enable PFAs to defend themselves in the period 1998-2000. Our funds managed by the PFAs could not be hedged and we had to simply accept the curse the Central Bank of Reserves had cast on us. That loss, due to the artificial and whimsical hedging impossibility imposed by the CBR, is precisely what the Bank owes us the affiliates. Will someday the CBR recoup our losses or will we have to go to court for justice to be enforced?

My proposal is vey simple –and I am still speaking in technical terms–: to go up to 20% starting at 15% by November 30<sup>th</sup> up to 20% by March 30<sup>th</sup>, thus progressively minimizing the potential risks of disturbances in the financial markets which will

additionally enable multifunds to operate appropriately; and in general terms, this proposal means at the most that about 570 million dollars that are now restrictively invested, would be allocated to foreign investment next year (I repeat, at the most). For those who are not Peruvian, the Central Bank of Rerserves has spent more than 1,000 million dollars this year protecting the exchange rate. That is the wonderful consistency of the Central Bank.

The benefits are obvious and this is important too. Sometimes I feel like telling my friends of the PFAs and those of my own PFA "do not stand up for me, buddy", because your defense does not benefit us the affiliates, because the confused and manipulated (by those interested in the *status quo*) public opinion believes that the liberation of the limits benefits PFAs and not us the affiliates. That is why many people do not understand when a fund manager stands for the liberation of the limits and they believe that fund managers are the ones who are doing business and do not realize that we, the affiliates, are the actual beneficiaries. That is why I ask you not to stand up for me, pals, we are going to stand up for ourselves.

Let us talk about the costs. Bearing in mind the fact that half of the deposits of the PFAs have denominations in dollars would mean, in the worst case scenario, a reduction of half of the 285 million dollars in foreign currency deposits in the banking system. Given the fact that the marginal reserve requirement ratio is 20% in foreign currency, the potencial drop in the reserves would only amount to 57 million, in other words, 0.51% of the stock of the Peruvian Central Bank of Reserves. Consequently, there is no technical reason from the exchange policy standpoint regarding the management of reserves for the the Central Bank of Reserves to deny the authorization for the increase in foreign investment limits of the PFAs. I think they have already realized this which is the reason they are talking about investment and promoting the development of the country.

There is a great opportunity now precisely due to the moment we are going through. Peruvian exports have increased 45% from January to September with regard to the same period last year. Last November, the multiannual macroeconomic framework revealed 9,000 million dollars in exports for this year, and we are going to exceed the 11,500 million dollars.

This is the right time and above all, that is the most intelligent way to help as far as foreign exhange stability is concerned, rather than buying dollars without any clear policy and creating a quasi fiscal deficit.

It is contradictory that in a country where there is freedom to move the capital and it is stipulated in the Constitution, the Central Bank of Reserves restrains the terms of capital of the main domestic investor so severely. I am seriously thinking of filing an action for enforcement of rights because what they are doing is violating a constitutional right, and this is a Constitutional principle.

Widening the current limit of investment from 10.5% to 20% over a five-month period would not create major internal problems, neither in the capital market nor in the banking market. On the contrary, it would alleviate the current devaluating pressure on the dollar against which the Central Bank has been fighting at so high a cost. I insist, the effect would be equivalent to 0.51% of the current stock of international reserves.

This proposal could reduce the volatility of the investment yield of the PFAs, improve the risk profiles through a wider diversification and introduce factors for greater competition. It only seeks a greater welfare for the user and no greater benefits for the PFAs, but apparently, the public does not seem to get it, instead, the welfare of the affiliate depends directly on the yield of the fund, the safety of the investments; and it is the exact opposite to its volatility. Therefore, reducing volatility also benefits the affiliate.

I would like now to move onto the last part and say a few words as an affiliate. What I am about to say first—I wish there were a journalist here, if not, I will say it again outside— is that the position of the Central Bank of Reserves is abusive, confiscatory and immoral, and I am willing to defend each one of the three epithets aforementioned before whomever at the Central Bank of Reserves.

It is abusive because they are abusing a questionable prerrogative, in my mind, that has been given by the State so as to artificially depress the yield of our funds.

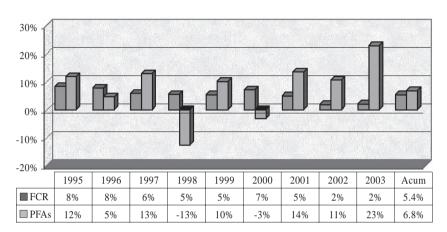


Figure N° 4
HISTORICAL ANNUALIZED YIELD IN DOLLARS

The Public System (FCR) presents very low but always positive yields. The private PFA shows a high volatility due to country risk overexposure

It is confiscatory because this straitjacket has hindered the protection of our funds, has hampered the possibility for those who manage our funds to be able to invest in alternative instrument to cushion the blow of the 1998-2000 period. I do not even want to estimate how much it represents for the pension I will finally receive, because it might have ominous consequences on my phisycal and mental health.

Finally, it is immoral because I do not think they have the right to do as they please with my money. Those are our funds, and I speak on behalf of those three million affiliates who are not cognizant as to what their rights are and what we are defending. This is a Kafkanian situation, we are fighting for them to let us take the best advantage of our money.

And here is what I propose: let us discuss a minimum unit, a percentage of the funds that the affiliates accept to necessarily invest in Peru as a solidary and voluntary contribution, because that is what we pay taxes for. Nevertheless, for this investment limit abroad we should not be asked how much we want to voluntarily invest in Peru. That is the way it should be. Now, I would be more than happy if 100% of the fund were invested in

Peru. We would all be very happy as Peruvians, but they cannot play with our money. The logic is backwards. I do not know who came up with foreign investment limits in the first place, but what we should have is a unit, and if you want, we can discuss with the Central Bank of Reserves what that unit should be as opposed to what the limit should be.

If promoting development is what this is all about –and I will refer to the inconsistencies of the government–, then there are 550 million dollars in government real estate ready for sale: the San Martín barracks, the Horseback Riding School of the Army, and the PetroPerú building. Well, let them sell those and invest them in whatever it is they want, there are 1,100 million dollars worth of rotten portfolio of the banks intervened by the State; let them sell, securitized, and do whatever they want with them and play chief investment officer of a PFA investing in whatever they please. And, lastly, if they are so worried, let them sell the Central del Mantaro plant stock and give money to the elderly who are condemned to live off the losses caused by the drought.

I think that the Central Bank has other functions such as protecting the reserves, thinking about how to lower the overexposure of the dollar and let go of this abusive, confiscatory and immoral policy of setting limits to the investments of the PFAs abroad.

I propose a 20% just to conciliate, but as an affiliate I would say that the right thing to do is not to have limits at all.

#### **COMMENTS**

PARIO MOREYRA<sup>1</sup>

I think the presentation has been quite eloquent, especially, with regard to the critique to the Central Bank. What I will do is to present some figures and tables to demonstrate the same, but from a more objective point of view. Not that there was anything wrong with it, but from the point of view of a technical analyst.

However, Mr. Garrido is on the right track: the money of the individual capitalization accounts belong to the affiliates, they are the ones who have to stand up for their money, not the PFAs. Obviously, there seems to be a conflict whenever we stand up for them, I mean, what is in it for them or for investment managers if they want to get money out of the PFAs abroad? Let us check some figures to put in perspective what all this money invested in the PFAs contends.

Obviously, the 7,500 million dollars that are already in the PFAs accounts for a big chunk of the funds invested in Peru from international reserves, national saving, stock exchange capitalization and GDP (See Diagram N° 1). Today we have more than 7,500 million dollars, we are the biggest institutional investor in the country together with mutual funds and the ONP.

As shown in Diagram  $N^{\circ}$  2, we are limited with 10.5% abroad, and the ONP has 65% abroad. There actually is an inconsistency because we are almost the only ones who have limits. Mutual funds do not

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#### Diagram Nº 1 IMPACT OF PPS IN THE ECONOMY

As of august 2004, the accumulated pension fund of PPS represented:

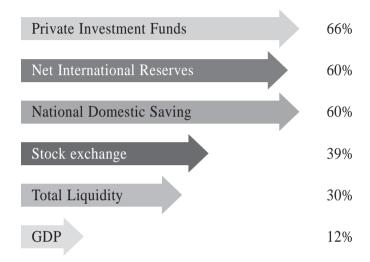


Diagram N° 2 DOMESTIC INSTITUTIONAL INVESTMENT

• FUNDS Pensions US\$ M. Funds ONP (Government)	7,350 2,000 3,100	<b>Abroad</b> 10.5% 12% 65%	43%	Pensions  M. Funds
BANKS     Investment Portfolio US\$	,	0370	+3 /0	Government
• INSURANCE CO'S P&C US\$ Life Insurance	422 1,326	40%	8%	☐ Banks ☐ Insurances
			27%	
			9%	

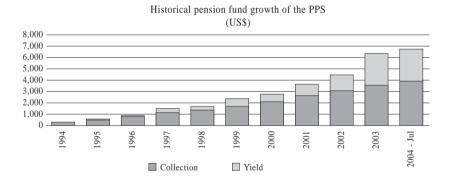
Total: US\$ 17,870 million Domestic foreign US\$ 14,185 million

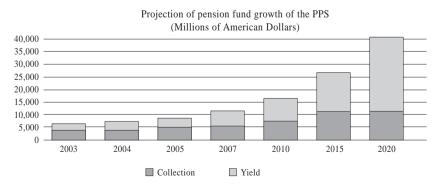
have limits, i.e., they could invest more but have to pay taxes, banks invest their dollar overhang abroad. In fact, we deposit in banks and if they have an overhang that day, they send it to New York. All in all, there is a considerable investment in the domestic market.

And this is growing. Figure N° 1 shows at the top how the managed fund has grown and how it will continue to grow in the coming years. This is obviously an exponential projection because the yield gains ground with the value units contributed. However, there are not enough instruments in the domestic market; on the bond side, placements and redemptions are not sufficient to cover the current growth in the pension system.

The pension fund system grows much faster –and we have seen that over the last years, both in the yield and in the redemption of the old bonds– than the economy and bond issuance do (Figure

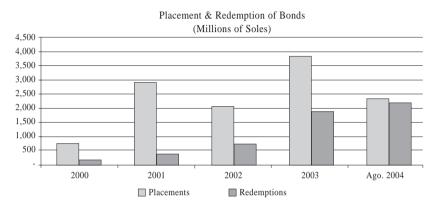
Figure N° 1
EVOLUTION OF THE FUND

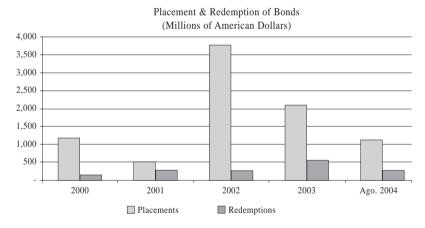




N° 3), which creates a distortion. And what I will try to demonstrate is that those limits create more distortions than benefits for the affiliates in the long run.

Figure N° 2
PLACEMENT & REDEMPTION OF BONDS





On one hand, we can see that any bond of a domestic Triple A company is able to be issued at a lower rate than its peers—companies that belong to the same industry or to the same company— in other markets. And this is just an example. The rates at which Telefónica, Telefónica España, Endesa, for instance, are able to place their bonds are much lower than the rates of the same companies in countries with a lower risk such as Chile. That creates a distortion in the rate. Table N° 1 shows this situation.

COMPARISON BETWEEN PERUVIAN CORPORATE BONDS AND THEIR INTERNATIONAL EQUIVALENTS Table Nº 1

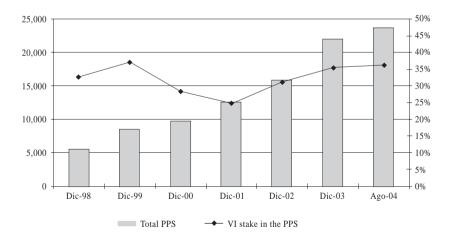
Rating Duration Yield Bond Support
AAA 1.8 2.681 Cia. Telecom Chile
Embotelladora S.A
Embotelladora S.A.
AAA 1.8 2.752 Cia. Telecom Chile
Embotelladora S.A.
AAA 2.2 3.051 Soc. Química y Mi
Colombia Rep. Of.
Financiera Energ.
Bogota D.C.
Centragas
Colombia Rep. Of.
AAA 2.7 3.473 Financiera Energ.
Bogota D.C.
Centragas
Colombia Rep. Of.
AAA 3.1 3.557 Celulosa Arauco
Endesa - Chile
Colombia Rep.
AAA 3.6 4.84 Endesa - Chile
Colombia Rep.
AAA 4.5 3.75 Celulosa Arauco
Endesa - Chile
Colombia Rep
Colombia Rep.

Source: Bloomberg and Reuters.

Afterwards, a distortion in the stock exchange is created. PFAs already have big percentages of the main companies in the country with an extremely high concentration on those companies. We own 42% of Credicorp, that is, we have more than the Romero group on Credicorp; we own 35% of Edelnor, Edegel, etc.; and that is unsustainable, we are not capable of managing companies, we are institutional investors. The day one of those companies is in trouble, we will be in trouble. Well, actually we will not be in trouble but the affiliates, however, they will blame it on us.

In Figure N° 4 we see the increase in participation of the PFAs in the domestic stock exchange. We own more and more in the domestic stock exchange and it is not possible to have more, not because we do not want to, but because we already have very high percentages and a few issuers. Not all issuers qualify, which makes us buy more and more so that we can keep the stocks, which reduces liquidity in the stock exchange thorugh time. There is less and less trading in the domestic stock exchange, so if we wanted to get out of a paper it would be impossible.

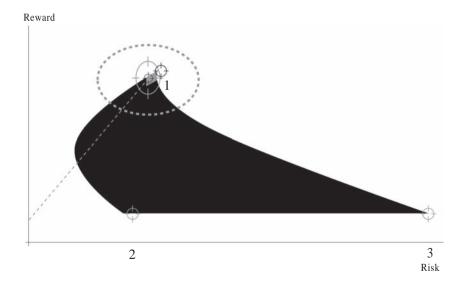
Figure N° 4
EVOLUTION OF THE PPS FUND IN DOMESTIC VARIABLE INCOME



On the other hand, there are not enough long term instruments for the investment of PFAs. The average of our affiliates is 33 years old, which means we have to continue investing for the next 30 or 32 years on average, and there are no long term instruments with the exception of TGP or some other in which we can invest these funds long term. It is true we have government bonds, but there is also a limit. And even though the affiliates did not want to hold one government bond too many, there is a balance, an optimum percentage. In fact we are the country whose PFAs hold the least amount of government bonds.

If we look at the optimum portfolio represented by Figure N° 5, the role of the limits is to restrain the investment possibilities which, in our case, as a PFA is restricted to the square at the top. That allows for an optimum portfolio that is inferior to what you might get if you had a wider range of investment options. In other words, If there were no limits and you could invest almost anywhere in any asset, we would have the blue universe depicted here which would not necessarily allow for a greater yield but probably a lower risk.

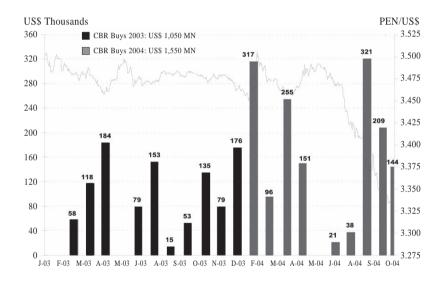
Figure N° 5
OPTIMUM PORTFOLIO



The subject of foreign investment does not necessarily lead to a greater yield, that is deceitful, however, it does permit to lower the risk of the portfolio, reduce the 90% of country risk we have in Peru.

Among the distortions and other things in the market is the exchange rate effect. Although it is not one of our objectives as a PFA, the exchange rate does have an impact on our portfolio, and the trend is that the CBR is buying dollars so as to try to keep an exchange rate, and yet, no matter how much they buy, there is no way to maintain it. (Figure N° 6). This vision is contradictory with the fact of trying to maintain more reserves adjusting the operative limits for the PFAs.

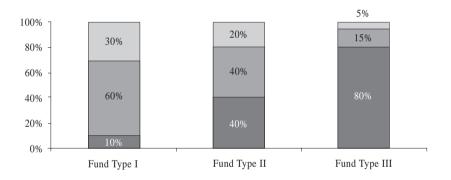
Figure N° 6
EXCHANGE RATE AND SHARE OF THE PERUVIAN
CENTRAL BANK



Obviously, if the operative limit of the PFAs were increased from 10.5% to 20%, the exchange rate problem would not be solved, but that is none of our business, the problem is the inconsistence of monetary policies. On one hand they want reserves, and on the other hand, they do not want the exchange rate to drop, or at least, that it were not so volatile, therefore, different policies are being handled for different aims, and there is a series of inconsistencies in that regard.

Finally, the foreign limit issue is also critical, not only because the affiliates want to be able to diversify in a better way, but also because it would not be possible to build Fund Type 3 if you do not have a greater percentage abroad. There would be no way to launch the multifunds, at least this Fund Type 3 (represented in Figure N° 7), with a greater percentage in variable income, if the foreign operative limit is not increased. And this is not just from the point of view of the affiliates who would want a greater diversification from the operative stanpoint. It would be very difficult to manage a multifund system that I think is totally necessary, as we have seen in the presentations of Joaquín Cortés and Jorge Ramos. It is necessary for those individuals of a different age bracket and different risk profiles to pick an adequate portfolio for each one.

Figure N° 7
PROFILE OF FUNDS PORTFOLIOS BY TYPE OF INSTRUMENT



In conclusion, the growth of pension funds is more than the Peruvian capital market can endure. As a matter of fact, the capital market in Peru has been developing quite a bit, but is not enough yet, the fund grows faster than fixed income issuances, there are not enough long term instruments and we have a considerable percentage of the main companies of the country.

There are also distortions in the capital markets due to the restrictions in investment limits. That is, the portfolio does not seem to be well-diversified, optimizing yield and risk. Interest rates are distorted because companies are being financed at

lower rates than they could be financed abroad creating a questionable effect in the exchange rate. In summary, the subject of the multifunds is important but in order for them to work it is necessary to flexibilize these limits.

# CONTRIBUTION OF INTERNATIONAL DIVERSIFICATION TO THE RISK-REWARD OF THE PORTFOLIO

ARTURO ALEGRÍA<sup>1</sup>

What I am about to present is a quite simplified exercise in order to try to answer two questions: what has been the contribution of the diversification to the pension funds in Chile and whether or not a gradual opening strategy is preferable, which, I would say, has been the case in Chile versus a more accelerated strategy. Obviously, I would say that there is no answer, but I am going to try to show the elements that must be considered, the oportunities presented by foreign investment and the associated risks.

I will start with a very simple exercise: the construction of an efficient frontier, taking six categories of assets and a rather long period of time, from November 1990 to September 2004 (see Table N° 1). We see the annualized return of the representative index of these types of assets, the passive strategy, and the volatility. At the bottom, the three types of portfolios are specified: a conservative portfolio, a medium portfolio, and an aggressive one. In these analyses of efficient frontier the exchange risk is not considered, that is, it is supposed that every investment in foreign assets is absolutely hedged. Later we will look at an exercise in which I reduce that assumption.

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Currently, he works as Business Development Officer of Vision Advisors. He was also the Assistant Investment Manager of Habitat PFA, responsible for foreign variable income investment and global asset allocation of the Pension Funds.

He worked as Research Professor of the Institute of Economic Policy of Adolfo Ibáñez University.

Table Nº 1 EFFICIENT FRONTIER

Nov 90 - Sep 04	Domestic variable income %	Domestic fixed	Short term fixed %	Developed internacional variable %	Emerging foreign variable %	Developed foreign fixed income	Emerging foreign fixed %	International short term fixed income %		
Annualized Yield	13.64	4.96	5.29	6.21	7.09	7.49	12.57	4.40		
Annualized Volatility	24.00	3.74	0.69	13.82	22.62	5.18	9.06	0.53		
									Annualized Yield %	Annualized Volatility %
Conservative Portfolio	0.00	0.98	10.97	0.00	0.28	1.35	0.00	86.42	4.56	0.51
Medium Portfolio	0.00	0.00	25.81	0.00	0.00	32.35	41.84	0.00	9.05	4.31
Aggressive Portfolio	12.53	0.00	0.00	0.00	0.00	0.00	87.47	0.00	12.71	9.91

Well, we see here the medium portfolio with a yield for the period of 9% annualized, and a volatility of 4.3%, with a high concentration in short term fixed income, foreign fixed income of developed countries and emerging fixed income

Note: When simulations or efficient frontiers are made, the frontier always says what you expect it to say because, actually, the periods of time are extremely volatile. There are extremely long periods, we have a period of 15 years here, and it looks as though in the most aggressive portfolios would have been better to keep a high participation in emerging fixed income, instead of stocks. We are talking about a 15 year period, not one or two years. We have to be careful with the results. I repeat, it is simply an exercise.

Here we see that when the possibilities of diversification in this period in particular are included, they amplify –for portfolios of medium level of risk– the expected yield. For extreme levels, there is no big contribution. I simply present this because one would expect a similarity to what we will see in Figure N° 1.

We have here the efficient frontier but with or without the possibility of international diversification, and always under the assumption there is no exchange risk involved. We see that there is an increase in the possibilities of return and the risk contributed by international assets. This is also a very special period. When we look at these results –September 1997 to September 2004– we

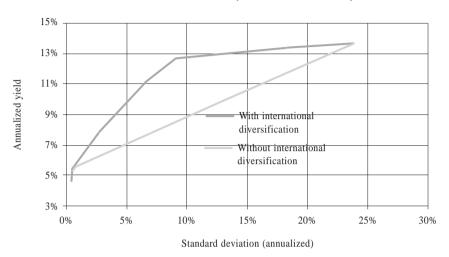


Figure N° 1
EFFICIENT FRONTIER (NOV. 90 - SEP. 04)

have to think that during this period we went through the Asian crisis (second half of 1997), the Russian crisis (August 1998), the collapse of the American stock market in particular, and the technology stocks, bringing down the rest of the markets along with them in the year 2000; and the accounting scandals of the second half of 2002. All of that hit the markets and reduced the appeal for variable income. We are talking about a 7-year period in which many negative things happened for the markets, but in spite of that, the odds of improving the yield, given one kind of risk, clearly increase when international diversification is factored in.

Table N° 2 shows the results in numbers compared to the pension funds yield. If we look at the numbers, for example, we see that the pension funds portfolio for that period yielded 2.65% annualized, with a volatility of 5.25%. Now, had we taken the conservative portfolio, volatility would have been dramatically reduced with a considerable increase in the yield. If we take the medium portfolio we have a return that yields 6.93% with a slight increase in volatility. In that frontier I am not considering any kind of restrictions. At the end of my presentation I will show you an exercise in which I do consider restrictions because, obviously, the PFAs could not invest in order to be in the efficient frontier due to regulatory issues.

Table N° 2 YIELD OF THE PORTFOLIO

Sep 97 - Sep 04	Domestic variable income	Domestic fixed	Short term fixed	Developed international variable income	Emerging foreign variable income	Developed foreign fixed income	Emerging foreign fixed income	International short term fixed income		
	%	%	%	%	%	%	%	%		
Annualized Yield	4.22	5.13	4.61	2.91	-0.28	5.81	7.83	3.99		
Annualized Volatility	21.85	3.89	0.86	15.75	25.29	5.55	9.84	0.60		
									Annualized Yield %	Annualized Volatility %
Conservative Portfolio	0.00	1.71	0.00	0.00	0.40	2.73	0.00	95.17	4.05	0.56
Medium Portfolio	0.00	0.35	0.00	0.00	0.00	44.30	55.35	0.00	6.93	6.16
Aggressive Portfolio	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	7.83	9.84
								Pension Funds	5.97	4.96

(Note: the inability of the market to generate what we call alpha, in other words, the fact that management does not pay). When we look at the literature, there is evidence on one side, but the evidence on the other side is totally arguable, so it is interesting that when we say "there is no alpha", and therefore pension funds should invest in index portfolios, it looks somewhat contradictory that the same investment management is allowed to make tactical changes, because there are many researches that show that going in and out of one kind of asset discretionally might be much more expensive in terms of performance than having an actively managed portfolio with the inherent costs.

The caveat here is that if we are not going to believe in active management and hinder PFAs from hiring experienced fund managers with many resources, it then seems a bit contradictory that, on the other hand, we have given these very executives the possibility to make a decision that from the affiliates standpoint can be much more expensive. Research shows that if an investor has lost the best 10 or 20 days in the stock exchange, his yield drops dramatically. That is, when he is trying to get in and out, he can certainly have a big loss. I will come back to this issue later.

But this exercise is under the assumption that the portfolio remains constant during the whole period and there is no active management, that is, there are no active portfolios but everything is being assessed at index levels.

If we consider the possiblity of no exchange hedging, in other words, there is an exchange risk, and what we see is that the expected yield improves moderately. This is a relatively short period of time, a 7-year period in which, in the Chilean case, the currency devaluated. A long period in which that was the trend that saved the last year. So, the results show that the yield of a medium portfolio would have been higher than 8% in terms of yield, with an even lower volatility than that of close to 6%. That is to say, at crunch time when the crisis affects the markets, the currencies in emerging markets tend to depreciate and, therefore, there is no natural protection since there is an unhedged position.

In Figure N° 2 of the unhedged exchange frontier, the widening of experiences looks quite impressive. Obviously, this must be taken cautiously because had we tilted towards one extreme, it might have had a negative surprise.

14% 13% 12% 11% Annualized yield 10% 9% 8% With international diversification 7% Without international diversification 6% 5% 4% 0% 2% 4% 6% 10% 12% 14% 16% 18% 20% 22% 24% Standard Deviation (annualized)

Figure N° 2 Efficient Frontier (sept. 97 - sept. 04) (no exchange hedging)

Efficient frontiers simulations aside, and coming back to reality, what I show here is how the composition of the pension funds portfolio has evolved. Table N° 3 shows that in August 1998,

domestic variable income accounted for roughly 20% of the portfolio; fixed income, 19.2%; 76%, and here I concentrate on short term and long term fixed income. In the past as well as at present, PFAs have approximately 15% of the portfolio in short term fixed income, which seems quite steep an amount. Here we have both short and long term. Foreign variable income was 1.7% at the time. Investment abroad started in 1996, in reality, the amount invested abroad in 1997 was close to half of a percentage point increasing in 1998. Investment in foreign fixed income was a lot less, therefore, the portfolio was highly concentrated on domestic assets.

	Domestic variable income %	Domestic fixed income %	Foreign variable income %	Foreign fixed income %	Domestic %	Foreign %
August 1998	19.2	76.6	1.7	2.6	95.7	4.3
August - August 2004	14.8	70.5	9.0	5.7	85.3	14.7
August 2004	18.8	57.2	19.3	4.7	76.0	24.0

<sup>\*</sup>Includes long & short term fixed income

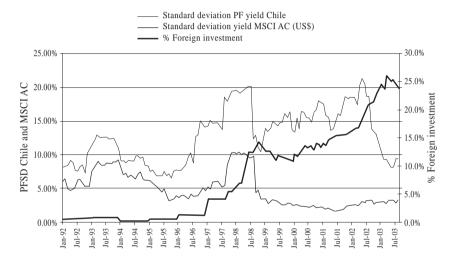
If we go back to August 2004, we see that domestic variable income remains almost constant, it fell sharply in between but basically due to falling prices. Domestic fixed income is 70%, and variable income goes up to 9%; foreign variable income is a more significant figure on average, specially in August, close to 20%. This is significantly important from the standpoint of the yield, totaling 76% in domestic portfolio; 24%, in foreign portfolio; and an average for the period between August 1998 and August 2004 of 85% in domestic portfolio and 15% in foreign portfolio.

The rise in foreign investment has contributed to the reduction in the volatility of the yield. If we look at the percentage of the investment abroad in Figure N° 3, there is an ever-increasing rise starting in the period 97-98, in a permanent way, and if we look at the standard deviation of pension funds yield starting in that period when foreign investment began to be more revelant, there is a quite significant drop despite the rise recorded by the standard

<sup>\*\*</sup>Includes short & long term

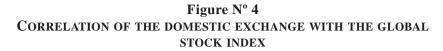
deviation that only decreased in the last months; in other words, just when PFAs start to invest a greater percentage abroad, the markets –probably due to the reasons I mentioned earlier– become much more volatile, but in spite of, that, the risk of the portfolios is reduced.

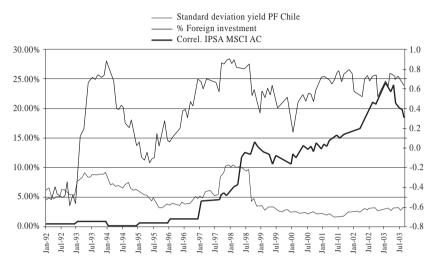




The correlation of the domestic exchange with the global stock index is relatively high for the period in which the PFAs start investing abroad (see Figure  $N^{\rm o}$  4). We have a scenario in which, together with opening abroad, there is a greater volatility in the markets thus reducing the benefit of diversification.

As final considerations, we must take into account that a quick opening to foreign investment allows to improve the risk/reward combinations, we already looked at that in our presentation. But there are also risks in, first, investment teams that face a new environment, because handling a domestic portfolio is very different from managing a portfolio that offers a big amount of assets, much more liquidity, and unknown assets. That is to say, we have to limit up to what extent I can take a reasonably good decision and up to what extent I have to delegate. Obviously, the experience that was useful for the domestic market was one that





was not so deep, not so liquid, and could not be so useful in the international market.

The greater liquidity offered by the markets can create the temptation of adopting a strategy to go in and out. Of course, it is a toy, so to speak, but we do not have to get too attached because the probabilities of having a bad performance is too high. We have to understand that liquidity does not mean we must trade in too short a term.

In summary, I would say we must balance the opportunities and the risks there are. The opportunities are given by the numbers I showed, better yields, but there is also risk. So, the timing to open foreign investment must consider those two factors and not only the risks.

Finally, in order to establish the limits and regulations is more important to have an approach towards the risk of the portfolio rather than an approach toward the risk of specific assets, because that creates lower risk in that asset but it does not necessarily regulates well the expected risk/reward equation of the portfolio.

### **COMMENTS**

Mariano Álvarez<sup>1</sup>

I would like to split the presentation into two related yet different topics: The first one is to make some comments derived from the research presented by Arturo, and the second one is to define a regulation in order to establish a foreign investment limit that may be very simple to estimate, rather technical. And if you excuse me, I will defend you, Hernán, because just so you know I am also an affiliate.

For starters, I would like to begin with the final considerations of Arturo's presentation. The study concluded that international diversification does raise the chance of lowering the risk and increasing the yield of the portfolio. I think we all agree on that. Now, what worries me –and I would like this to be clear from the standpoint of the managers whom I represent– are the risks he referred to at the end.

The first risk there might have been -Arturo said- was that investment teams would be facing a different environment for which they may not be prepared. I think that the experience in Peru over the last 11 years shows how seriously we -and I should not say this because I represent them- both PFAs and regulatory agencies, have managed to analyze different markets and different

Engineer and Economist from the National University of Engineering. Master in Applied Economics and a Candidate for a Ph.D. at the University of Boston, U.S.A. Currently, he is the Chief Investment Officer with Union-Vida PFA. Among his previous jobs it is important to mention his performance in the Central

Reserve Bank of Peru where he held the position of Assistant Manager of Research and Global Analysis, and his role as Manager of the Investment Division at the current Superintendency of Banks and Insurances. He was also the Manager of Economic Research with Citibank N.A. Lima Branch, and Manager of Economic Analysis for Santander Group Peru.

products as well. Although the concern is valid, it is also true that the experience shows managers and regulatory agencies have done a good job.

The second concern is the likelihood to use this international market liquidity to do some market timing; and what he says is that we should take advantage of it to make some long term investment. I totally agree on this matter and I think that, in general, the vision of every pension fund manager is long term yield because it is important for the affiliate and will, finally, determine a good pension. I have nothing to object on that.

The third issue was that tax laws, regulations, and transactional costs should be analyzed in detail by the countries we will be dealing with. Evidence shows again in Peru that there has been no case of fraud, loss of documents, etc. That is, what we call the *back-office* has responded perfectly because we, managers and the regulatory agencies alike, have been sufficiently serious when facing new markets, and we have gradually been entering new markets just because we thought it was necessary to analyze everything in detail so as to prepare the risk mechanisms required to not get into trouble.

I completely agree with the conclusion of the presentation, but I would like to talk about this risk chance that there might be, from the managers point of view.

Now I will move onto the second issue. What have we seen in the morning? If we recap the presentations, we must first conclude that multifunds are good for the affiliates. This is what has been presented. There were a couple of presentations which mentioned that in order for multifunds to be implemented, especially in Peru,—and the evidence in Chile shows that—we need to expand the investment limits abroad. Third, what the last presentation tells us is that foreign investment increases the possibilities for the yield and reduces the risk in the portfolios of the affiliates. The logical question I hope the regulatory agency—the Central Bank— is asking itself is how I estimate the figure, which is the best figure for a limit abroad. Is it 10, or 15, or 20, or 40, or 80, or is it 100?

I would like to go back. When the reform was launched, it was said at the time that even though the affiliate was the final goal, this would have an internal investment source that was going to

develop the domestic and capital markets, and the market as a whole for that matter. This certainly represents a subordinate interest but, unfortunately, the government knows that. From this standpoint, what we should say is that the limit should be established in such a way that the subordinate limit does not collide with the main limit, the affiliate.

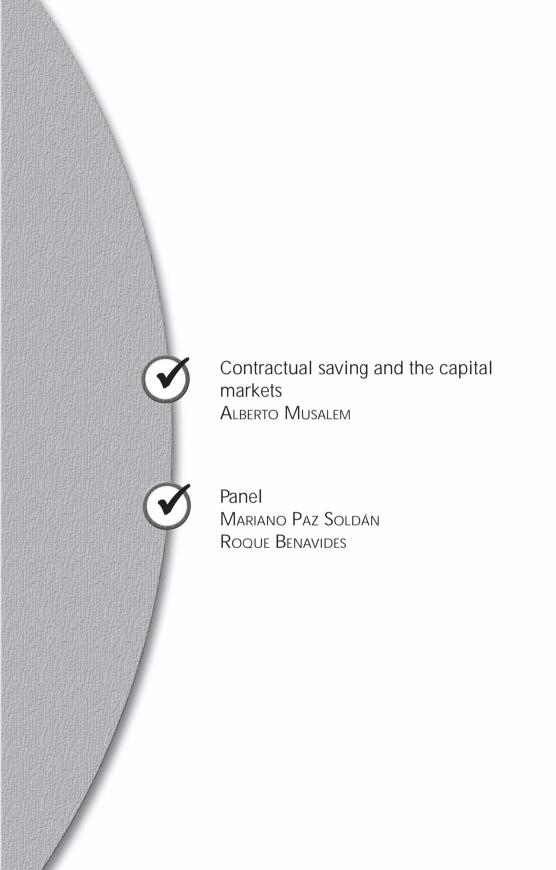
How is that number calculated? We asked the market how we could do this, which is the easiest way. The market will not tell us when we are investing enough abroad but domestically. Hernán said there is a moment in which there are too many resources in a closed market, which is our case, and the market is going to tell us we do not have the correct price. Price is the best resource allocator and provides us with all the market information. When we see that a local company can issue a paper in the domestic market at a rate lower than that it could have issued the paper abroad, the distortion of the price is due to the rule. Then, we have to change the limit.

The counterargument here might be: What if the company is investing domestically? Is it generating national development? Well, the evidence in Peru shows that more than one company has issued in the domestic market to acquire a foreign company with that money. This has been the case over the last two or three years.

Following this rule we can easily define that whenever the rates go in opposite directions, we have to increase the limit abroad. Therefore, we maximize local investment without hurting the affiliate.

## Chapter III

How to develop the capital markets?



## CONTRACTUAL SAVINGS AND CAPITAL MARKETS

ALBERTO MUSALEM<sup>1</sup>

I wholeheartedly thank FIAP and the Peruvian Association of Pension Fund Administrators for the invitation to participate in this event.

I wanted to tell you that my position as official for the World Bank finishes by the end of the month and I will join the Center for Financial Stability in Buenos Aires, Argentina as Chief Economist.

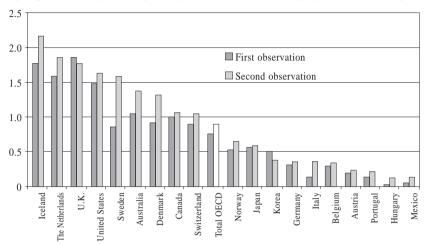
In my presentation I will talk about the experience we have had at the World Bank on contractual saving and the capital markets or financial markets, with results from studies we have carried out over the last three years. We will first see the relative importance that contractual saving has in monetary aggregates and the capital markets; and later we will discuss which are the factors that in our view inhibit the development of these markets, to finally conclude with political recommendations to develop such markets.

What we can see in Figures N° 1 and N° 2 is that there is a persistent increase in the participation of long term assets in most of the economies of the OECD and in emerging economies, and in some of them, they are twice as much as M2 monetary aggregates (money + near money). This is very important because it indicates there is a mass of resources that is growing at a faster pace than M2 monetary aggregates. That is -in these economies in which there are

Doctor in Economics from the University of Chicago, he currently works as an official for the World Bank where he has been the main promoter of contractual agreements. He has previously been Economic Advisor worldwide, leading the development of multiple programs of structural reforms, and heading many studies on financial markets. He has also published his reaserch papers in many countries.

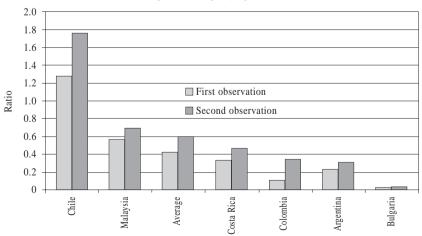
He has a vast experience as Profesor in many academic institutions of Argentina, Brazil, Colombia and the United States.

Figure Nº 1
CONTRACTUAL SAVING / (MONEY + NEAR MONEY)
OECD: END OF XX CENTURY AND BEGINNING OF XXI CENTURY



Source: Data base elaborated by Alberto Musalem and Pablo López Murphy, World Bank and International Financial Statistics of the IMF.

Figure N° 2
CONTRACTUAL SAVING / (MONEY + NEAR MONEY)
EMERGING ECONOMIES: END OF XX CENTURY AND BEGINNING
OF XXI CENTURY



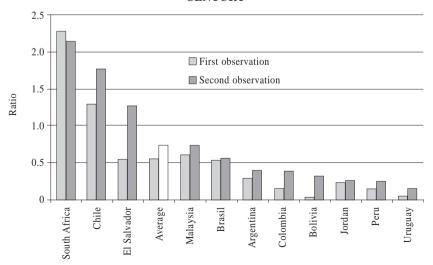
Source: Data base elaborated by Alberto Musalem and Pablo López Murphy, World Bank and International Financial Statistics of the IMF.

institutional investors (financial assets of pension funds, and reserves of life annuity and life insurance companies) that move long term resources—, a change in the money supply structure is underway, with a greater participation of the long term money supply which is very positive for the development of capital markets.

There has been an increase in that relative participation in each one of these countries at the end of last century and at the beginning of this century. In particular, Chile has long term resources that are almost twice as much as short term resources or M2. In the case of Colombia, for example, although there is no increase in these two periods, they account for less than 40% of M2, and in the case of Argentina there is a lower proportion.

Figure N° 3 considers contractual saving plus property and casualty insurance because in many countries the data of life insurance assets cannot be separated from those of property and casualty insurance, so they must be factored in. For instance, in the

Figure N° 3
(CONTRACTUAL SAVING+P&C INSURANCE)/
(MONEY+NEAR MONEY)
EMERGING ECONOMIES: END OF XX AND BEGINNING OF XXI
CENTURY

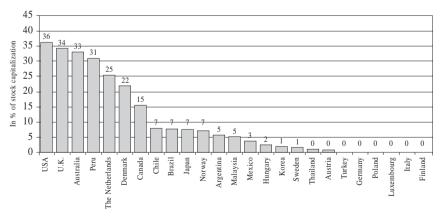


Source: Data base elaborated by Alberto Musalem and Pablo López Murphy, World Bank and International Financial Statistics of the IMF.

case of South Africa, the reserves of the long term savings system are twice as much as those of M2, and Chile still has a good participation. The average for all these countries is nearly 75% and, of course, there are countries like Peru that are lagging a bit behind. What I would like to point out is that there is a considerable number of countries in which the proportion of long term savings is equal or higher than the short term resources. In a way, this indicates the relative importance these resources have and the potential of these countries to expand the participation of such financial resources.

Let us see now the participation this resources have regarding stock market capitalization and bonds. In Figure N° 4, for example, what is the participation of stocks that institutions of contractual savings have in their portfolios regarding stock capitalization? You see that in Chile is 7% because it is 2002. I think that with the advent of multifunds the share is higher than 10% of the capitalization. But in Latin America, Peru is the country with the highest share: 31%. In a way, the Peruvian case is the consequence of an intentional government policy —that has recently change— of borrowing money abroad as opposed to borrowing money domestically. That then, makes much more room

Figure N° 4
INSURANCE AND PENSION FUNDS STOCK PORTFOLIO/
CAPITALIZATION OF STOCKS - 2002\*

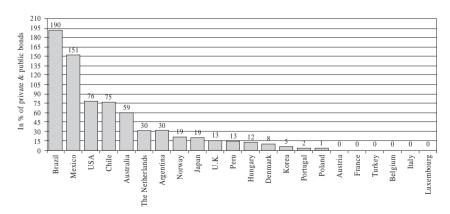


\*For OECD countries the relations is as of 2001 and in somecases 2000. Source: Data base elaborated by Alberto Musalen & Pablo López Murphy, World Bank & World Federation. for these institutions to invest in the securities market, especially in stocks. In the case of the United States, it accounts for 36% of the capitalization of the stock market.

In relation to bonds, Figure N° 5 shows too that in Brazil and Mexico the share of bonds in the portfolio accounts for more than 100% of the capitalization of bonds listed. This might be the consequence of either foreign investment or investment in unlisted bonds. The bonds Chile has in its portfolio account for 75% of the bond market capitalization which is a fairly similar figure to that of the United States. Lagging behind are other countries like Argentina with 30%, but there might be a problem here like in other countries in which the valuation of the fixed income portfolio is sometimes fixed at technical value instead of market value, and usually the former is over the latter, meaning this information is somewhat inflated; on top of that, part of the bonds were already in *default* in 2002.

We came up with an econometric research using data of countries from the OECD and emerging markets in order to study the assessment of market capitalization for both bonds and stocks. We have found, indeed, that there is a positive relation between an

Figure N° 5
INSURANCE AND PENSION FUNDS BONDS PORTFOLIO/
CAPITALIZATION OF LISTED BONDS - 2002\*



\*For OECD countries the relations is as of 2001 and in somercases00. Source: Data Base elaborated by Alberto Musalen & Pablo López Murphy, World Bank & World Federation. increase of contractual saving relative to domestic financial instruments and market capitalization. That is, the fact that contractual savings increase their share relative to the mass of financial assets, really leads to a deeper analysis of the stock market and the bond market. Therefore, the market capitalization of both stocks and bonds increases. There is a positive relation between these instruments and the deeper analysis of the securities market.

Now, the impact on the deeper analysis and liquidity of the stock market is greater in countries with more transparent information of their corporations. This is critical in that it tells us that if we want to develop the capital markets further in our countries, the effect of institutional saving in the markets is much more efficient when the accounting standards are higher, and when the information provided by companies is much more reliable. It is a very important message that we are going to include in our recommendations: if we want to develop the capital markets and if we want these instruments to be more effective in the process, we need then more transparency in terms of the information that corporations provide to the market, in other words, better accounting and audit standards.

Another effect is that the impact on the stock market is greater in countries in which the financial system is based on the securities market. There are countries like Germany and France as well as Latin American countries (Chile is probably the exception) in which the financial systems are dominated by the banking sector, whereas in countries like the United States, Canada, probably Chile, Australia, and England, the financial system is dominated by the capital market. Then, what we have found is that these contractual savings instruments are more effective in developing the stock market of those countries in which the financial system is dominated by the capital market.

The same occurs when pension systems are compulsory as is the case in many Latin American countries, with the exception of Brazil as opposed to other countries like those of the OECD whose systems are basically voluntary.

We found that these contractual savings are more effective in developing stock markets in those countries where the financial sector is dominated by the capital market and whose pension systems are compulsory; and also that (the point of discussion in the previous panel) the closer the capital accounts in the economies, the more effective the development of capital markets. These are empirical results that are by no means a recommendation and we will come back to them later in the final section. It is natural that when the outflow of capital is restricted, internal resources are invested more in domestic assets. But as mentioned in the previous panel, distorsions in the price are created and there are consequences like the inhibition of capital inflows.

Next, we have that the impact on the bond market is greater in countries where financial systems are based on the banking sector. Then, it would come as no surprise that in the case of economies whose financial systems are basically dominated by the banking industry, i.e. in Latin America, these instruments have a greater impact on the development of the bond market.

We also studied whether or not the relation of these instruments of pensions savings and the impact on capital markets is a consequence of a third variable, or if there is a codetermination. So, if this was the case, the results we would obtain would not be relevant. We run the corresponding tests and they showed that the development of these instruments follows a pattern toward the capital market irrespective of other codetermined forces; meaning that the policies towards developing contractual savings are somehow critical in terms of their effect on capital markets.

Let see now what we think are the factors that slow down the development of capital markets. Evidently, the fact that a country has an excessive participation of the government in the debt market, displaces the private sector in the offer of securities. We have even seen that here in the figures, in the cases of Chile and Peru (the most extreme cases in Latin America). We see that there is a greater development in the capital markets because the Government has not participated; there has been no displacement of the private sector due to a relatively structured fiscal policy. Then, one of the problems that the development of these markets faces is the participation of the State in the debt market.

Another problem is the excessive participation of the State in the economy as a producer of goods and services. Pension reforms cannot happen in a vacuum, they must be placed within a context,

a strategy. If only the pensions system is undergoing reforms but the State is still the majority stakeholder of the main economic activities of the country, there will obviously be no flow of papers into the market because the State is still the owner of a big stake of the assets of the economy. This is one of the factors that hinders the development of capital markets because there has actually been a change in the structure of the economy but not a complete one at that. In other words, a pensions reform alone that further seeks the utilization of the market will not be as successful as the one that is implemented jointly or within a global strategy, in which the private sector had a greater participation in the domestic economy.

Another factor that inhibits the development of the capital markets is the macroeconomic volatility and the absence of a medium and long term yield curve due to the difficulty of developing long term instruments. Also, in order to have financial innovation, a prolonged yield curve in time is required for the pricing of the appropriate risks. When there is no yield curve, there is no benchmark, there is no way to make valuations of financial instruments, specially, derivatives.

Other factors limiting the development of the capital market are subsidies to bank loans. First of all, there are countries in which we have direct credit even via development banking. When there are subsidized loans, companies look for credit before issuing bonds or stocks to go to the stock market, they look for financing through subsidized credit.

But implicit subsidies is also another problem. For example, in our countries banking crises are usual, and so are situations in which the resolution of the banking crisis is through debt forgiveness. Some of the countries that have followed these practices are Argentina, Mexico, and Costa Rica. Certainly, it is good to be indebted and we have to bet for that because there are potential debt forgiveness benefits for future debts. So, as this kind of financial arrangements are offered in the banking sector, companies will clearly look for financing via banking debt rather than bond or capital debt.

There are also problems because of the distorted tax treatment. For example, in the majority of the countries there is a tax exemption on interests of bank deposits versus taxes on interests and capital gains originated by corporate bonds. These tax exemptions are

partly compensated due to an implicit tax, since in many countries the required bank reserves are not considered.

There is also a subsidy for the illimited guarantee on deposits, there is a subsidy for the deduction of interest on banking loans but not on loans through bond issuance. Finally, in several countries dividends are subject to double taxation while interest are only taxed once which creates a bias against the issuance of stock in favor of endebtedness.

Other problems we face are regulatory substandards in terms of corporate government, accounting and audit substandards, and an inadequate disclosure of information; technical assessment to the detriment of market valuation, inadequate protection of the rights of minority shareholders, market transactions systems subject to discretional management, even the use of insider information; and an inadequate regulation and oversight of institutional investors. For instance, we have been talking here about multifunds and about deregulating investments, but it cannot be done in isolation. If we are going to deregulate, and I am for the deregulation of the allocation policies of the portfolios -we will see that in the recommendations—, we must do it together with a deeper analysis of the oversight based on the risk of the portfolios. One cannot deregulate and leave everything at the discretion of the good reasonable practices of fund managers, one has to remember that what we have in those countries are compulsory systems, that is, the State has the obligation to guarantee the basic appropriate management of these funds. Hence, this deregulation must go hand in hand with a system of improvement of the oversight systems based on the risk of the portfolio.

We also have illiquid markets in part as a consequence of restrictions to capital flows. There are exchange restrictions, there is an underdevelopment of the future exchange markets, there are direct controls on capital flow and also legal insecurity in many of our countries.

Let us move onto the recommendations for the development of capital markets. Basically, we will tackle the aforementioned limitations:

 Adopt the best international practices of the corporate government (including the responsibility of the administrators and the disclosure of information), international accounting standards, valuation standards and auditing. The best results in the securities market and in financing companies can be obtained when the investment of institutional investors are made under the rules of a prudent investor and the industry is protected against political risk.

- Eliminate the impositive tax differential between instruments and issuers, and limit the deposit insurance for small contributors.
- Eliminate exchange restrictions, create a regulatory framework for the development of future markets and allow institutional investors to invest more abroad.

The restrictions to the outflow of domestic institutional investors abroad creates a distortion in the prices (it is possible that the internal capital cost does not reflect the country risk) that finally limits the inflow of capital because foreign companies participating in the domestic market, or even large domestic corporations with access to international markets, would be financed locally, and they would stop bringing capital, in other words, they would anyway cancel each other out.

In addition, we must understand that our institutional investors do not go abroad looking for a higher yield but a lower risk, whereas foreign institutional investors would not come to our countries in search for diversification to lower their risk but in search for a higher yield. That is to say, there is a sort of complementation, and as we have more latitude in terms of having access to international markets, we will have fewer distortions in the domestic market, and probably a commitment of the economic authority for the free flow of capital to prevail.

If all the other financial intermediaries and the public in general have the leeway to get access to capital markets abroad, why is it then that the restriction is only implemented for this instrument? In a way, the government is sending out a signal to the market confirming a policy of free flow of capital when it is deregulating the access of these companies or institutions to the international market.

Adopt policies that eliminate the blanket subsidy to credit, lowering the participation of the State in the provision of goods

and services, perfecting the regulations of the securities market, stock, corporate bonds, mortgage bonds, mutual funds, fiduciary trusts, leasing, etc.

I would also like to add up a point: it is required to be more proactive in the pension funds, because they cannot wait for the market to be developed, to develop the instruments, but there must also be more interaction between different elements or agents in the economy. An example I really like and I always mention is the Brazilian case. As pension funds can only invest in public papers, in papers that are traded in the markets, the investment banking in Brazil has come up with a product that can be sold to pension funds.

What investment banking does in Brazil is to create closed-end mutual funds invested in unlisted corporations that are, however, authorized by the Superintendency of Corporations. Then, the investment banking issues these funds to the market for companies and pension funds to buy these closed-end mutual funds that are public; that is to say, they are traded in the stock exchange but the underlying portfolio is comprised of a stake of unlisted corporations.

#### **PANEL**

Mariano Paz Soldán<sup>1</sup>

The whole morning we have discussed a series of issues on which I think most of us agree. I would have loved that congressmen, Central Bank Officials, and the Minister of Economics had attended this meeting, because I think that the issues we are dealing with here are of paramount importance for the development of the country, they are important for the development of future pensions of all the workers in Peru. That is why among us we are tryng to convince ourselves, but I think we are already convinced, so I would like other people to have attended this meeting.

I totally agree with the presentation of Mr. Alberto Musalem in that the development of the capital markets is clearly influenced by the growth of pension funds. In the Peruvian case, I think the figures have shown that we are talking about 25,000 million soles, approximately 7,500 million dollars. Obviously, it has been a growth that has helped the joint and parallel development of the capital market. And we also see in the projections that Pablo Moreyra has shown the future development after which, ten years from now, we will not be talking about 7,500 million but 20,000 million; and 15 years from now, 40,000 million dollars. Therefore,

Biomedical Engineer from Boston University and Master in Industrial Engineer from Northeastern University. In addition, he specialized in Finance at the School of Business Administration for Graduate Students (ESAN) in Lima, Peru. He is currently the Chief Executive Officer of Profuturo PFA, and also the President of the National Association of Advertisers (ANDA) and the Securities Board of Trustees. He is also the Director of the Executive Committee Peru 2021 and the Peruvian Institute of Business Administration (IPAE). He is also a member of the Advisory Committee of the Center of Accounting and Sustainable Management from Universidad del Pacífico, the Consultancy Council of the Peruvian University of Applied Sciences and the Consultancy Council of the Southern Scientific University.

it is an important amount that will clearly change the development of capital markets in Peru.

Currently, there is evidence that we are talking about 60% of the national saving and almost 40% of stock capitalization, 30% of the total liquidity, and 12% of the GDP. We are talking about important figures, as of today, what we have in pension savings is greater than the private savings of the banks and, definitely, this has helped the development of the capital market.

Yet, I think there is still much work left to do. The information provided by companies is not as transparent as I would like it to be. Definitely, the financial system is not based on the securities market and, consequently, the bond market is more developed than the stock market. We have seen how the subject of financial yield bonds, corporate bonds, etc. has been actively developing but in Peru there still is much informality, and therefore, there is no institutionalized saving and the financial system still has a lower participation than in other countries in the region.

Now, from all the things I have mentioned in terms of factors that slow down the development of the capital markets, I think that in most of the cases, Peru has behaved quite well so those factors do not exist. As for the participation of the State, it did not participate actively when the system was implemented which allowed private companies to develop, and currently there is such an excess of liquidity that the State can issue and the private sector can issue, but there is not a greater offer, and therefore, the State is not hindering the development of the capital market.

However, there were some comments that I think are important to notice as the issue that Hernán Garrido mentioned regarding the limit of government papers. Currently, the fund has reached more than 20% in government bonds which is not bad compared to the rest of the region as Pablo said; nevertheless, if we recall that in 1997 we had 20 million soles invested in government papers as opposed to the 5,210 million invested in the State in only seven years, meaning there is a proportion that somewhere down the road will have to be limited because we also have experiences like the Argentinian case, where they reached levels of 80% and when they defaulted a third of the fund got lost. Not only to the detriment of the development of the capital markets, but also of the pension

system per se, and I think those are experiences we have to learn from and know how to set limits to them.

As regards the excessive participation of the State in the economy as producer of goods and services, I think this has not occurred in Peru. We have had privatizations which has been the case for the most of the last decade.

As for macroeconomic activity and the abscence of a yield curve in Peru, I think they have been managed in a quite stable manner over the last few years. It is true that there was no yield curve at first, but over the last few years, through the Economics Department and the program "Market Creators", a yield curve has been created. There are still some points to cover but I think we are on the right track.

With regard to the issue of subsidies to bank loans, I think that in Peru there is no system of subsidies to bank credit.

Distorted impositive treatment: In the case of Peru, exemptions do exist but they apply for both capital gains and profits originated by corporate bonds, therefore, there is no distortion.

As far as regulatory substandards are concerned there are things to improve at the corporate governance level, accounting and audit, etc. but I think we have made some strides in terms of the good corporate governance. When the PFAs first started, there were no credit rating agencies, nowadays, credit rating agencies obligate companies that are at least in the capital market to disclose much more transparent data than before, but I think there is no understanding yet as to what a good corporate governance entails as a whole and, therefore, there are many companies that believe that because they are complying with the law, this is enough to say they have a good corporate governance.

With regard to this last point, we have not had pleasant experiences with some companies and, however, due to the lack of liquidity, the dearth of liquid papers, we have not been able to punish issuers that behave as either a good or a bad corporate governance.

What I really think we have to improve, and I think that the Superintendency is about to go about it, is the valuation

methodologies of several patricipants of the capital markets. Currently, everything is under the Superintendency of Banks and Insurances and, yet, there are different ways of valuating instruments depending on whether or not they are owned by banks, insurance companies, or PFAs, which makes the secondary market not so active because there are papers that are beneficial for some and harmful for others.

On the other hand, PFAs must be proactive which is what we have been doing. We have been somehow the promoters of "Procapitales" which is an institution that is just trying to develop capital markets. The former President was the Chief Financial Officer of a PFA; we have engaged in Preinversión; we have participated in Provalores which is a group that together with CONASEV and the stock exchange tries to develop markets.

So, there has been some initiatives but I think they must not limit the main objective of reaching better pensions.

It is important to work both ways, it is important to be concerned as to maximizing the yield by minimizing the risk and reach better pensions, and develop the capital market at the same time. But the capital market must not come first which is exactly what has been going on lately when the technical arguments for foreign limits have come to an end. As of now, I think that the issue of widening the limits abroad is a must.

I think there has been consensus in that multifunds are the right path to create more competition, more sense of ownership, and I also believe there is consensus until today in that widening foreign limits does not contradict the development of capital markets. And you have seen in the Chilean case how it has been possible to widen it

I think there is something wrong as far as foreign limits are concerned, and it is the fact that saying we do not want to take the money away contradicts what is read in the newspapers from the stanpoint of an expert. They have run out of technical arguments and they are now saying that it is outrageous that the money of the Peruvians goes out to finance companies abroad. I think that is happening anyways, and those are not the kind of arguments that must be made to widen foreign limits. We want this to be a fair issue and it has been also demonstrated that there are clear signs

we are in a scheme in which we are paying rates that we should not be paying, and clearly the pensions of the future workers in Peru are being harmed. There are cases of issues of domestic companies in the domestic market with a credit rating lower than that of the parent company that, obviously has a lower credit rating and yet we have only two points of difference in the issuances that have taken place either in Chile or Peru just because we have these limits.

When Augusto spoke and said that a point in the yield means 25% or 27% more for a pension, well, two points in the yield mean 50% or 60% more for a pension and this is what we have to be clear about.

Pablo talked about the investment scheme of some companies that had issued here; a concrete example is that of the cement company which issued at a 3.8% rate, and the same duration for a Mexican company in the same period issued at rates of 8.7%. In other words, we are talking about 5 points of difference in the yield and at a lower risk than the domestic company which used the money to acquire a company abroad, so we are not talking about developing the market, either.

Of course we are not against the development of the country, but I think there are not enough funds for the country to keep on growing. The country is growing at a 4% or 5% pace, the funds are growing at a 20% pace, and what we do not have to do is harm future retirees. But if we were to estimate what they have already lost, it would be about 250 million. We are talking about a 9% less in the pension just because foreign limits have been restricted not in a technical way but in a way in which the welfare of the Peruvians is being overlooked except for just some internal indexes that do not represent the main objective of the system.

#### Panfi

ROOUE BENAVIDES<sup>1</sup>

I thank the invitation. When I look at the speakers who have presented here this morning, I see that I am the only representative of the companies in which PFAs invest, so there might be a difference between what I might say and what I should say from what has been pointed out this morning.

I have listened to Mr. Musalem and I think we are convinced we have to develop capital markets further, and to change a bit the tone of the presentation, I wanted to talk about why a company like Compañía Minera Buenaventura is invited to a forum like this. Turns out that roughly 5%, if I am not mistaken, of the total fund of Peru is invested in this company. PFAs in Peru have about 14% of the stock valuation of the company, out of which 12% is invested through the Lima stock exchange, and about 2% through the New York Stock Exchange.

Compañía Minera Buenaventura is a company the was founded 51 years ago. It was the first Latin American mining company to be

Civil Engineer from Universidad Católica of Peru. Master's degree acquired from the management School of Brunal University – the United Kingdom. Graduated from the Management Development Program at Harvard Business School and from the Advanced Management Program of Templeton School at Oxford University.

He is currently a Director and the Chief Executive Officer of Compañía de Minas Buenaventura and a member of several organisms such as Centrum Consulting Council, the Faculty of Accounting and Management at Universidad Católica of Peru, among others. He is also a political spokesman of the Entrepreneural Council for International Negotiations (CENI) and Director of Yanacocha and the National Mining, Oil and Energy Society.

He has previously held several positions within Compañía de Minas Buenaventura as Project Engineer, Assistant to the President, and then as Finance and Administration Manager up to his current position. He was also the President of the National Mining, Oil, and Energy Society, as well as the National Confederation of Private Institutions (CONFIEP).

listed in the NYSE back in 1996, because it was understood that it was the only way to go since, unfortunately, the Peruvian capital market was very small. We were in a globalized industry where we had to compete against much larger companies, so we needed to be well-capitalized and, the bottom line is, what it takes to defend property and maintain control, as it is said here in Latin America, is a good stock exchange capitalization. That is the best defense a company may have. The best defense is not to own 100% of the debt but 30% of the capital. We must be involved, but when companies are overexposed to debt, when they are not well capitalized, neither the investor nor the company wins.

We are listed in the NYSE, we have liquidity, we have a good stock exchange valuation and that is what allows us to develop our activities.

We have been talking about good practices in the corporate government and, of course, you will understand that since we are being ruled not only by the CONASEV and the Lima Stock Exchange in Peru, we also have to report to the Security Emission Commission and to the NYSE. In that sense, we are forced to apply good corporate governance practices, and we also apply them voluntarily because we wish so, because we believe that this is the way in which value is added to the company and the shareholder.

In that sense, we have worked quite a lot in terms of transparency, in terms of providing the information required by getting into the company's web site. Of course, as the saying goes "you make belts out of leather", meaning that we have to be efficient in our operations, in our results. Evidently, the Board of Directors plays a very important role and we as Directors must try to pick and seek the best people. I am convinced that the cheapest consultant is a good Director. In fact, a good Director supports management, supports the company and that's why we must have good Directors, independent Directors, because the truth is, it seems that Directors must not only be independent but they also have to know nothing about the company.

And If I may, I would like to talk about how Directors get elected by the PFAs in Peru. I will take Buenaventura as an example. I cannot speak about this in theoretical terms but in practical terms. 50% of the capital of the company is held by foreign institutional investors and the main one is Fidelity. And this does not come as a surprise. They hold 18% of the company in 20 funds. Do you think that Fidelity imposes a Director? Obviously not. Anyways, the legislation in Peru forces PFAs to propose Directors which does not happen in the Western civilized and developed world. And I am not kidding, this is simply the truth. It turns out that at least in North America, the Board of Directors has a Committee that seeks the best talents and I think that the regulation PFAs must comply with is wicked, and this is simply a fact, and it happens.

Of course, we firmly believe in the respect for the rights of minority shareholders. And if we want to attract small investors, the only way to do it is respecting them. And, of course, if we want to attract pension funds which is a group of small shareholders, we also have to respect them and that is done through transparency.

Buenaventura has been through rather unusual situations. Until 2001, we had two kinds of shares and the reason we issued a second kind of shares was that we were in the midst of a very unpleasant trial that lasted for 6 years. It was nothing but a *take over* concealed as a corporate dispute. So we were not going to issue common stocks because it would have been naïve; if we were to be acquired, that would have helped them do so.

So preferred stocks were issued in New York in 1996. In 2001 we decided that the best way to provide value for our shareholders was to go for one kind of stock: equal rights to all our shareholders; meaning that Buenaventura has gone from two kinds of stocks to the same kind of stock. And nowadays we have the same rights. At Buenaventura, a share is like a vote, and that is the only way to go.

Let me now move onto the subject of the PFAs. A lot has been said regarding the reserves of the Central Bank, and I wonder where the muscle of the CONASEV is, because when I hear about the U.S., I hear a lot more about the Securities and Exchange Commission rather than about the FED in terms of private companies. Then, Why is it now that in Peru you hear more about the Central Bank rather than about the CONASEV? I think that here, with all due respect for the National Oversight Commission of Securities and Corporations, they have to play a better leading role.

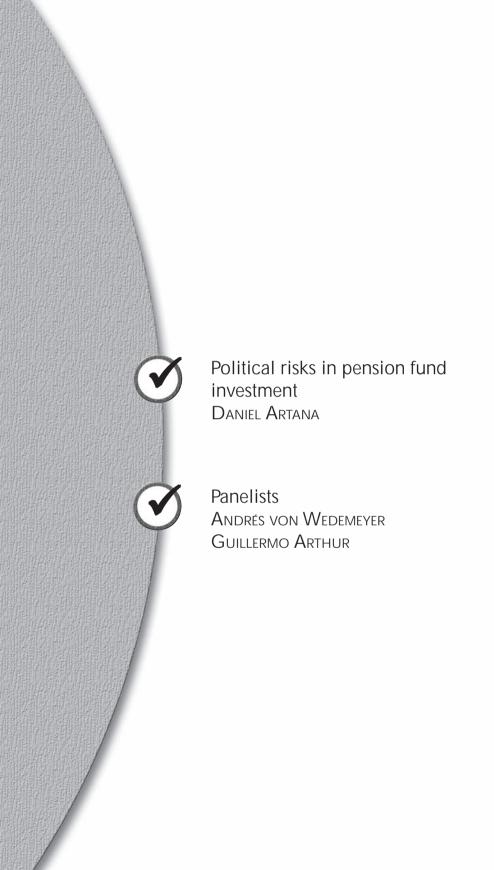
CONASEV must prevail. I am not saying it has to be more important than the Central Bank, the CB has its function but CONASEV has to take the leadership position, and in that regard, the PFAs and the companies listed in the Stock Exchange must help. I think people just cannot understand what the true roles are in that regard, and the CONASEV not only has an impact on the PFAs, but also, of course, on companies like Buenaventura. And I say this on behalf of the company in which I hold the position of Chief Executiver Officer.

Our countries are not a great help in many aspects and in Peru we hear a lot about political buzz, we hear a lot about the limitations to invest. I believe that what is best for the PFAs and for the economic system as a whole for that matter is market economy, and this means that if an individual, like myself, is able to have as many investments abroad as he pleases, I do not see why the PFA to which we contribute monthly cannot do exactly the same. And I think we must reform in order to improve, foster and develop these capital markets.

I do not want to finish up without saying that I also think PFAs must seek investment alternatives; and I think that concessions, which were not mentioned during the morning, are a good mechanism that would also allow to contribute to the development of our country with the money of the PFAs.

### **Chapter IV**

Political risks in pension fund investment



# POLITICAL RISKS IN THE PENSION FUND INVESTMENT

Daniel Artana<sup>1</sup>

I would like to thank the Peruvian Association of PFAs for inviting me to participate in this seminar and also thank them for having given me the difficult task of the first presentation after the interesting lunch we all enjoyed so much. But I think that has been solved quite well because after the Argetinian debt default and its impact on the private pension system which had about 70% of its assets in Government securities, the subject looks at least entertaining.

What I will try to present first are some comments on the political risk in the pension systems both in terms of allocation and capitalization; later, I would like to comment briefly on the Chilean experience so as to focus later on the Argentinian case and, finally, conclude with some reflections and suggestions.

First and foremost, the State is motivated to intervene pension systems for different reasons, one of them is to reallocate the income, another one is to obtain easy funding for the National

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He previously worked as Treasury Secretary of the Department of Economics and Infrastructure of Argentina, and was a Director of FIEL. He also worked as consultant for different private and governmental entities from several countries like the World Bank, IDB, UNDP, among others.

He was an outstanding professor at Universidad Nacional de La Plata and at Universidad Torcuato Tella.

He is currently participating in several publications of books and magazines on Fiscal Policy matters Public Debt Sustainability, Public Services Regulations, Incentives on Investment, Social Security System, Retrofitting, and Restructuring of the Public Sector, among others.

Treasury, since oftentimes in our region, the State has fiscal urgencies and therefore, the temptation to get their hands into the resources is almost permanent, and above all, because the negative effects of these decisions can be seen long term, when people leave, then, the burden is somehow passed onto future governments while the "benefits" of having those funds available and the reallocation of income favors the current government. Consequently, the temptation of leaving the problems for the future and enjoy the current benefits is very high, even though the costs of the problems are higher than the benefits measured in current value.

There are two different ways now. Actually, the State can have an impact on an allocation system like a capitalization system. Perhaps, the most obvious way to affect an allocation system is twofold: having pensions that do not reflect the contributions made, instead they are lower than the contributions that were actually paid by individuals; or downright deterioraring the pensions in real terms, which has an important political cost that oftentimes has been used to finance the National Treasury.

In a capitalization system the thing is a bit more subtle. On one hand, one can use pension funds to promote certain objectives, political investments that the management of the country might have, with the argument of promoting development, and that can be done either demanding that a percentage of the funds go to defined political objectives —as we saw in some of the presentations this morning— or combining as many assets as possible in which pension associations can invest. This forces to intervene in other assets in capital markets that are not sufficiently big as is the case in many of the countries in the region.

Another way to do this is with asset prices that do not reflect the market value, as was the case in Argentina during the tequila crisis; with a portion of the investments in public bonds because it is a scheme in which there is a penalty for not moving within a band of the average yield of the system. The fact that there are assets that are protected against price fluctuations of the markets strengthens herd mentality and strengthens the fact that an individual who does not want to follow the average in that overinvestment of public securities, has to naturally do it if he or she does not have, eventually, the greater risk that his or her shareholders have to contribute for the difference in the objectives.

And one can ask directly that the pension funds be mandatorily invested in Government assets, and that later the State defaults their obligations as it has happened in Argentina.

A priori, it might look as though the capitalization system is better prepared to cope with political risk owing to the three issues that are well-known to you: individual accounts making the expropiation decisions more visible on the government's part; second, the right of ownership is clearer (relative to the former issuer) and, actually, this has to do with the fact that it is easier for the State to interfere with the flows than it is to interfere with stocks. As far as flows are concerned, one might always think it is transitional, instead, a percentage of my 10-year savings is being taken away from me. That is much more expensive, a much harder decision for the State to make. And on the other hand, the fact that there are administrators which compete in the management of funds creates a group that is independent from the public regulator, the State; it creates an additional opposition of interests to that of an allocation system which, regularly, almost everywhere is another agency of the government which, on top of that, is influenced by the decisions of the National Trerasury.

What I will do next is to summarize some comments from a work by René Cortázar, who was the Labor Minister in Chile some years ago, from a presentation he gave last year at a meeting of the FIAP in Cancun.

In 20 years of capitalization system in Chile there has been some attempts to politicize the system even though the attempts have failed and the system has been relatively immune to these pressures. One thing he mentions in his work, and that may have helped is the fact that in Chile the regulations can only be modified by the Executive, thus avoiding that more oportunistic decisions can be made in Congress.

On the other hand, he mentions in his work that at some periods of time during these 20 years, there have been some interferences with the allocation system. At some point in the second half of the 80s, pensions did not follow the evolution of the prices due to fiscal urgencies; there were some changes that end up favoring some sectors to the detriment of others. So if we look at the Chilean experience we might actually say this is what was expected: the capitalization system was better prepared to cope

with political interference. It has been confirmed in this particular case. This takes us now to analyze the Argentinian case where it seems the conclusion is the opposite.

What I am going to try to do here is tell you a little about the sequence. First, there was already a loss of transparency with the tequila crisis. In order to avoid that assessed shares reflected the drop in bonds (which later recovered), administrators were allowed for a portion of the portfolio in public bonds to be assessed at technical value, that is, computing the rate of return at the moment the bonds were bought, which avoided that part of the portfolio was exposed to market fluctuations. It is not a transparent way to reflect what the real value of the portfolios was, cushioning the volatility that sometimes prices bring to the market.

Moving now onto the crisis. In the year 2001, the limit to buy government bonds was increased from 50% to, in fact, 70%. Afterwards, pension associations were practically forced to use funds deposited in fixed terms to buy short term treasury bills in a context in which the State could not face its debt maturity placing debt in voluntary markets. Later, they were again "persuaded" to participate in the megaexchange of 2001, where basically bonds were exchange for secured loans with a lower performance but with a guarantee that generated tax that is charged in Argentina on current account credits and debits.

Finally, the crisis unleashed amidst the default process with roughly 70% of the portfolios invested in public bonds, and now I can be more precise on this. When I sent the presentation, there were still certain issues in the process of being defined. Now we can be more precise as to how these bonds were going to be redeemed: they would be redeemed through a bond in indexed pesos that will have a coupon of 3.3% above the indexed pesos, and that bond will have a total or partial remission of 30%. It will be above the Argentinian bond, losing currency and jurisdiction. Most of the bonds in Argentinian debt were in dollars and issued in jurisdictions outside Argentina. It is a 42-year bond with ten years in which even interests are capitalized, and has a grace period of 22 years.

There is a very small part of the RPFAs that owned short term bills, which is taken out of the redemption of the debt and exchanged for a much shorter bond, also in indexed pesos as of 2014; and finally, the remainder because there is no quasi par bond issuance for all of the bond holding RPFAs. They have a discount bond with a 66% remission in dollars but with coupons that are much more similar to 30-year market coupons. In other words, if we calcute how much the bonds are worth, we have the discount, estimated in 10% in dollars, the discount rate might be worth about 30 cents, and the quasi par 42 cents. This is a bond that will not be traded for a year and we will not know for sure, but in both cases there has been a substantial remission.

Now, I am going to strike a parallel between what the Argentinian system has been and an extreme episode with default and the relevant option. It is true this has been a violent attack to the ownership rights of the savers but, on the other hand, the relevant option for a pension system of capitalization is not to invest in dollars abroad or invest in a pool. But what would have been the case if savers, the workers, had been in the pay-as-you-go system. Then, I am going to try to make a comparison between both systems to see whether under a stress scenario the pay-as-you-go system has been better protected than the capitalization system.

The first thing one can do is to go over what has occurred with the retirement credit of the pay-as-you-go system, considering that the Argentinian pension reform goes back to 1994. But as you can see in Figure N° 1, since the early 80s, median retirement falls to half in real terms, then, it recovers during the convertibility period and now, in the crisis scenario it goes down from an index of 120 to an index of 100, that is, there has been a remission of 17%. In other words, those who were retired in the pay-as-you-go system, those who were never in the capitalization system also had a substantial credit remission.

Now, on top of this we can make a more conceptual comparison, and the point here is that one can compare an ideal pay-as-you-go system against a system that is and has been abused on the political management side in Argentina and in other countries in the region. And what I am going to show is that, in my mind, and even under extreme circumstances such as the default with remissions at levels never seen before in a country the size of Argentina; the capitalization system is now better off than the pay-as-you-go system. Although there has been a violation of the ownership rights that is very costly for future retirees, it speaks somewhat of the fact

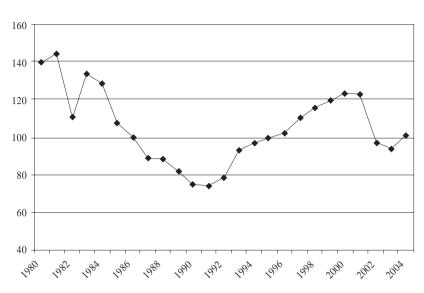


Figure N° 1
RETIREMENT CREDIT BALANCE OF PAYG (AVERAGE)

that the capitalization system better resists the attacks of the political power than the pay-as-you-go system does.

What we did in this exercise was to try to evaluate how low the assessed share of the pension funds in Argentina would go, the average of the funds; because the situation varies greatly from one RPFA to another. Since one of them participated in a redemption that took place before and was more favorable than what others were offered, but I take the average of how low the assessed share would go if we valuate the bonds at market price.

To have an idea of what the yield gives. And remember that in the presentation given by Augusto Iglesias in the morning, he showed information provided by Robert Palacios that indicated a real yield in Argentina of 11%. Well, if we factor in the effect of the remission of the bonds and compute that the assessed shares go up in Argentina due to devaluation, because the unaffected part of the assets improved, from values in real terms due to the depreciation of the real exchange rate, the result of all this is a drop in the assessed share of about 25%.

Bearing that in mind, the question is how much goes to accumulated yield from 1994 to date, and the answer is roughly a real 6.5% a year, and the net of the commissions for the RPFA is a real 4.7% annually.

So, if one compare under these circumstances what happened to capitalization, and looks in theory at the amount accumulated in a pay-as-you-go system, we can see that it accumulates the growth of real salaries plus the growth of the population, because both allow to have a bigger wage bill over which future pay-as-you-go pensions are paid. But in this period of time, in these ten years, the population in Argentina grew 1% a year and real salaries fell to 1.7%. That means, if we project what happened this decade, the long term yield in the pay-as-you-go system was -0.7% a year compared to a 4.7% yield in the capitalization system even under stressful circumstances.

Long term, the quasi par bond has had a yield of 3.3% but only in a portion of the portfolio, and we will have to see whether in the future the historical yield obtained so far can be replicated. It would also be higher than it would be in an ideal pay-as-you-go system: the population in Argentina grows 1% a year and real salaries could range from 1% to 2% due to growth in productivity. I would say, then, that the most optimistic scenario would be of 4.7% against 3%. Therefore, we must conclude that it is still a stressful scenario. Apparently, the capitalization system was relatively better off compared to the pay-as-you-go system.

There might certainly be risks of new defaults, but it is also true that during extreme episodes, as we saw earlier, the affiliates of the pay-as-you-go system lose as well and do not fall into this ideal system that accumulates 3% a year.

It is true that after redemption the RPFAs in Argentina will have a very liquid investment represented by these quasi par bonds, but also the investment in the pay-as-you-go system is very liquid, one cannot transfer freely the funds acummulated by the pay-as-you-go system.

So, in this sense I would say things turned out to be relatively well, except for one assumption. In order for this to be true, contributions must come back to 11% in Argentina –they are currently 7%, they were reduced from 11% to 7%-; if not, the

commission effect is very important and, therefore, the capitalization system becomes burdensome.

Starting from this I will try to make some reflections.

There is one thing we must have in mind first: A portion of the Latin American countries, four in particular, Argentina, Uruguay, Bolivia, and Peru where people –due to several reasons that have to do with hyperinflation- decide to save in hard currency, in foreign currency. These economies are quite dollarized. And if we want to satisfy that, and the State and the private sector offer bonds in dollars, the portfolios are exposed to real exchange rate risks, and regurlarly, in solvency simulations of debt this risk is not factored in quite well. For example, Uruguay whose debt was nowhere near that of Argentina but above 50% prior to the default, and the devaluation took it to unbelievable levels, the debt by the late 90s accounted for 30% of the Gross Domestic Product. And yet, it had to undergo a restructuring because the macroeconomic adjustment demanded a very significant real exchange rate depreciation, which generated, in turn, a financial crisis due to this real exchange rate depreciation issue among other things, and the debt went from 30% to 100% of the GDP. Then what seemed to be solvent was not so anymore.

It strikes me as curious that those countries with an investment limit in harder foreign assets are the four countries aforementioned; all four have the most dollarized economies in the world, and we should naturally allow that the capitalization system might be flexible enough to provide savers with what they want, i.e., save in dollars and not in indexed and non-indexed domestic currency.

A second reflection: compared to what happens in other parts of the world, we naturally think in financial theory, that investing in bonds is a safe asset investment. Now, here is the deal, in most of the region sovereign bonds are not risk free bonds, then, what kind of safe assets are we talking about to persuade RPFAs or PFAs to invest in public bonds? As a matter of fact, sometimes we have to look at historical high yields because we are persuading our PFAs to invest in what in other countries would be a junk bond. And if the objective is to protect future pensions and at the same time satisfy this wish of the people to save in hard currency, because they do not trust governments, it holds

water to have higher investment limits abroad. This has been argued in the morning and I think there is an additional macroeconomic reason to ask for that.

Another comment that was brought up this morning was that if we set multiple objectives, we can be exposed to the system later as well as to criticism that is out of the question. The latest document of the Central Bank on pensions reform has this problem somehow because, turns out, the pensions reform did not increase its coverage. Partly, there was also a problem when we were led to believe reforms were going to solve all the problems in the economies which is absurd. The pensions reform was supposed to provide people with a better pension, and if on top of that they help to develop the capital markets as well as to improve the coverage, better yet. They represent external factors but we cannot judge the reform because of multiple objectives that an instrument cannot meet in order to solve all the problems in our economies. It seems uthopical and it may backfire because, for ideological reasons, those who are against the reform find something to say. You see? The coverage was not increased and the reform failed. This is something we can see in Argentina and it is also happening here in Peru.

Now two or three final conclusions: Even in an extreme scenario, the capitalization system has worked better than the pay-as-you-go system; the multiple objectives and the lack of transparency like assessing at technical value must be avoided. We cannot directly predict the idea that bonds are always a safe asset. Then, if we put these two things together, the worse the credit rating of a sovereign bond and the greater the preference of a society to save in dollars, the higher the limits –if there must be limits at all– to invest abroad; and that, therefore, should lead towards financing transitional costs in the Chilean way, i.e., with fiscal surplus as opposed to public bond issuance.

This suggests that in order to reach the objective of improving future pensions, it is very important that public finance is healthy, because, otherwise, the risk of expropiation is higher in any system; it is important that portfolios are well diversified which has been extensively discussed this morning; and if possible, try to avoid minimum limits to investments because this forces to invest in assets that do not allow for the best yield. We also have to avoid persuading RPFAs to invest in certain assets by combining

maximum levels, which is valid, as many other objectives are, but there are other ways to concentrate them. Trying to reach an international diversification of the portfolio, not only because of a risk diversification issue but also because there are societies within Latin America that want to save in hard currency, then, we somewhat respond to this social concern.

Transparency is important. Valuating at market prices, and if the assessed shares have gone down, it is preferable that the affiliate knows, as opposed to what we have done in Argentina and what we will keep on doing in the coming years: hide this reality which brings about quite important intergenerational shifts. And also depoliticize the oversight process.

I think this agenda has been around all day long so the only thing we do here is to summarize a whole bunch of consensi we are reaching in this meeting. As someone said this morning, it is not clear whether or not there are consensi outside this environment but at least let us agree among ourselves so as to have a wider debate.

#### PANEL

Andrés von Wedemeyer<sup>1</sup>

I would like to start by saying that I congratulate Danial Artana for his brilliant presentation, a different approach from what we have been talking the whole morning, and maybe a good summary as well.

Precisely, what has been said allows us to highlight three aspects that I think are relevant as a conclusion and deserve to be highlighted. First, I undoubtedly think that the development of every pension system requires to operate within an economic security framework as a basic underpinning, that can only take place thanks to a healthy management of public finance. We have just heard examples of the opposite with the inconvenient that even those who were politically responsible blame the failure of their own wrong policies on the pensions system.

If a country or a forgotten society does not remember this reality, it will be, in turn, doomed to destroy its pension system and most likely its social peace. The creation of resources that will allow to

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Currently, he is the President of the Association of PFAs in Peru, President and Chief Executive Officer of Cervesur and Chief of the Board of Directors of several entities: Cervesur, Profuturo PFA and Euromotors. He is also the Director of several companies such as La Positiva, Insurances and Reinsurances, Futuro Invest Inc., Company of Insurances and Reinsurances (Bolivia), among others.

Among his prior positions he worked as President of the Chamber of Commerce and Industries of Arequipa - Peru, and also as Director and CEO of Cía. Cervecera del Sur del Perú. It is also important to mention his role as Director of Bancosur; and that in 1998 he was awarded the Medal of Industrial Merit by the National Society of Industries.

finance pensions down the road can only be reached in a stable environment where the real value of these savings is preserved. Otherwise, pensioners would be the first victims of any monetary and/or financial disorder and the subsequent inflation it generates as our own experience has demonstrated.

The second aspect worth highlighting refers to the principles of diversification. It is paramount to bear in mind that industry diversification, or issuer diversification, or market diversification is the cornerstone for an adequate portfolio management which not all politicians at present seem to comprehend.

In our case, the approach we have heard from Daniel Artana is interesting. But in the case of these three countries, there is a specific issue in that we are used to thinking in dollars because of these hyperinflation times, and all of a sudden when we have the surprise that the Peruvian currency, as it happens, starts revaluating against the dollar; then, everything gets much more complicated because that is something we still do not know how to manage, at least the public is not used to managing it. Consequently, it is critical to have this criteria in mind so that there is an opportunity to lower the risk in papers that are not in the domestic market, which is an additional argument to all of the healthy arguments on portfolio diversification.

That is why the system must defend by all means that such principles be respected unescrupulously by both the administrators and the government authorities which in many cases are prone to overstep those principles due to political considerations. In this specific case in Peru, it is public and noticeable our current and total discrepancy with the arguments of the Peruvian Central Bank of Reserve not to increase the current limit for foreign investment of private pension funds.

We estimate that the Central Bank has adopted a position that goes beyond the purpose of its intervention on the matter to the detriment of the interests and rights of our affiliates. And it was already said here that it must be CONASEV the entity that should work with the criteria we hear today in the discussion of the Central Bank of Reserve whose function is quite different to that it is taking on to the detriment of the system. What is more, if this position is not modified in the near future, it will affect the implementation of the multifunds that by law are already created in the country as a new alternative of pension saving.

We believe that the criterion adopted in this case has been overly politicized harming the interests of our affiliates.

The third issue I would like to point out –and I think it is convenient to emphasize– is the transparency in the assessment and valuation of the portfolios as another of the indispensable elements to guarantee a solid development of the private pension system as well as in fact of the capital market. We have heard in the morning too that, obviously, if we are dealing with a PFA, an insurance company or an investment fund, they cannot be given other systems to valuate an asset that is still the same asset depending on the situation.

The portfolios of the funds must reflect in the most precise manner the reality of the capital market in countries with high volatilities in order to enter into that market and adopt the decisions that are beneficial and protect the funds and the investments.

The experience shows that using inadequate methods to valuate a portfolio or a security that is part of that portfolio, inexorably leads to a second best relative to stability and quality which finally harms pension funds.

To wrap it all up, I guess that the experience our country has in this matter sheds light on the importance of this factor. In our case it has been regulated adequately which has contributed to consolidate our pension system.

#### **PANEL**

GUILLERMO ARTHUR<sup>1</sup>

My comments on Daniel Artana's presentation will be limited to stress some of the things he mentioned, because I greatly concur with what he has stated.

He has told us that the political risk of the pension schemes is given by two types of pressures: first, the fiscal pressure, i.e., the interest of the State to get easy resources that will allow to fulfil certain budgetal objectives. And the greater the success of our system and the more money accumulated in the individual accounts, the greater the risk as well; second, the redistributive pressure which is represented by the interests of specific groups in increasing the amount of their pensions or lowering the requirements to obtain them.

He also mentioned that the new pension system undoubtedly has a better resistance against the political risk for two reasons: first, because in this system the right of ownership over the funds is stipulated, consequently, it does not represent a promise but money that belongs to the workers; and second, because any political interference is much more visible since it is on a stock not on a flow.

Lawyer from Pontificia Universidad Católica de Chile.

He is currently the President of the International Federation of Pension Fund Administrators (FIAP), of the Chilean Association of PFAs and the Federation of Private Institutions of Social Security. He is also the Vicepresident of Summabansander PFA S.A., and a Member of the Administrative Council of the International Labor Organization (ILO); of the Executive Council of the International Organization of Employers (IOE); and the Labor Commission of the Confederation of Production and Commerce.

He has stood out as speaker on reforms to social security in several International Seminars.

He was formerly the Labor and Social Security Minister.

He is the author of the book: "Legal Status of the New Pension System", Editorial Jurídica de Chile, 1999.

This has been demonstrated in a work by René Cortázar that points out that since the new pension system was in force in Chile, there has been no political interference, on the contrary, all the legal regulations that have been promulgated in the past four administrations since the implementation of this new system have tried to improve it and strengthen it with no interference of any kind. However, in the same period there were innumerable interventions in the pay-as-you-go system which continued in a residual manner for those individuals who in 1980 were contributing to the former system. Consequently, this is the fairly eloquent proof that at least regarding redistributive risk, the capitalization pension system is far more prepared than the pay-as-you-go system.

Nevertheless, the difference Daniel referred to between the Argentine situation and the Chilean situation concerning fiscal pressures, or the permanent temptation of the governments to use pension funds for other purposes, weakens the argument of this greater force of the new pensions system.

Why was the situation avoided in Chile and not in Argentina? What is the difference between both countries? It is simply the composition of the investment portfolio. I think that a portfolio absolutely concentrated on public debt instruments is in a vulnerable situation completely different from that of a well-diversified portfolio, with foreing investments, variable income securities, etc.

In law, ownership is understood as the capacity to use, have full enjoyment and disposal of something. As those ownership attributes are limited by the regulation and the investment of the funds is concentrated on or leaned toward certain sectors, it obviously becomes much more vulnerable. I think that is the big difference between Chile and Argentina. And although there are obviously other reasons, this undoubtedly explains why Argentina was more vulnerable to risk.

Finally, I think that the best defense of the new savings system of the workers will be the creation of a true sense of belonging of the funds. The fact that the funds are alloted to pay a long term benefit greatly weaken this ownership sense.

And I would like to refer here to two aspects that seem essential to strengthen the sense of belonging. I am talking about two regulations that in Chile are already in force and in Mexico and Peru are underway: the multifunds and the voluntary saving of pensions.

In the morning, Joaquín Cortés told us that about half a million workers, almost half of the contributors of the new Chilean pension system, picked a specific multifund. In this way, the workers are abandoning the traditional indifference towards their pension system in order to voluntarily exert the right of ownership, in other words, choosing between different alternatives of investment. In a way they are using their ownership right.

The same occurs with voluntary pension saving. The worker makes a totally voluntary decision by saying "I want to get a better pension, therefore, I am going to save more than the legal obligation to contribute 10%".

The workers who are using these two instruments are clearly creating much more indeleble links with their pension system, and therefore, they are strengthening the sense of ownership of those funds, which will shield the funds of the workers little by little – hopefully this is more than a desire—in order not to be expropiated by the greed of governments with entirely different interests.

I think, then, that these two instruments have not only had their own merit of improving the yield of the pension funds, but they have also represented the expression of the use of the right of ownership which will leave them less vulnerable in the future.

## Chapter V

New model of investment regulation

# Part I: AIOS Panel



Investment guidelines in Chile: a necessary evolution
Guillermo Larraín



Pension fund investment: improvements and new investment alternatives

LORENA MASÍAS



Investment scheme of pension funds in Colombia
LIGIA BORRERO

## INVESTMENT GUIDELINES IN CHILE: A NECESSARY EVOLUTION

Guillermo Larraín<sup>1</sup>

I would like to greatly thank FIAP for the invitation and the opportunity for AIOS to present the vision of the regulators on the investment issue.

First and foremost, I will make two general considerations that surprisingly were covered this morning. First, the paramount importance of optimizing the scheme of investments in a capitalization system. If we were capable of optimizing the investment scheme and make it perform 1% of the life of a worker given the densities there are -1% seems to be an item-, it would account for 20% more in the pension, which is precisely what we are persuing: to provide a better pension for the average individual.

The second consideration is that I believe there is a general misconception in the public opinion, and particularly in some

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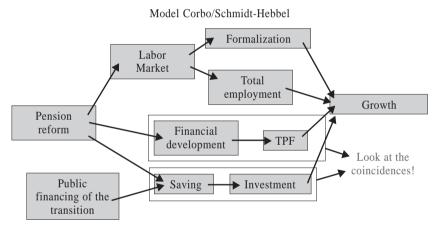
He has been the Chief Economist of BBVA Bank Chile, Coordinator of Economic Policy and Chief Economist of the Chilean Treasury Department, and he has a vast experience as Associate Researcher of the OECD of the Development Center in Paris. He is a professor of Macroeconomics in the Industrial Engineering Department of Universidad de Chile.

In addition, he has actively participated in publications on economic and pension funds issues such as: "The Chilean Pension Saving: Challenges of the Low Density of Contributions and its Causes", together with Solange Berstein and Francisco Pino; "From Economic Miracle to Sluggish Performance: Employment, Unemployment and Growth in the Chilean Economy", with Andrés Solimano, for the International Labor Organization and "Human Capital, Trade Reform and Growth: The Experience of Chile", with David Bravo and José De Gregorio, a working paper for the OECD, Paris, among others.

political sectors where it is thought that favoring a better financial management might look as though PFAs as institutions, their executives, and their owners are being favored but the affiliates; and the previous point shows exactly the opposite. Optimizing the use of the financial resources of the pension funds benefits affiliates directly.

After those two considerations that were already mentioned earlier in the morning, I would like to start with a work by Vittorio Corbo and Klaus Schmidt– Hebbel that has been referred to many times over, in which they show the macroeconomic impact of the pension reform depicted in Diagram N° 1.

Diagram N $^{\circ}$  1 MACROECONOMIC EFFECTS OF THE PENSION REFORM



The economic growth is affected by the pension reform in three different ways: first, the labor market which induces in principle to a greater formalization; it induces in principle to a decrease in the labor tax, an increase in employment through which growth is positively affected.

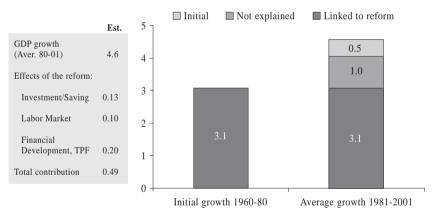
The second channel has to do with financial development, i.e., a PFA is a big financial savings machine that must be placed somewhat on some issuer and that necessarily leads to the birth of several savings instruments, increases the terms of issuances of

securities, creates new securities which affects the financial development, the total productivity of the factors (TPF) and, in turn, growth.

The other channel that is related to the previous one yet in a different manner, has to do with the fact that there is simply more saving.

The economic growth that in the Chilean case has been quantified by the two authors before mentioned, is presented in Figure N° 1. Despite that we can debate some assumptions, what they found is that practically 0.5% of the total average growth achieved by the Chilean economy, which is 4.6% between 1980 and 2001, that is, practically 10% of the growth for the period is directly or indirectly linked to pension reforms. I insist, there is a significant statistical impact on growth.

 $\label{eq:Figure N} \textbf{Figure N}^{\circ} \ \mathbf{1}$  Economic growth and pension system reform



Source: Corbo & Schmidt-Hebbel (2003).

(1) The total is calculated as a compound rate and is therefore not equivalent to the sum of the individual effects.

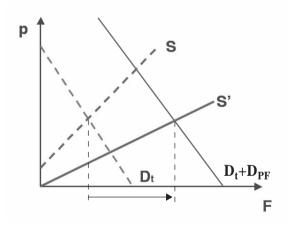
An aspect that is not considered in this work, and that Alberto Musalem presented today is the fact that this process is not automatic. Starting up a PFA –as Daniel Artana said— is not a panacea. We might come up with a cure for baldness, for example, but not with the creation of a PFA. What I mean is that pension funds are part of the solution, but not the only solution. I think that

the positive impact that the pension reform has on the economy has been oversold, and because of this, the emphasis on the need to get ahead in many other areas of the economy which are complementary to the pension reform and absolutely necessary for this reform to bear fruit, has been undermined.

Figure  $N^{\circ}$  2 presents the offer and demand of funds. There is a demand and an offer in the pre-reform economy; and what the pension reform does is to add a new pension fund demand for financial instruments.

But if we do not do something to create a new offer, we will evidently be crowding out as is the case in the public sector whenever there is a fiscal deficit, and what we need is this complementary offer, and only then this shift and the greater availablity of resources for the productive sector show up.

Figure N° 2
OFFER AND DEMAND OF PENSION FUNDS



The pension reform is not a "panacea" for the challenges of development; its success depends on what is done with the capital and labor Markets.

The pension reform, then, is not a panacea. Its success depends on what is done in other markets; it is an important reform but it needs to be complemented in two fundamental markets: the capital market and the labor market.

I will exclusively refer to what is done in the capital market because it is what brings us together here, but what happens in the labor market is also clearly critical, because all the investment managers here dress up in Armani and run every day and look young, but the truth is that at the end of the day the pension system will be judged by the pensions, and up to a point pensions have to do with what is done at an investment level, but they also have to do with what is going on at the labor level, with the level of salaries, and therefore, with what occurs in the labor market.

What I am trying to say is that neither AIOS nor FIAP has been placing enough emphasis on the analysis of the issues concerning the labor market and too much emphasis on the financial issues. Last year, this time around, we attended a seminar in which the issues of the financial market were extensively covered but not enough emphasis was placed on the labor market, and this is the area were the most significant and fundamental changes in the Latin American economy have taken place. I am referring fundamentally to the Chilean case. Over the last 20 years we have had a different labor market, and what is happening there has enormous repercutions in the pension system including its political evaluation.

Then, I will refer to the capital markets. Alberto Musalem's presentation would allow me not to make comments on Diagram N° 2, because he clearly and in detail conveyed what I wanted to include in an incomplete list of institutional requisites for that diversification to exist. There must be such an offering of funds that is complementary to the appereance of demand created by the PFAs so as to have the development of the capital market that our countries deserve. And here we have to look at things such as simply the protection against inflation, the macro economic stability. Nobody argues now that there must be macroeconomic stability, however it is a necessary but insufficient condition. We have to see what happens with investment opportunities, regulatory uncertainties, tax uncertainties, legal stability of the contracts, tax or guidelines distortions.

An issue that I think we have placed little emphasis on is credit rating. A fundamental subject for investment to work well. It also deserves a differential treatment.

As regards the offer of variable income instruments: what is the deal with the corporate culture of our companies? Many companies in our countries are familiy-owned businesses, and

### Diagram N° 2 Some institutional requisites for diversification (incomplete list)

### - Fixed Income

- Mortgage
- Corporate
- 1. Protection against inflation (Macro est.)
- 2. Investment Oppotunities
- 3. Legal stability of contracts
- 4. Elimination of tax or regulatory distortions
- 5. Cradit rating ... etc...
- 6. etc.

### - Variable Income

- Corporate culture, accountability
- Corporate governance
- · Protection of minority shareholders

families do not like the idea of losing control, consequently they do not go public which significantly inhibits the appereance of the complementary offer for the demand of the PFAs. Often, family-owned businesses do not want to render accounts, they like a certain level of secrecy, and honestly that is bad for the capital market, but it is critical to correct this situation for the pension reform to provide all its benefits.

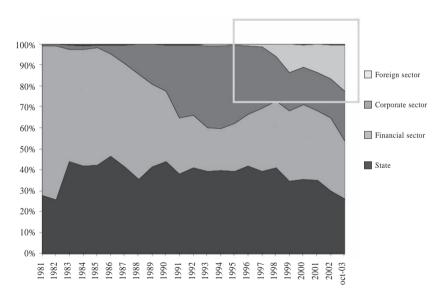
This is a long, hard, persistent, and probably a boring task for most of the public, in particular for the political world, but it requires a strong decision on the government's part to act systematically.

Well, if this is not amended, the offer will likely not come into sight and we will be halfway down the road with a few issuers and low liquidity, and I think this is what we have seen throughout Latin America, including Chile, because Chile might be a little more diversified than the rest of the region, but we still have problems in terms of the concentration of the corporate issuances, a little less maybe and getting better with time but I would not say that Chile has overcome the hurdle at all.

I would like to say, then, that the issue of diversification goes beyond efficient frontiers of risk, it goes beyond the foreign investment limit and has to do with all the complementary and institutional machinery that must also be put in place. In Figure  $N^{\circ}$  3, I show the diversification in the pension assets through time in Chile. You see that the state-run sector reaches 45% even during the crisis of the 80s, but from there on it has remained stable at 40% and over the last 5 years the presence of state-run assets has fallen.

The financial sector has always had an important role but as you can see it is diminishing as well. And why so? Because other corporate assets have been gradually creating either stocks, bonds or others.

Diversification, then, is not a limit problem as was somehow pointed out today. There is a complete institutional fabric behind.



 $\label{eq:Figure N° 3} Evolution of asset diversification in Chile$ 

In Table  $N^{\circ}$  1, I show the composition of funds managed in Latin America, and in broad strokes, the compositions are not so different. Draw your attention to the bottom line where I have excluded Peru and Chile which are the most diversified countries within the region; what the bottom line shows is that the degree of dependency of Latin American countries on government debt is really impressive.

Table N° 1
COMPOSITION OF THE FUNDS MANAGED IN LATIN AMERICA

Country	Total (millions of US\$)	Governments %		ancial tutions	&	vestment Mutual Funds	Foreign issuers	Others
Argentina	16,139	68.9	3.6	1.5	11.8	2.8	9.7	1.7
Bolivia	1,493	64.1	7.3	16.7	8.6		1.7	1.5
Chile	49,690	24.7	26.3	7.7	14.5	1.9	23.7	0.1
Costa Rica	305	79.5	13.8	5.7	1.0			
El Salvador	1,572	82.3	13.2	4.2	0.3			
Mexico	35,743	82.3	4.5	13.2				
Peru	6,311	19.5	21.4	12.1	35.5	1.0	8.8	1.7
Uruguay	1,232	69.6	22.9	5.8				1.8
Total	112,485	51.0	15.3	8.9	10.2	1.7	12.4	0.4
Total except Chile	e <b>62,795</b>	71.8	6.7	9.8	6.8	0.8	3.4	4.2
Total except Chile	e							
& Peru	56,484	77.7	5.0	9.5	3.6	0.8	2.8	4.5

Later, as a general conclusion, that complementary offer of securities, beyond government securities, is scarce in Latin America; and we can deregulate all the investment limits we want but if that complementary institutional framework is not present for companies in our countries to issue bonds, stocks, or have investment projects, quite frankly, the deregulation of limits will not take us too far.

Now, despite of what Hernán Garrido said today in such a nice way, the fact of the matter is that these funds must be regulated. I do not think the solution is to say: the elimination of the limits will take us... I mean, it turns out that the elimination of limits will cure our baldness, but nothing could be further from the truth, this is an industry that must be regulated. And I will talk about the Chilean case.

In the Chilean case, the pension industry is at the center of the social security system, savings are mandatory and, therefore, the Government cannot withdraw from what is happening with pension savings. People have different educational levels, the information you —as the expert managers of these resources—manage is asymmetrical; further down the line, the salesforce that comes to ask you, as Joaquín Cortés said; and in the long haul, the people whom we are interested in serving and that have an extremely low financial education also justify the regulation.

The presence of State guarantees in some cases may or may not exist, depending on the country, but in Chile there actually are guarantees, and when this occurs there is an adverse selection and, therefore, that is another reason to regulate.

And, lastly, administrators manage resources of a third party, their own resources, they have related businesses, they belong to financial conglomerates, so we need to necessarily see the potential for conflicts of interest. Definitely, this a consistent list of reasons for pension funds to be regulated.

Now, the question deals with the new investment model. Then, the first point I would like to mention is that the investment regulation needs complementary reforms, which not all of them are completely finished yet, and many of which require improvement, deeper analysis and persistence through time.

Second, this is an industry that must be regulated. Let us not forget about that, it will always be; nevertheless, I believe —and I will just talk about the Chilean case setting AIOS aside—that in Chile we have reached such a highly complex level in the regulation of investment that is quite frankly excessive.

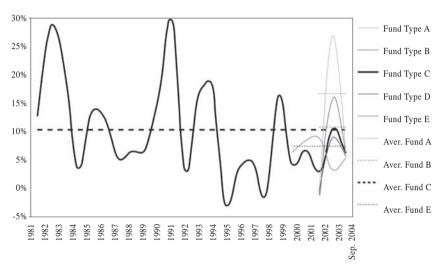
I would like to add up that after 23 years of history we have a highly complex investment regulation. That is the description of the types of limits there are, and within the five multifunds that constitute the Chilean multifund there are 97 restrictions that must be complied with. Of course, not all of them must be fulfilled simultaneouly because it depends on the instrument and the issuer, however, it creates an enormous complexity.

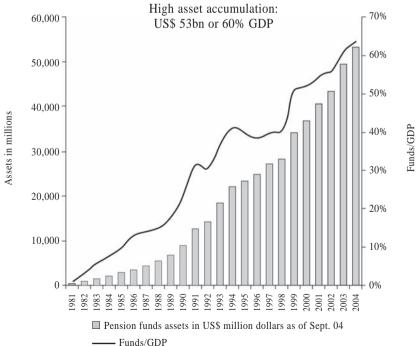
What I mean with this is that the investment regulation that we have in Chile is extremely difficult; and it certainly has costs on the effectiveness of that financial savings allocation which is crucial to have good pensions.

What is the problem? The problem is that such a complex regulation has been successful. We have 23 years of history, average rate of return –until september 2004– of 10.2% in real terms regardless of the commissions deducted from the fund which is the gross yield. A very significant accumulation of assets, amounting to 53,000 million dollars according to the data presented in Figure N° 4.

Figure N $^{\circ}$  4 Results of the regulation in the yield and saving

Real gross yield annual average: 10.2% (Fund C)





Then, there are people who say this works well. And the big question is will the next 20 years be as the previous 20? And I strongly believe the answer is no. As Guillermo Arthur said a while ago: such a strict regulation has historical origins due to the distrust there was back then so that no one would walk off with the money, but with 20 years of history I think we are in conditions to move towards a more liberal investment scheme in order to make the most effective use of the financial resources of the workers and, consequently, the pensions.

### Four consequences of these high regulation:

First, it makes the management of the funds more difficult which affects long term results and has diversification costs. Augusto Iglesias mentioned in the morning a working paper by the Research Manager of the Superintendency, Solange Bernstein together with Rómulo Chumacero for the Central Bank, and what they estimate is that due to a lack of progressive effectiveness, nowadays, the fund could be 10% higher than it effectively is.

Somehow, this severe legislation of investment regulations discourages the use of clearer and more defined investment policies where Board of Directors play a more active role and there is a more through research work. We have really big funds in Chile and I think there is little research relative to the size of the fund. I think investment policies are not known by the public, they are luckily known by the regulator, and up to a point the limits tend to replace the investment policies of the PFAs themselves, which makes the administrator delegate the responsibility onto the regulator, because as you can see there is little visible room for more.

Nor there is something that we have mentioned here today that is complex to implement which is the development of systems of risk measurement. Currently, we inform people about yield, prices; and we are simplifying that information, making it more visible and clearer for people, but the fact is we have no prevention of risk, even though there are some arguments so as not to explain the kind of risk it is being taken, and on that Augusto Iglesias is right but the truth is, that is something we have not discussed yet.

There is certainly more flexibility abroad than in Chile, especially in OECD countries. There are practically no limits by

instruments with the exception of investments outside the OECD, particularly Denmark that has a more restrictive investment scheme. Practically every country has limits by issuer with the exception of Australia; every country has limits with related parties because conflicts of interests are even in the best of families.

In Latin America, the flexibility or complexity of our investment scheme is rather similar to that of other countries, and Augusto Iglesias also quantified the abovementioned.

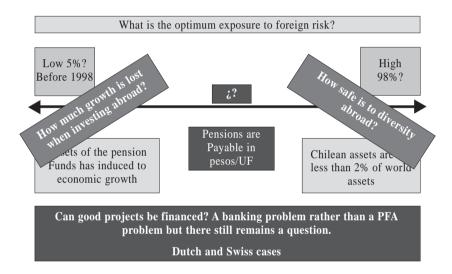
Some ideas. The current regulation is excessively restrictive and I think that the word "excessively" is appropriate here. Particularly for a mature industry in which there are a few and specific cases of fraud, and therefore, we think they are a part of life. No one would have thought that this was going to be managed by Saint Francis of Assissi.

Now, the maturity of the industry is not homogeneous, I think there are parts of the business that can be as effective as possible as is the case of risk control, research, and investment policies which has to do with how the investment regulation somehow hinders the development of these areas of the business.

The models of the OECD countries are useful but only partially, and it is so because in the OECD pension funds do not play the critical role that pension funds play within social security here, and consequently, it is necessary to move forward and provide more flexibility. We, in Chile, are going to propose an amendment to the investment scheme in order to simplify that range of limits. This list will not go away because it has virtues and gradually with time, in a process that will probably take us a couple of years, we will move forward not towards a risk supervision scheme rather than towards the control of the compliance of investment limits. But unlike the Mexican case that places much emphasis on financial risk, our idea is to work with the concept of pension risk. We are interested in this risk and that implies completely new developments that do not exist today on an international level, with the exception of the Netherlands and Australia that already have something, but in fact that will also be an innovation we are thinking of implementing regarding the supervision that it is done now worldwide.

I would like to finish up by saying that –it is true– I did not think that what I wanted to discuss now was so concealed in Peru, but the fact is, I innocently came up with Diagram N° 3 because I think is important.

Diagram N° 3
THE CASE OF EXTERNAL RISK FOR PENSION FUNDS:
OPTIMUM LEVEL?



There is a complicated issue regarding the optimum level of exposure to international risk. Somebody might say that the optimum exposure is little, and maybe it is so due to the Corbo and Schmidt-Hebbel argument that I mentioned at the beginning. Whenever the capital market is accelerated to develop it and thus making the economy grow, there is more employment, salaries increase, and therefore, pensions improve; this argument is valid up to a certain extent but, I insist, there are other things for us to do in both the capital and labor markets for that dormant offer to show up.

On the other hand, as Mr. Garrido said, everything is outside. And this is an exercise we came up with in the Chilean case at some point: fiscal paradises and countries whith questionable institutional fabrics aside, the Chilean assets would account for roughly 2% of clean international assets. So, if that were the case,

one must say that there is a perfect diversification, chilean pension funds should have 98% outside Chile and only 2% inside. Truth be told, we do not know for sure which is the intermediate point to which we have to aspire.

Then, what we have to do is to reconcile how much growth is lost when investing abroad, given that we cannot put pressure on the capital market vesus how much security we gain by diversifying abroad. This is a complicated issue. I have not seen models that provide us with a satisfactory solution in that regard; and I would like to say that it is useful to look at the experience of countries with no restrictions such as the Netherlands and Switzerland.

Certainly, these two countries have different pension funds schemes than those in Latin America, therefore, our schemes will be more regulated than theirs. But their case is interesting in that The Netherlands has 70% of its pension savings outside the country. What is the difference? The difference is that The Netherlands has the greatest portion of that 70% in the Eurozone which is their own currency with no exchange risk. Switzerland has approximately 28% or 29% of its pension funds outside the country; and it is interesting because both countries are alike in terms of development and diversification but they do not have exchange risk.

It seems as though at least in the Chilean case, the relevant percentage for the level of exposure to foreign investment must be in the neighborhood of 30% which is what Switzerland has in broad strokes; and 70% for The Netherlands. You could argue that is not worth it because 70 is too big a number. And it certainly is big but it is more than what we have now by all standards. Additionally, Switzerland is a much more diversified economy than the Chilean economy is. Chile has two fundamental risks: one of them is copper risk; our pension funds today are exposed to a high copper risk; then, if Switzerland is a benchmark, it means we have to diversify more because we have more risk linked to copper.

And the second risk we have is the Joaquín Cortez risk. That is, if something happens to him, he goes crazy or does something inappropriate, our pension funds can suffer a great deal which led me to believe we need more diversification than the one we have today, and consequently, the foreign investment limit –at least in the Chilean case— must be increased.

# PENSION FUND INVESTMENT: IMPROVEMENTS AND NEW INVESTMENT ALTERNATIVES

LORFNA MASÍAS<sup>1</sup>

The regulation of investment in Peru has undergone significant changes so as to provide new investment alternatives to the affiliate, particularly to whom is close to retirement and must face the lack of investment instruments.

First of all, I will consider the problem of the affiliates next to retirement. Within a context in which there are excessive variations in the yield, there is a possibility that the effective pension paid out be less than the estimated pension, as was the case in Peru in 2000 when the yield was negative. Within that context, many affiliates close to retirement had to face an ever-decreasing capital fund which translated in a lower pension. Therefore, it was necessary to search for an alternative for these affiliates through the creation of a fund that preserved the capital, that is, a fixed income fund. And that is how the idea –for the Peruvian case– of going for the multifund scheme was born. The reason the multifund law was passed three years later in 2003 is not worth mentioning.

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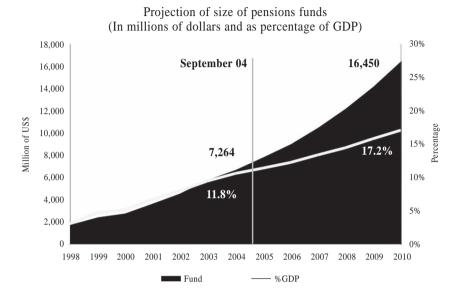
In the academic field she was a Teaching Fellow and Teaching Assistant for the Department of Economics of Pittsburg University. She has also actively participated in several publications related to supervision, monetary policy and the pension system.

The multifund scheme includes the creation of three funds: fund of capital preservation, mixed fund and growth fund. In this way, the funds are offered in accordance with the profile of the affiliate in terms of age, investment horizon, risk aversion, among others. Thus, an affiliate next to retirement can maintain his/her capital in a fixed income fund, whereas a young affiliate with an investment horizon of 30 or 40 years can keep his/her capital in a growth fund

Another objective that is also present in the implementation of the multifund scheme is facing the dearth of investment instruments by flexibilizing the investment scheme but assuring an adequate risk investment control. It is well-known that in the domestic capital market the demand for investment instruments grows at a faster clip than the offer of investment instruments. Consequently, on one hand the implementation of measures that seek to flexibilize the demand is required, and the increase of the offer on the other. Next, I want to highlight the efforts that have been made in order to face the scarcity of investment instruments.

In order to place ourselves in the Peruvian case, it is convenient to refer to the importance of pension funds in the economy. According to what is observed in Figure N° 1, we can see that in 2004, the pension fund is approximately 7,200 million dollars which is about 12% of the GDP. Thus, pension funds have had a spectacular growth and they are expected to grow even more to 16,000 million dollars by 2010, close to 17% of the GDP. The growth of pension funds can clearly have virtuous effects on the economic growth. However, it also implies a challenge since we must find investment alternatives, and in that sense, the Superintendency has been working in order to look for adjustments to the regulation for pension funds to have new investment alternatives.

In addition, it is convenient to refer to new alternatives for the affiliate in the multifund scheme. In accordance with the regulation, affiliates can opt between three types of funds for mandatory contributions: the fund of capital maintenance, the mixed fund and the growth fund. The new investment scheme also implies novelties for the affiliates regarding voluntary savings. With the advent of the multifunds, the affiliate could make voluntary contributions in a PFA different from that in which he/she invests his/her mandatory contributions. On the other hand, the



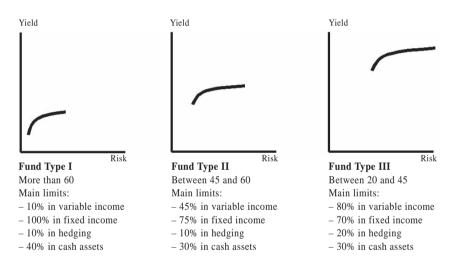
new scheme also allows artificial persons to be able to make voluntary contributions for pension purposes, i.e., in order to increase the pension saving of the worker.

Figure N° 1 shows what investing in each one of this funds contends. In other words, the higher the risk level, the higher the yield. The age brackets shown on the figure are referencial since the affiliate can choose from the fund of his/her preference. Nevertheless, it is expected that an affiliate older than 60 picks the conservative fund and a 45-year-old affiliate picks the growth fund. The investment objectives are reflected in the composition of the portfolio, so fund type 3 which is a growth fund can have up to 80% of the portfolio invested in variable income, while the conservative fund can have up to 10% of the portfolio in variable income instruments.

As it was mentioned before, the multifunds scheme also brings novelties with regard to new investment alternatives. On one hand, investment limits have been flexiblized in order to have more investment latitude and for investment options to get closer to an optimum risk/reward combination. There used to be a wide range

of limits by instruments including limits by bonds of the financial sector, bonds of the non-finacial sectors, leasing bond, among others. These limits were eliminated and other limits by asset class were established: for variable income, fixed income, derivatives, and cash assets. Only the limits for the investment in foreign instruments and securities issued by the State including the Central Bank of Reserves remained. Nonetheless, the law stipulates a widening of the investment limit abroad of 10 to 20 per cent of the portfolio, which will allow to broaden the investment options in variable income instruments in order to develop the growth fund.

Diagram N° 1 NEW ALTERNATIVES FOR THE AFFILIATE



Apart from that, the limits by issuer in terms of the size of either the company or the pension fund were established. At the beginning, the limits were established in terms of the pension funds, but as they grow, the investment of one company alone can be a significant percentage of the equity capital of that company. So, it is convenient to establish the limits in terms of the size of the company so as to secure a better diversification of the portfolio.

In order to face the lack of investment instruments, we have made sure that portfolios can invest in a wider range of instruments, issuers, and domestic market projects. In this way, the investment in variable income instruments issued by infrastructure concessionaries has been allowed, such as ENERSUR where all the pension funds hold 20 per cent of the equity capital. ENERSUR is a company that manages a concession of hydroelectric power generation and it is operated by Tractebel, a company of well-known prestige in the power utility sector. As for infrastructure projects whose investment amount is less than US\$20 million. PFAs can invest through investment funds such as the Apoyo Capitales fund. On the fixed income side, there are also concessionaries that have issued bonds that pension funds have bought as the water development project of AquaAzul. On the other hand, the investment of structured instruments which use government bonds as an asset-backed security and whose yield is linked to foreign instruments as the Standard & Poor's, the Euro or others.

On top of that, derivatives provide other investment alternatives with instruments such as foreign exchange forwards; and cash assets provide certificates of deposits or commercial papers.

The regulation has also permitted to widen investment options by allowing to invest in instruments issued under the terms and conditions of a private offering. Before this regulation was put in place, pension funds could only invest in papers listed in the public securities market overseen by the National Supervisory Commission of Securities. From the moment this new regulation is issued, pension funds can invest in instruments that are not listed in the public securities market but comply with certain minimum security conditions such as having a credit rating and being listed in the Chamber of Securities and Liquidation (CAVALI) through a financial record. In addition, the issuance must comply with the provisions of the Securities Market Law, which is verified in a legal report drafted by a law firm, and it must be structured with the intervention of an agent with market expertise.

It is a modern private market with a minimum of security and transparency because the issuers are obliged to present a prospectus to investors. This condition has also permitted to reduce transactional costs, thus allowing a greater number of issuers to participate in the market. The Superintendency of Banks and Insurances believes this condition is contributing to foster the growth of the specialized institutional market. One example of instruments that have been issued under these conditions and that are currently part of pension funds portfolios is the investment made by the funds in Enersur.

The investment of pension funds in financing new projects and in concessionaries that promote infrastructure projects has been previously mentioned. This regulation allows the listing of new issuers through new investment instruments designed to finance infrastructure projects, concessions, and housing. And those issuers can be companies created to manage concessions. Given the level of risk, the requirements for financing these issuers are stricter than those requested for a corporation. The difference between a concessionary and a corporation lies in the existence of a financial record. That is to say, a bond isued by a company without a backtrack record and that is developing a new project would fall into the category of companies with stricter requisites. For example, additional guarantees are demanded for the investment of pension funds in stocks issued by concessionary societies. The type of guarantees that can be presented are several, including endorsement, policies, assets, etc. On the other hand, it is important that the investment decision assessed by each PFA takes into account both factors linked to the cash flow and the yield of the project as well as factors linked to the experience and commitment of the operator of the project.

Finally, the regulation has also facilitated the investment in structured instruments, which are fixed income instruments with variable coupons where the principal is protected through some instrument to the tune of, for instance, a sovereign bond, and the yield is linked to some asset in which investment funds are authorized to invest. For instance, it can be a currency like the Euro or an index like Standard and Poor. The instrument is structured in this way, and it is beneficial for the portfolio because it improves the risk/reward ratio, allowing to link the yield of the investment to riskier instruments but maintaining the security of the principal.

Now, this greater flexibility that PFAs have in managing portfolios comes together with a greater responsibility in the sense that a deeper analysis of the investment risk is necessary. There is a regulation in that regard for every PFA to develop risk areas, e.i., create risk committees and units whose main objective is to identify, measure and control the different types of risk that an investment portfolio can face, such as interest rate risk, and exchange or operative risks. To that end, measurement schemes of risk indicators must be implemented and the limits for those indicators must be established.

Then, all these measures have implied important changes in the regulation. However, the Superintendency is still seeking to broaden the investment alternatives that assure a good diversification of the portfolio.

### **ANNEXES**

### Annex N° 1 NEW ALTERNATIVES OF INVESTMENT: NEW PROJECTS (SEPTEMBER 2004)

Issuer	Description	Participation PFA	Development stage
Aqua Azul Consortium	Concession agreement for 27 years Development of Rio Chillón Lima Acea-ITA (45%), Impregilo-ITA (45%) Cosapi-PER (10%)	US\$ 17 billion	06/28/2002: Certificate of beginning of project Completion of the second and last stage involved through contract
Consortium Transmantaro	Concession agreement for 33 years Mantaro Transmission Line Operation - Socabaya. Sierra Central Hydro Quebec CAN (57%), Fonds Solidarité Travailleurs du Québec-CAN (28%), ETECEN-PER (15%)	US\$ 10 billion	10/08/2000: It was concluded the committed requisite for the commercial operation in its full capacity
Enersur	Beneficial interest contract of Hydroelectric Central in Yuncán. The concession agreement grants Enersur exclusive right to operate the central ar commercialize the energy	US\$ 48 billion	Progress of construction is 70% and it is estimated it will be fully operational starting in July next year
Energy network of Peru	Concession agreement for 30 years Explotation of electric transmission system of Peru ISACOL (30%), Transeica COL (30%), EE BogoCOL (40%)	US\$ 36 billions	Build, operate and maintain the line of transmission Zorritos Zarumilla, Line Chimbote Lima and compensation system
Transportadora de Gas del Perú S.A.	2 agreements by concession for 3 years i) Design, ssupply of goods and service and construction of transport system of natural gas thru pipes of Camisea to Ci Gate and the exploration of concession goods; and ii) Concession for the design, supply of goods and services and construction of transport system of Natural Gas Liquid by pipelines of Camisea to the Coast at the explotation of goods of the concession	s billions	Certificate of "Mechanical completion". Construction period concluded on May 29th 2004

Annex N° 2 New alternatives of Investment: Investment Funds

Name	Туре	Referential amount
AC Capitales SAFI	Investment fund in infrastructure, public services and natural resources. 30 year horizon the invested amount as of 09.30.04 is US\$ 750 m	US\$ 1,050 million
SEAF (Small Enterprise Assistance Funds)	Investment fund for direct financing in unlisted companies in the Securities Market (small and medium-size companies). As of 09.30.04 the invested amount is US\$ 322m	US\$ 15 million
COMPASS Investment fund for SB&MSC	Investment fund for operations of acquisition of credits, financial instruments of short term V.I. (securities of non-massive issurance), of small & medium-size Co's. The duration of the fund is 2 years, extended by minimum periods of two years. The amount invested as of 09.30.04 is US\$ 42 billion	US\$ 55 million

### Annex N° 3 NEW ALTERNATIVES OF INVESTMENT: STRUCTURED INSTRUMENTS

Fiduciary	Principal	Yield	Amount US\$	Maturity
Merryl	Peruvian Sovereign Global Bonds 08	MSO <sup>a</sup> World Index	48,2	15.01.0
Continental Securitized	Peruvian <sup>b/</sup> Sovereign Global Bonds 08	S&P 500	20,0	15.01.0
Intersecurities	Peruvian Sovereign Global Bonds 08	UMA fund Protector Fund	11,4	17.07.0
Continental Securitized	Peruvian <sup>b/</sup> Sovereign Global Bonds 08	Euro a/	37,0	05.03.0

a/ Morgan Stanley Capital Index.

b/ Securitized Bonds. Structured Sovereign bonds with yield in EUROS were acquired at an initial price of US\$ 10 million per bond, redeemed at a final price of US\$ 13.5 million. So, for the period 28.01.02 to 05.03.03, a yield of 35.4% was obtained.

### INVESTMENT SCHEME OF PENSION FUNDS IN COLOMBIA

LIGIA BORRERO<sup>1</sup>

Before such qualified speakers and attendants is little what can be added. We have attended an intensive course on comparative law in terms of regulation and pension fund investment management, but I would not want to pass this opportunity up without showing you a brief vision of what our system in Colombia is, and in particular, our investment scheme.

First and foremost, I would like to mention the political and legal environment in which we currently are debating these issues.

Colombia has a pension scheme in which the private capitalization scheme and the pay-as-you-go system coexist, allowing the worker to choose from either one, and obviously with transfer limits depending on the age and seniority.<sup>2</sup> See Diagram N<sup>o</sup> 1.

Lawyer and Master's degree in Legal and Socioeconomic Sciences from Universidad Javeriana, Bogota – Colombia. She has studied on Capital Markets at the Interamerican Institute of Capital Markets in Rio de Janeiro – Brazil and she studied Industrial Property in Montevideo, among other studies.

She is currently the Delegate Superintendent for Social Security and other Financial services at the Banking Superintendency of Colombia.

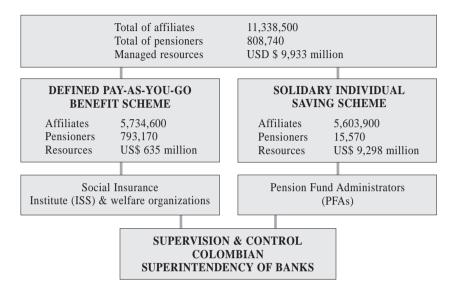
She was the Plenipotentiary Minister of the Colombian Embassy in France, and later she was in charge of Businesses A.I. She also worked as private secretary of the Treasury and Credit Minister, Juan Camilo Restrepo Salazar and was the President of La Previsora Insurances and Global Fiduciaria. In addition to her important carrer as Executive Secretary for the Association of Economic Law and Fundación Deportiva del Café.

She has a vast experience as professor of courses and seminars on Private, Commercial and Corporate Law both in the Faculty of Law and in the Faculty of Business Administration and Graduate Program at Universidad Javeriana.

In addition, she is actively participating in publications and conferences on several subjects such as Doctrines and Concepts of the National Commission of securities, and Consistency Legislation of the National Commission of Securities, among others.

The transfer can be done every 5 years except for those who are less than ten years away to be eligible for a pension in the pay-as-you-go system (55 for women and 60 for men). In the case of private funds, affiliates can shift every 6 months.

 $\label{eq:Diagram N^0 1} \textbf{Structure of the General Pension system in Colombia}$ 



Like in every country in Latin America this is an issue that is still under discussion: There seems to be ciclycal reflections as to whether or not to go back to the pay-as-you-go system eliminating the individual savings scheme; moreover, when there are political debates, "the appetite" for those accumulated resources in the individual accounts increases, specially under a complicated fiscal deficit such as the one our country is currently undergoing.

In Colombia, we are just revising the pension system. And in Congress there is a legal act underway seeking to primarily lower the transitional cost from the old pay-as-you-go system that is currently becoming effective in all its dimension. We have exhausted the reserves of our pay-as-you-go system and the State has had to honor the guarantee stated in our Constitution which, on top of the fiscal hurdles, imposes the search for definitive solutions.

In spite of the fact that Colombia is a country that has grown permanently since the 80s, except in 1998 when it decreased, and that it has a macroeconomic stability, the fiscal issue requires adjustments that are part of our political and legislative agenda. That is why the reforms must be carried out to reduce the transitional cost aforesaid

### GENERAL PENSION SYSTEM

EVOLUTION OF MANAGED RESOURCES

10.000

8.000

4.000

2.000

Dec./94 Dec./95 Dec./96 Dec./97 Dec./98 Dec./99 Dec./00 Dec./01 Dec./02 Dec./03 Sep./04

Individual saving scheme

Pay-as-you-go scheme

Figure Nº 1

Source: Exchange rate as of september 2004 \$ 2,595.17

and to lower the cost of payment of pensions the State is responsible for, since there are no reserves left. Likewise, we must seek solutions for the amendments to some Constitutional Court verdicts on acquired rights after certain laws that were originally designed to diminish this cost were stated unconstitutional. Nevertheless, —and I must say this—in order not to have an undisputed decision that might contribute to make the system more sustainable, we have opted to constitutionalize some issues of the pension system at the risk, in my mind, of turning our legislation, and in particular the Constitution, into a totally inflexible system in this regard. Because I think that resorting to constitutional texts to cut the "expectations" of the transitional scheme is the most exotic case in the world; as well as eliminating additional allowances stated in previous verdicts as was the case of our famous "allowance 14".

But on the other hand, there is the political debate. That is to say, as in our public system the Institution that must pay those pensions is out of reserves, obviously the looming argument is the possibility of "using" the resources of the private funds to solve short term problems. For example, the conclusions are: why do we not come back to the multipillar system and pass on some resources to the public scheme so that fiscal accounts and the previsional fund improve? This is the political debate in which we are.

Well, in all this legal and political environment, the truth is that we have consolidated an adequate general system of pensions. Our individual saving system was created by the law 100 in 1993. Like in Peru, it has been around for approximately the same time and we follow the Chilean model. The mandate of the lawmaker was, obviously, to find this balance between security, yield and liquidity<sup>3</sup> for the workers' pensions, and those resources must be managed by administrators based on the limits established by the government through the Superintendency of Banks.

In Colombia we have a Superintendency of Banks in charge of insurance, banks, PFAs, fiduciary trusts, and money exchanges. Under this scheme we have an investment limit system established by the Superintendency, with the only exception of the limit of investments in domestic and foreign public debt. Hence, with that law limit, the Superintendency has been able to abstract itself from the debate as to where to invest and better protect the resources of the pensioners. This has allowed for a better supervision, independent from debates and requests by whom would wish, by all means, to stimulate the capital market, focus investment toward a particular sector, or increase the financing of public spending with such resources. See Figure N° 2.

The maximum limits established by the Superintendency of Banks are global limits by issuer, by issuance and over-linked securities, under the premise that we do not have minimum limits and the negotiations must be held in the secondary market through transactional systems.

It is also forbidden to invest securities issued by administrators, their head offices or corporate affiliates, in order to prevent conflicts of interest or risk concentration.

Now, as I have been requested by the President of AIOS for this conference, relative to placing special emphasis on the strengths and weaknesses of the investment scheme in Colombia, I will move onto making some comments about the issue.

<sup>3 &</sup>quot;ARTICULE 100. Investment of the Resources. In order to guarantee security, yield and liquidity of the resources of the system, the administrators shall invest them under the conditions and subject to the limits that the Government deems necessary through the Superintendency of Banks, prior to the judgement of a commission, with no entailment, of the National Labor Council or a surrogate organism.

60% Total portfolio US\$ 9,298 millions 48%50% 40% 50% 40% 30% 30% 30% 30% 20% 20% 20% 14% 13% 10% 10% 10% 7% 4% 2% 1% 0% Public Debt Institutions Variable Underlying Not overseen Foreign entities Fogafin Mortgage by SBC Overseen by income securitization bonds and SBC different from securuties mortgage portfolio Invested percentage Maximum Limit

Figure N° 2 Mandatory Pension Funds Investment limits & position as of september  $30^{\rm th}$  2004

Source: Exchange rate as of september 30, 2004 \$ 2,595.17

As supervisor, I always wonder whether the regulation we have is somehow limiting the improvement of the yield of the portfolios. Does the regulation set the conditions for investing the resources in this or that way?, and are we some how sacrificing a better yield which is translated into a better pension because of a security issue? And I think supervisors are being permanently tested when we hear or analyze all of the requests from PFAs, the Legislative, the Executive itself, from those who manage public debt, etc, so as to try to succeed in putting together an investment basket as good as we can, and look for a balance between security, yield and liquidity. I would like to draw your attention on the order given by our Legislative. I do not think it is mere coincidence. There is a clear message towards where we are headed investmentwise, and how those who are supervised and supervisors alike face action and oversight.

Likewise, I consider that one of the main strengths of our invetment system is the experience we have had over these 10 years. By analyzing this period, by observing other experiences, by looking at the current debate in Peru, the Chilean debate, what has occurred in Mexico, etc. we can reach to the conclusion that actually for our country the authority and the way in which this issue is regulated is for us a strength. It is the job of the Superintendency of Banks through a circular to define the investment scheme except for public debt as it was mentioned before.

By analyzing the way in which this faculty has been used, we find that even though there is an "apparent easiness" for changes, only three changes have taken place since the creation of the funds: in 2001, in 2002 and in March this year<sup>4</sup>. In virtue of this last change we do not talk about foreign investment anymore but securities issued by foreign entities to allow them to also issue and place their bonds in our country. Likewise, we have to precise the investment of off-shore mutual funds so that it covers not only fixed income but variable income as well. Also, there is no prior registration or grading of the funds by the supervisor relative to mutual funds, but they are asked some minimum conditions relative to the time of their creation, to their contributions and the muscle or support they have, among other requisites. They too are requested to be overseen and to comply with a series of conditions that somewhat guarantee the security of the resources invested there.

In addition, two changes in the investment regime have been introduced, one for stocks and the other for public debt investment.

Moving onto the subject of the strengths, and in particular of the authority defined by the scheme, we believe this has allowed us to adapt easily to market conditions, the international environment, and to get closer to the needs of the market but from a technical standpoint and with no major political debate. And that has allowed to have wider and easier limits to determine. We think that the way in which these limits are established allow for diversification and structure the portfolios with a low correlation. See Figure N° 3.

It is worth mentioning that since the birth of the funds, foreign investments, stock investments, and variable income investments in general were allowed. Hence, we can say that current investment limits are not the culprit of a yield loss vis-á-vis other alternatives less regulated as we can observe in Figure N° 4.

External Circular 010 of March 20th, 2001, External Circular 018 of April 3rd, 2002 and External Circular 013 of March 19th, 2004.

Figure N° 3 Pension fund portfolio mandatory as of september  $30^{\rm th}~2004$ 

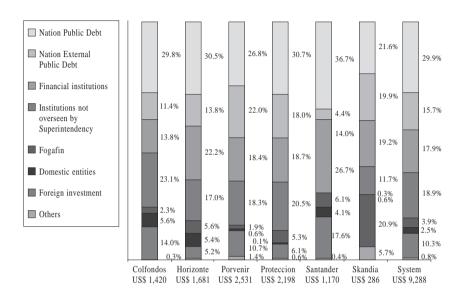
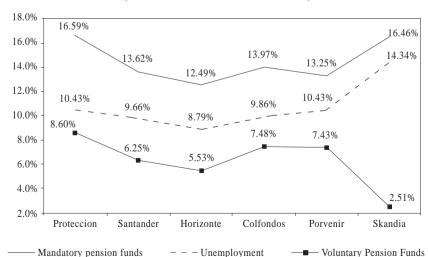


Figure N° 4 LAST YEAR YIELD (AS OF SEPTEMBER 30<sup>th</sup> 2004)



We have come up with an exercise to compare the portfolios of the mandatory pension funds to some similar portfolio in search for an answer to the questions I had asked at the beginning of my conference. Is the supervision of the Superintendency hindering individuals from having a better pension? Is the Superintendency somewhat handcuffing managers to make their best? Is the regulation the cause of all we have now? We must be precise in that whenever I refer to the diversification possibilities we have, I am not saying that our portfolios are efficiently diversified. The existing diversification is just the result of the possibilities of a market which like ours, has many limitations due to its lack of depth and liquidity.

Hence, if we compare the portfolios of voluntary pension funds (taking into consideration that in the case of these funds one can choose the portfolio, but here we refer to the aggregates) to those of mandatory funds or unemployment portfolios; or even if we compare them to those of collective portfolio managers or the same portfolios of the financial system, we can see that diversification is the same, the appetite for public debt is the same, that –except for the limitations of the financial sector to invest in stocks– the appetite for stocks is the same, the appetite for venture capital funds is the same. They are similar portfolios not because of the herd mentality created by the minimum yield, nor the way in which the formula is calculated, let alone the limits as many assert. These portfolios resulted from the limitations of our own capital market for every collective portfolio manager and for all portfolio managers for that matter.

So, if we think that with the regulation we are contributing to a lower yield, we can see in the figure how the yield for voluntary pensions is much lower, with the caveat that the investment of the resources of these pensions has no limitations abroad as for public debt, private capital funds, risk, and variable income. They only have limitations as to the issue and the issuer, yet we have seen that they currently have a lower yield compared to the real returns that mandatory pension funds have had which are regulated and have minimum yield limits.

Another strength that our system has is that it always allows for a free market game within general parameters. What does this contend? It means that the fund manager is the one who picks the international investment fund. As it was stated before, there is a

previous registration of the funds in our system. In layman's terms, minimum conditions for the funds have been established and the manager is the one who looks for them in the market, and if they comply with requisites, he invests in them below this limit.

Owing to this need for adaptability to the reality of the market, the Superintendency decided to increase the level of investment abroad from 10% to 20%, we did it when the average of the funds was 7%.

I recall the debate before adopting this measure. There was the fear that the funds would buy this kind of investment. The Superintendency was convinced that this step was going to be, as it has evidently been the case, gradual, and not because of the gradualism of the regulation -as it has been discussed in this seminar—, but by the slow and studied action of the administrators. This decision was widely argued by both the public and the private sector in response to the impact it might have either by the fear of pressure against the currency, or by the shifting of domestic savings abroad, leaving the internal Colombian sector unfunded. The measure was previously published on the Internet. Some comments were received. It was widely discussed. The issue of the import exchange rate was widespread. The President had requested the Central Bank Caucus to intervene in order to restrain the appreciation trend that still persists in all our countries. And it was then we knew we had to pass the regulation. The Superintendency sent the supported reasons for the measure intended to be adopted to the board of Banco de la República. Some forecast that there might be an excessive demand in dollars on the funds' part to rapidly reach the established limit for this kind of investments. We thought this was not going to happen, that this increase in foreign investments was going to be slowly as it turned out to be. To date these investments have increased only 1%. There was no need for any gradualism of the regulation as it has been advised throughout this seminar. The administrators themselves have done this gradually. They have a wide margin up to 20% of the value of the fund. The regulation started in March and it is being studied, and we see here the president of a PFA whom was asked about the issue and he said we must go slowly.

Another strength we have is the valuation of the investment at market price. This is done by each administrator. The Superintendency issues a guideline with the general parameters that each entity must use. This valuation at market price has been around since 1995 and has become the general valuation for all entities.

There is no Value at Risk but we have the obligation to calculate it for control purposes and we will study what it will reveal. Obviously, we all have the same fear regarding the information provided to the public on Value at Risk. We must be careful and analyze this issue to avoid that a forced disclosure of unnecessary data may bring about pressure and too short term a management by the PFAs. We are watching this issue very carefully in our country.

An additional strength in our system is credit rating which is established by an independent credit rating agency; and one of the amendments the Superintendency has just introduced in the aforementioned regulation is to go from an AA- credit rating to investment credit rating (BBB-).

To sum up I would also like to mention some weaknesses of our system.

The first weakness is that we have competition as far as public debt securities are concerned, and this is one of the reasons that has hindered the development of our capital market. The State is fiercely competing as was told by a mission from the World Bank that confirmed it was not the regulation the reason for our portfolios to be concentrated on public debt but the State's competition, the demand for those securities to finance itself.

We also have a lack of depth in the market, a dearth of liquidity and offer of securities. Public offerings in 2003 reached 1,404 million dollars, when contributions for the year alone amounted to 1,656 million dollars. That was one of the excuses we gave the Central Bank and the market as a whole to increase the limit to 20%.

Another weakness in our system today is that it does not allow to differentiate the portfolios. We have got to head toward multifunds, but we have to be cautious for two reasons: first, we still have a considerable data problem in our system because we have the old system and the capitalization system, together with an overlapping in the two systems, i.e., we have the same person in

the data base of the two schemes and we are still working on that because our public system has had gigantic information glitches for a long time. The transition towards multifunds is not possible unless we know exactly who is in the system.

Apart from that, we believe that the lack of depth in our market can result in overvaluation of internal assets to the detriment of the affiliates. Hence, we carefully check the Chilean experience on multifunds as well as the development of what happens in Peru and Mexico with the recent reforms on the matter.

Finally, I would like to be precise on one of our advantages that might become a weakness which is the absence of enough counterbalances to define the investment system when there is no technical supervision. This is not what has happened over the last ten years, but given the "flexibility of the regulations" to change investment limits, we might at some point run the risk of succumbing to the pressures and set up minimum limits or focus investments on infraestructure works, low-cost housing, the financing of small businesses or sectors of interest for a particular government or sector to the detriment of the law and the affiliates. Luckily, neither the law nor the technical structure of the Superintendency allow for similar actions, and those of us who have been in charge of these problems are well aware of the big responsibility that the lawmaker has given the Supervisor.

## Part II: OECD and FIAP Panel



Towards a new investment regulation model in Latin America Juan Yermo



New model of investment regulation
Francisco Margozzini

## TOWARDS A NEW INVESTMENT REGULATION MODEL IN LATIN AMERICA

JUAN YERMO<sup>1</sup>

I would like to start by thanking FIAP and the Association of PFAs of Peru for the invitation to participate in this seminar to cover such an important subject as is the investment of pension funds in Latin America.

I would like to provide some ideas from the OECD and my own. And I would like to structure the presentation in four parts: first and foremost, I want to mention what I personally believe is the big problem when starting any kind of analysis on the assessment of investments; secondly, remind you a bit about the regulatory weaknesses of the systems; third, introduce you to a system that probably is not very useful in the case of Latin America but it sure is interesting as a mental exercise; and finally, I will introduce you to some reforms that might be implemented and that I think would improve the system in a more realistic and applicable manner.

Basically, the principal problem we have is a quite serious one and it is based on the fact that there is some disagreement among financial experts about what the best way to invest long term is. We have the models of Markovic that allow us to make a short term assessment from one period to another as to how to invest, however, long term investment –the one investment for retirement,

Economist from Oxford University and graduate from Cambridge University. He is currently working for the Organization for Economic Cooperation and Development (OECD) as an Administrator of the Financial Affairs Division, and as Secretary of the Working Group on Private Pensions System. He is a member of the International Network of Pension Regulators and Supervisors Secretariat and manages a wide research program on several problems related to the working, regulation and supervision of the plans and pension funds.

He formerly worked as Consultant for the World Bank on reform projects of the pension fund systems in Latin America.

has not been covered in a coherent way, in a theorical way which is necessary in the academic world. This is happening now, we have the studies done by Campbell and those of other economists that allow us to determine that the risk-free asset in the long term is a bond indexed to inflation of a high credit quality and that it is something, as we know, that does not exist in Latin America, therefore, they must be generally sought after outside these countries.

On the other hand, we have a market vision which I would say is okey. This is a zero risk long term vision. But if it is true that we have to look for a higher yield, with a greater risk, and above all, search for market imperfections phenomena, as is the paradox of the risk prime of stocks or the regression to the stock average, we have here two visions and some disagreement at an academic level, an even greater disagreement at a practical level, at the level implementation of the investments and, lastly, a concern on what is the best choice of the individual based on these uncertainties about long term investment. From an objective point of view, I think this is the big concern of any investment scheme of pension funds.

As regards regulatory weaknesses, I think the first problem we would have to face is to really define what the fiduciary responsibility of the pension fund administrators is. And I think that when we are in an insurance sheme, in a defined benefit scheme, as is still the case of many countries of the OECD, we have a defined liability that could be either a commitment or an obligation and, therefore, by definition and as a consequence we have an investment policy that seeks to match those liabilities with adequate assets.

In the case of a defined contribution system this does not occur, therefore, there is more swing margin, the objective of those investments is far from being defined; and basically, it is the reason why in countries in Latin America we do not have clear and defined investment policies, nor adequate risk control systems. Because the only thing that has been conceived so far is which the allocation of the assets of these funds should be through the investment regulation.

Secondly, I think there are still many questions as to the adjustment of a system of minimum returns relative to the yield of the industry. From an objective and long term perspective, I would

say it is being oriented toward investments, and the evaluation of these investments is completely short term oriented. These yields are measured on a yearly basis or every three years regardless of the long term impact these pension fund investments have on retirement.

On the whole, I think we would all agree that what must be done is to compare these investments not with the yield of the industry but with the market yield. And if we look at the long term retirement investment, the risk-free long term benchmark is the one that should work and be applied in these systems.

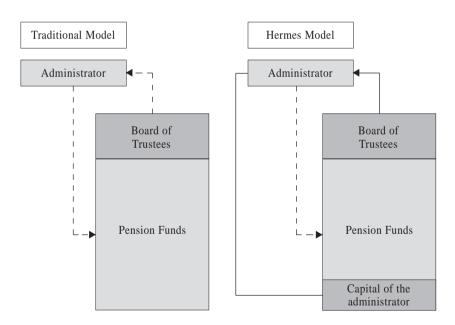
Thirdly, as it has been mentioned time and again, the third regulatory weakness is that of the investment limits that in general are quite strict. There is little sensitivity when applying this regulation vis-á-vis the volatility of the prices, and there are a few possibilities of surpassing those limits without a penalty or a considerable sanction to the administrators. At the OECD we have less strict yet higher limits where there is –especially nowadays—more flexibility to surpass them provided that they can be justified with an adequate investment policy which is consistent with the long term objectives of that particular pension fund.

Generally speaking, this regulation is playing against risk management instruments such as derivatives and foreing investment, which in the case of Latin America, in the case of emerging markets in general, is an absolute necessity in order to guarantee a good diversification and a good risk management.

In addition, I think the limits that are too strict and restrictive –just like minimum yield relative to the investment and assessment of funds—, focus their own oversight of the administrators and funds on the short term horizon; and I think that instead of the supervision, what is being done by focusing or projecting the returns, by projecting and estimating future pension that the affiliates of the system might receive, is to focus the whole analysis, supervision, and control of the system towards the short term horizon; and I believe this is the big problem these systems are facing in the sense that they come up with new models of risk control like VAR, and basically, the attention is being focused on the risk of one period to the next regardless of the projection there will be on the pensions of the individuals.

I will now move from these regulatory weaknesses onto a somewhat special model presented in Diagram N° 1 which is the only one of its kind in OECD countries: the model of the Pension Fund Administrator Hermes, a British administrator created by British Telecom. It is a quite unique yet curious case as mental exercise. The administrator was sold by British Telecom to the same pension fund sponsored by the company, e.i., the Trustees of the pension fund –since this is a fund that exist as a legal entity– are also the Directors of PFA Hermes which manages that very same pension fund. Evidently, this scheme would not work given the structure of Latin American countries, but I think it is interesting because what has occured is that since 1997, Hermes provides services to third parties, that is, it has become a Pension Fund Administrator like any other in Latin America, and sells these pension funds to any other employer or pension fund sponsor.

Diagram N° 1 GOVERNANCE IN OCCUPATIONAL PENSION FUNDS



What we obtain through this governance structure of managing the pension fund is that the incentives of the administrators are totally in line with those of the affiliate, and in the long run, the responsibility of the administrator is only towards the affiliates. I am not saying this is something that it will be promoted in OECD countries, but it is interesting as a mental exercise, as something that might work in a well-managed economy.

In general, the cases in Latin American countries are similar to those in OECD countries, whose pension funds exist as legal entities, with a Board only limited to the control of the administrator; and here we would have other cases in which administrators can be controlled by their own sponsors or by a financial group, as is the case in most of the Latin American countries.

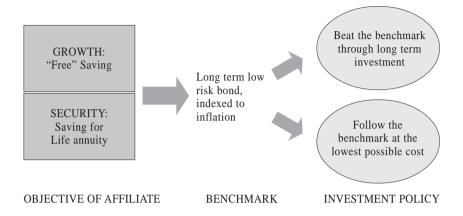
Let us set aside for a while this idea that it seems to have come from the Wizard of Oz or Alice in Wonderland, and check some structures that I do think might be applied in Latin American systems.

I think that a realistic and totally compatible situation with all fund management services, any kind of fund management when structuring multifunds would be threefold: first of all, to have an absolute market proxy for investments; second, to define a consistent investment policy with that benchmark that we will try to follow or beat; and finally, the performance of the multifunds with regard to that benchmark.

This is nothing new. It is basically the way in which the asset management industry works, and it is something that, I guess, is applicable to the private individual capitalization system through a long term approach. In general, there are short term approaches in the mutual fund system, and I think what we have to avoid is exactly this short term approach in the pension funds systems of defined contribution that both the regulation as well as the operation of pension funds itself have.

Therefore, if we continue a little further with what I explained to you at the beginning and observe Diagram N° 2 in which an individual seeks a high security for his/her retirement pension, we could split the two components of that mandatory saving between a portion of the saving for which the individual probably is searching security, and consequently a life annuity for retirement; and another component of that saving which is really what he is looking for: a greater growth, possibly free saving which the affiliate would like to pass onto his/her heirs, so it will be invested in a different manner.

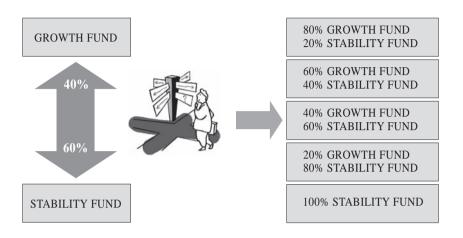
Diagram N° 2 What are the adequate benchmark and investment policies?



In spite of the difference in the two components, the benchmark for an individual who is 20 years away from retirement and wants to buy a life annuity, the rate must be free of risk. Then, the idea is not to have those limits, those minimum yields applied to the industry, but an objective, a specific benchmark ideally for each individual, because each person has a different term until retirement. Therefore, it is up to the individual how much he/she wants to invest in each type of saving, the so called stability or security saving and the growth saving; or if he/she is offered a range of services as in Chile where there already are these kinds of combinations of safe saving and growth saving. I think that will clearly depend on the capacity and trust of the affiliates to make the decision as to the exact percentage they want to invest in the safe saving component. See Diagram N° 3.

But what I would tell you is that from a theoretical point of view, the growth fund is the one that will be common to all of the affiliates, it will be a fund highly diversified in foreign stock, etc; whereas the fund seeking an absolute long term yield guarantee should be one that is tailored-made for each individual due to the fact that each individual has different investment terms, a different retirement and, therefore, the asset that the absolute guarantee offers will vary, at least the duration and maturity of that asset will vary.

Diagram N° 3 STRUCTURING THE MULTIFUNDS



Evidently, that is not feasible and the reason in Latin America we have stability funds which are common to all of the affiliates, but I think that at least the affiliate should know about the risk he/she is being exposed to in a common stability fund. The risk is even greater, of course, when this fund is not invested in foreign bonds but in domestic bonds with a high credit rating. I believe it is dangerous to create or foster a multifund system with so called Security Bonds or Low Risk Bonds when these funds can regularly be exposed to a high risk if they have not been sufficiently diversified internationally.

Then, what are the requisites for the efficient functioning of that kind of investments assessment and that type of regulatory framework design?

First of all, I think it is fundamental to have the possibility of combining programmed withdrawal with life annuities, and this conclusion is based on the same argument we commented before: the individual will have two components of compulsory saving; one that is seeking security, and another one which is searching for a complement on which to take a greater risk. Consequently, it is a must to have the possibility of combining the two types of pension modes which is exactly what has recently happened in Chile with the reform.

Secondly, I think in order to allow a long term orientation there must be a leveling of the investment regulation. I think that has been made quite clear in the discussion we have held today but we must place emphasis on foreign investment. I think that we can maintain prudential domestic limits, but foreign investment is absolutely necessary if we want to have any kind of long term yield approach of the pension funds. Likewise, there must be a greater use of derivatives which are the products that allow for a better investment risk management.

Finally, I think that the minimum yield measures lose their usefulness if we have this long term approach and if we compare the returns with an adequate long term benchmark for individuals. If the rationale utilized to defend the minimum yield is that some individuals will have a better or worse yield than others, then we could also ask ourselves why introducing a multifund system that will basically create significant differences between the yield of the affiliates in the first place.

If what we are looking for is limiting or making sure that a minimum yield will be received, I think that it is not being obtained through these relative yield regulations, because that should be done through an absolute yield. And there is also a basic pension, a minimum pension guarantee that in a way is already reducing the risk of having an inadequate yield.

So, what really requires a long term approach is the design of an investment policy statement, and to follow some guidelines when evaluating investments and the performance of these pension funds.

I am amazed with the fact that when I read the newspaper the description and comparison of the yield are always focused on a month and sometimes a year, but in general, affiliates are not being offered a comparison of the longer term yield, and above all, they are not being offered a projection of the benefits they might receive based on a concrete investment policy. And as I said before, this should be done with a benchmark, a safe benefit, which is what we mentioned this morning with regard to the need for a better pension variability management of the income or retirement.

Then, in an investment policy the amount that will be used actively and passively must be very clear, and lastly, what percentage of that fund is managed internally by the administrator itself and how much is delegated to a third party. I think these are some of the basic guidelines for an investment policy, and they should be used to advise affiliates when making their pension fund choice.

What would then be the main advantages? I think that the main advantage is that an informal liability is being specified for the pension fund, as well as the financial and fiduciary responsibility of the pension fund administrator; consequently, the investment policy of that pension fund is becoming a reality. It is not a given and abstract definition of adequate yield and security that does not help the affiliate, it would only help if we are in a defined benefit system as is the case in some of the OECD countries; it helps if we are in an insurance system, in a deferred life annuity system for example, or in a system with absolute minimum guarantees as in many insurance industries. But I do not think this definition is useful in a system based on defined contribution; and we have to accomplish a wider definition of the fiduciary responsibility but not through regulations such as quantitative limits that hamper diversification, or through minimum yield regulations focused on short term investment. It must be done through a long term approach.

The advantage of the benchmark is that it is independent from the investment policy of the fund and is marking a liability for that fund that otherwise would not exist, and in the end, the administrators, supervisory agencies and, in turn, the affiliates themselves are forced to totally understand what a long term investment is all about and the impact the different investment strategies will have on their retirement.

# NEW MODEL OF INVESTMENT REGULATION

Francisco Margozzini<sup>1</sup>

I have to introduce you to the guidelines of good regulations regarding investments, which were developed by the Investment Committee of FIAP, considering basically the experience that worldwide literature provides us in this regard as well as that of pension fund administrators in all these countries.

I also have to comment that these guidelines are aplicable to mandated pension programs of defined contributions based on individual capitalization. Nevertheless, some of them, not all of them, can also be applicable for a series of other pension schemes, an even for other kind of saving. Another way to define them is to point out that these are not guidelines, are not specific regulation proposals. We believe that specific regulations have to be established by each one of the countries, considering their own realities.

What are the objectives of these guidelines? Provide lawmakers and the industry with a framework that helps design efficient and effective regulations, and also promote a set of basic common rules among FIAP countries that serve to avoid malpractices and contribute to the stability of the pension systems.

He is a Civil Industrial Engineer from Pontificia Universidad Católica de Chile and obtained a Business Administration Diploma (DPA) at Universidad Adolfo Ibáñez. He is currently the Chief Executive Officer of the Pension Fund Administrators and Investment Guiad CSD, Inc. He is also a Memeber of the Credit Rating Commission and Director of the Enquiries and Offers System of Pension Amounts SCOMP, Inc. He was previously the CEO of PreviRed.Com during the trial run.

He actively participated as co-author of the books: "Analysis of the Pension System in Chile", "Private System of Pensions in Chile" and "Fifteen years after: A look at the Private Pensions System", which was published by the Center of Public Studies.

This guidelines work is divided into nine big issues that in our judgement relate to the main aspects of the investment process. Next, I will refer to each one of them.

# 1. OBJETIVES AND CHARACTERISTICS OF THE REGULATION

The first question we have to ask ourselves is: Is it reasonable or not to regulate investments?

It is clearly reasonable to regulate Pension Funds investment because we are talking about mandatory savings that have the important objective of financing pensions for people who due to their age are not eligible for work and, above all, because we are talking about managing the funds of third parties and not of the owners themselves.

If we are aware of the need for regulation, we have to see what are the characteristics of that regulation, and we have come up with three guidelines relative to the objectives and characteristics of the regulation. The first one is to make sure investments are made with the only objective of reaching adequate security and yield, since in long term savings as is the case of pension savings, the impact a yield point has on the level of the pensions is very important. Then, being concerned that these systems get a better ratio between risk and yield is not a whim.

Likewise, the regulation of the investment must not be used as an instrument to promote any social or economic objective, whatever their merits, other than the pension system objective. This means that pension funds must not be used for industrial policy, for financing projects or activities under conditions that strictly speaking have nothing to do with those fixed by the market at the relevant time; nor for stimulating the development of some markets. The contribution of pension funds to the social and economic development of a country is magnified when they are efficiently invested on the basis of a market criteria, and exclusively linked to the inherent objectives of the pension system.

Second, we must allow investments to diversify among the several financial instruments, issuers, and economic and geographical sectors, the important thing about international diversification has been pointed out in many of the presentations given in this seminar.

Third, the regulation must adapt and evolve to fit the reality of capital markets, the capacity to oversee and the characteristics of the legal system. We are talking about an ever-changing world. Nevertheless, the convenience to adopt a dynamic focus for the design of the regulations, must be balanced with the necessary stability of the regulatory framework, indispensable condition for administrators to develop their activity under a certain legal framework. In addition, the changes in the regulation should never obligate to a massive restructuring of the investment portfolios of pension funds. This means that the regulation should always evolve from a more restrictive situation to one in which more leeway for administrators is offered, but never the other way around. This way, the changes that will be introduced must always open up new investment choices and not limit the existing ones.

## 2. CORPORATE GOVERNMENT

The equity capital of pension funds is different and independent from that of the administrator and from others it may manage.

The administrators have a fiduciary responsibility with regard to the resources they manage. We refer to the concept of care and diligence with which these resources must be managed as though they were their own, and not that their resources get mixed up with those of the workers. The good family man concept.

Administrators must have external control procedures to comply with the regulation and their investment policy. They must define, if possible, their investment policy and make it public because in some cases it would be justifiable not to do it or to do it partially.

Likewise, administrators must exercise all rights pertaining to pension funds in their role as investors. We are talking about both the rights that come from the stocks found in the portfolio, and about their role as bondholders, investment and mutual fund holders, without participating in the managing decisions of the companies in which the resources are invested.

Lastly, they must guarantee the public access of information relative to their investment portfolio as well to the results they obtain.

## 3. INVESTMENT OVERSIGHT

Regardless of the important responsibilibities of pension fund administrators to establish the internal control that assures an adequate investment management, we also consider indispensable—given that these funds were brought about by a legal mandate and the existence of conflicts of interest, which is inherent to managing third party funds—the existence of external oversight that, in our mind, must have the following characteristics:

- Controlling within the fund that investment mangement complies with the legal regulations.
- Being impartial, timely, and independent, and be based on technical and professional criteria.
- Promoting the necessary changes to the regulation in order to make sure they adapt to market conditions.
- Providing timely, complete and clear public information.

## 4. CONTROL OF INVESTMENTS WITH RELATED PARTIES

This is a really important point. If we analyze the relative magnitude of the funds under management relative to the capital or the equity of the administrators, one sees that it is possible that individuals related to the administrator can get relevant benefits in detriment of pension funds. For that reason, there are three guidelines that are defined in order to better protect pension resources:

- Pension fund investment in assets issued by companies related to the administrador must be severely limited.
- The buying and selling of pension fund assets from and to individuals related to the administrator must be prohibited, unless it takes place in formal markets that assure the participation of other investors.
- Finally, there must be controls and limitations for the investments made by the administrator, its directors, and in general, everybody who participates in the investment process.

## 5. ASSET VALUATION

We are convinced that it is very important that pension funds investment is correctly valued through time so as to avoid wealth transfer and slants in terms of investments, and allow for reliable public information. There are several guidelines to fulfil these objectives:

First, investments must be preferably valuated according to market value. Yet, specially in small markets, not always there are daily transactions of all the instruments and even, in some cases, with existing transactions, the prices are not necessarily market prices beacause, for example, they may be very small transactions made to mark the prices. The problem lies, then, when clearly defining the requisites that transactions must comply with to "mark" market prices.

The methodology to valuate investment instruments must be unique (two methodologies cannot stand), clear (in the sense that it only allows one interpretation) and consistent (in the sense it does not slant in terms of investment), on top of that, it must be permanently updated considering the opinion of many specialists.

The frequency of optimal valuation depends on the opportunities in which pension fund movements are produced; has to do with a commitment between the need for valuation and the costs associated with it.

In the case of individual capitalization systems where there are movements (income and outcome) of pension funds on a daily basis, a daily valuation may seem absolutely necessary in order to avoid unwanted transfers of wealth. This is even more valid when such pension systems enable affiliates to freely choose how to invest their pension funds, picking from several fund alternatives, and when mandatory savings are included, they can choose from free availability voluntary saving modes.

The valuation of investment securities must be done by a third party with no conflict of interest.

We also think that it is not recommendable that methodologies of valuation include mechanisms that soften market prices. In other types of pension systems, mechanisms that soften price variations are frequently seen. We think that is negative for two reasons: because wealth transfers are allowed, individuals who manage more information can take advantage of these time differences; and on the other hand, losses can be conceiled and transparent information about the market is more difficult to find.

## 6. MEASUREMENT OF PERFORMANCE AND RISK

Fund managers in general and Pension Fund managers in particular, vie strongly relative to the quality of the investment services provided, and for this competition to make sense we think it is important that individuals, clients, get acquainted with the performance of each one of the administrators, which, in our mind, must not only be measured on a yield basis, but also by the associated risk to those investments. The next two guidelines derived from the following:

- Affiliates must be informed as to both the yield and the risk associated with the different pension funds.
- The several pension funds must be compared on the basis of their risk adjusted yields.

## 7. INVESTMENT LIMIT

We think that pension funds must only be invested in previously authorized instruments and asset class. The structure of investment limits must be consistent with the objective of maximizing the yield and/or lowering the risk of the portfolio. There is a clear concept here, contrary to what minimum limits are, either direct or indirect. A very restrictive cap structure generates, due to differences, a minimum limit on other instruments.

We also think that pension fund investment in some specific assets should be restricted. What kind of assets am I talking about? For example, high credit rating assets, low liquidity assets or limitations that allow to avoid controlling certain companies or the concentration of certain corporate groups.

In those countries in which pension fund administrators are authorized to offer their participants more than one fund, the system of limits should additionally provide their differentiation in order to give participants a wider range of portfolio options.

## 8. CUSTODY

We think that investment instruments of pension funds must be under the custody of an external custodian entity, independent from fund managers. We also think that these custodians must comply with high requisites in terms of facilities, security and technology systems, insurances, audits, etc. We also think that the internal custodians at pension fund administrators must comply with high security requisites.

The regulation must be targeted toward dematerializing securities, we believe the world is heading in that direction and to the interconnection between both depositories and stock exchanges as payment systems.

Two additional issues are, on one hand, the fact that the responsibility of authorizing and overseeing depositories or custodians must fall into a competent oversight organism; and on the other hand, the fact that among the basic functions of a custodian or depository are, obviously, the custody of securities, transactions record (buying and selling of securities) and the management of different capital events. Apart from that, there are additional services the custodian can provide such as valuation, cap controls, disclosure of information and the issuance of certificates.

# 9. TRANSACTIONAL PROCEDURES

Transactions of securities with the resources of pension funds must be done in authorized markets, meaning that they have to comply with certain specific requisites: first, they have to generate an effective match between offer and demand of securities, that is, they have to make sure there is a correct price formation; second, they have to be overseen, there must be an abundant flow of public information. Only in very particular cases, the use of other kinds of markets for specific transactions could be authorized. Also, when pension fund investments are made by an agent, they must have a special authorization to offer this service.

Another important aspect is that every conflict of interest that might arise must always be solved for the benefit of the affiliates. And, lastly, administrators must act in such a way that they lower the risks of execution of the transactions with the pension fund resources.

## 10. FINAL CONCLUSIONS

We are convinced that the most adequate regulatory model for mandatory plans of both defined contribution and individual capitalization pension must combine the use of prudent management criteria of the pension funds with a very reduced number of investment caps.

A second aspect, and probably even more relevant than the previous one, is that an appropriate legal framework with administrators and managers that assume their fiduciary role, and with supervisors that act professionally and efficiently is not enough. They are necessary conditions but they are not sufficient to protect pension funds. An active participation of the very owners of pension funds is required.

# Closing remarks

# Closing remarks



Guillermo Arthur, President, International Federation of Pension Fund Administrators, FIAP.



Luis Carranza, Deputy Minister of the Treasury, Peru.

# **CLOSING REMARKS**

Guillermo Arthur President of FIAP

Mr. Deputy Minister, Mr. Andrés Von Wedemeyer. We have come to the end of a long seminar, therefore, I commit myself to making a summary of what we have covered in this meeting.

I would just want to emphasize that there has been an absolute unanimity regarding some aspects that I think are important to highlight. First of all, the investment policy is at the heart of the development of pension systems. We could see how the pension depends on the yield offered by pension funds and also on the investment policies and the regulations promulgated in that regard.

It has also been highlighted the fact that the regulation must have a previsional objective, that is, it must be centered on obtaining a high security for the affiliates. The rest of the macroeconomic objectives or any other objective for that matter must be subordinated to obtain these benefits for the affiliates of the pension system. Saving has this purpose, the systems of individual capitalization are peculiar in that as they are owned by the savers, PFAs, as fiduciary trusts, cannot overlook the mandate that has been given to them: offering an adequate yield and security without getting distracted with other purposes no matter how laudable they might be.

It seems to me that there was also a clear coincidence concerning the improvement of the regulations that offer a better yield to the funds, and among them, the first coincidence is to prove why there is an excessive concentration of investment portfolios of the pension systems in Latin America in domestic instruments —with the exception of Peru and Chile—, in fixed income instruments and government securities, which plays against security and severely increases the political risk that derives from the interest that

governments usually have for those accumulated resources for different purposes other than those of the pension funds.

As a consequence, we have seen here —and the speakers have placed a special emphasis on that— the need to diversify the funds widening the investment margin abroad as the first measure. An adequate diversification cannot take place if there is no greater investment abroad, especially when our domestic markets do not offer the amount of instruments necessary so as to channel increasing resources in that regard.

We have also seen the need to invest resources in variable income instruments. I said that one of the characteristics we see in every country is an excessive concentration on fixed income instruments.

We have also seen how convenient is to flexibilize the existing regulations. There is an enormous amount of limits that give little room —which has even been mentioned by the regulators— and strongly broaden the scope of the administrators to get these purposes we have set ourselves done.

I finally point out -and I quote- it is a shame that no more politicians from our countries have attended this event for them to see that all of us who have worked toward these issues have greatly agreed with regard to such important aspects.

I finish up by saying that the big challenge in investment policy is to have a wider diversification, more foreign investment, and if possible, muiltifunds which have been already operating in Chile for two years, and are approved in Peru and Mexico. They will obviously allow us not only to have a wider investment diversification but also a greater sense of ownership of the pension funds by the workers. When a worker uses the ownership right saying where their funds must be invested, he or she is obviously developing that sense of ownership of the funds.

In order to shift into the multifunds system we must necessarily widened the foreign investment margins. There are not enough domestic assets in our economies to channel these funds. Consequently, the prohibition to invest abroad will translate into an excessive pressure on scarce assets that will harm the yield of the funds.

I will finally thank the Peruvian Association of Private Pension Fund Administrators and all the members of FIAP for their active participation, and especially the different speakers who have shown us the way ahead so as to improve the luck of those who trust their monthly pension savings for us to be able to provide them, at the end of their active life, with an adequate pension. Thanks.

# **CLOSING REMARKS**

Luis Carranza Treasury Deputy Minister of Peru

Dear friends from FIAP, it is a pleasure for me to be with you tonight conveying the greetings of the Minister of Economy, Mr. Pedro Pablo Kuczynski who, unfortunately was not able to make it here today because he had to attend an extraordinary Council of Ministers. Therefore, he expressedly requested me to come down here to share some reflections with you.

I know that this is like taking one of Cinderella's half sisters to the Prince, but... that is what we are here for.

The advantage of my improvised presence here is to provide a short reflection; and what I basically want to do is to share some ideas as to what we are doing in the Treasury Department to develop the capital market, and to briefly refer to PFAs' investment limits abroad which seems to have been a widely discussed and debated subject in this meeting.

In Peru we have many issues that must be solved if we want to grow at sustainable rates. Part of it is a fiscal situation that has improved quite a bit over the last few years, but we keep on having a high level of endebtedness, close to 50% of the GDP, that hopefully will be reduced.

Another fundamental aspect of the problem is that —given the hyperinflation of the 80s —unlike Brazil or Chile where inflation rates turned out to be a behavior of the agents that looked for protection in indexed mechanisms— in countries like Bolivia and Peru, for instance, the protection of the agents consisted in changing the currency and start using the dollar. The result is that we were still highly dollarized and that by all means was a considerable source of economic vulnerability.

Then, what we want to do, on one hand, is to guarantee that this improvement in the fiscal situation will protact in time; and we have a fiscal responsibility law that must be abided by, and towards that end, we would like to include severe administrative sanctions in case there is no compliance of the programmed fiscal objectives.

We would like to go towards a goal of structural fiscal result as is the case in Chile, but we are taking small steps and as of today we have something which is suboptimum, basically, a fiscal limit of 1% with the intention of moving towards a balanced budget and later evolve toward a structural goal. This is critical because if there is no confidence in public finance we will have a treasury bond that instead of playing the role of providing a zero cost yield curve, it will actually provide plenty of volatility to the market, and it will only kill the market instead of helping it develop.

Another fundamental aspect that is not within the bounds of the Treasury is the stability of the prices which is one of the roles of the Central Bank. Luckily, this has been managed well, we have inflationary measures that are targeted to a class mark of 2.5% within a band of roughly 1. In spite of the fact that the economy has been affected by a shock of significant alternatives that has temporarily increased the level of inflation, we are reaching that range. But the level of inflation that will be reached this year or the level of inflation we currently have is not fundamental but the expectation of the agents on the future inflation. I think there is confident in the system, the expectations of inflation for the next year are in line with the 2.5% which is basically the class mark of the inflationary target of the Central Bank.

The dollarization process we have undergone has its roots in the monetary and fiscal management of past decades. The process has been reversed, we have a disciplined management, but the dollarization remains. Why is it so important to dollarize the economy? Because we need an exchange instrument that softens the external shocks. Not having this exchange instrument would force us to accept —like Hong Kong for example— very strong deflationary pressures, that unfortunately our economy is not able to resist. The fiscal situation is not very solvent yet and it does not allow us to go through deflationary processes that might eventually help accommodate an external shock that implies a higher exchange rate.

Then, individuals, families, the companies with debt in dollars that sell to the domestic market, will have a very negative capital effect if we have relatively considerable devaluations that will lead to a severe restriction in spending, delinquency problems and to a severe economic recession. Basically, this is what we went through in 1998 and lasted for three or four years.

It is important, then, to try to talk people into keeping their savings, using the Sol as an instrument of reserve of value. It is a good option, and for that reason there must be no doubt at all as to the responsible fiscal and monetary management.

What we want to do is to build a yield curve and for that reason we have issued, just a few weeks ago, a bond indexed to inflation with a maturity of 20 years. We have reached to an end in the curve, and what we would like to do is to start filling this yield curve as the foundation for us to see whether the mortgage loan is granted in units indexed to inflation instead of dollars.

There are liquidity problems in over-the-counter markets that create quite negative vicious circles of high concentration and low liquidity; and when there is a small change in the financial conditions we wind up with an extremely high volatility in the prices of instruments. Correcting this issue implies, on one hand, the development of secondary markets, and we are doing so, but unfortunately the process is too slow.

So we are trying to design financial instruments that reduce that liquidity risk, not the interest rates risk but the liquidity of guarantee risk, which is primarily for natural persons who are saving in mutual funds and that if under some circumstances they decided to go out of these instruments for whatever reason, it does not imply so strong a fall in their value because at the end of the day they generate selling circles which are highly harmful to the system.

Not so long ago, mutual funds had undergone one of these processes, not a significant one at that, but it created a redemption of mutual funds within the sovereign debt markets. But absolutely everything we plan to do –which also has to do with a process of recomposition of the debt, since another one of our weaknesses is that our public debt is in dollars as well, and what we intend to do is to convert debt into domestic currency and domestic debt, as it was

done in Mexico— can only be made if people trust in the stability of the price and a fiscal sustainability. These conditions are necessary but not sufficient for financial markets to develop which is fundamental. I do not know any textbook on growth that does not read that the development of the financial markets is fundamental in order to achieve a long term and sustainable growth.

To sum up, I would like to refer to the limits of foreign investment. We believe is important to have diversification of the instruments, we believe it is fundamental that the pensioners can achieve a more appropriate combination of risk/reward than that of a closed market. And that has been demonstrated, the country risk of a closed market can be important in spite of the fact that we can diversify in different instruments within the country. It is the story of not putting all of your eggs in one basket but in two, however if both baskets are held by the same person, and the person falls, both baskets break.

Then, not only we must diversify in instruments within the country but also widen the options abroad. There is an old dispute between the pension funds and the Central Bank for these limits. I think that the arguments wielded from one side and the other do not go to the main point as to why the Central Bank must regulate the limits abroad. It has nothing to do with diversification, risk/ reward, which are valid reasons, nor with the resposibility of those who manage these funds; it has nothing to do with developing the domestic capital market, that is another issue; it only has to basically do with the issue of capital flow, volatility of the exchange rate that would imply capital flows in and out of the country, and the impact of the volatility that the exchange rate may have on the sector. That is the reason the Central Bank regulates foreign investment, and that is the fundamental reason that should be analyzed when seeing what the limits are. Apart from that, there may be fundamental reasons such as risk/reward, the combination of risk/reward; and unfortunately that reason has not been analyzed in depth.

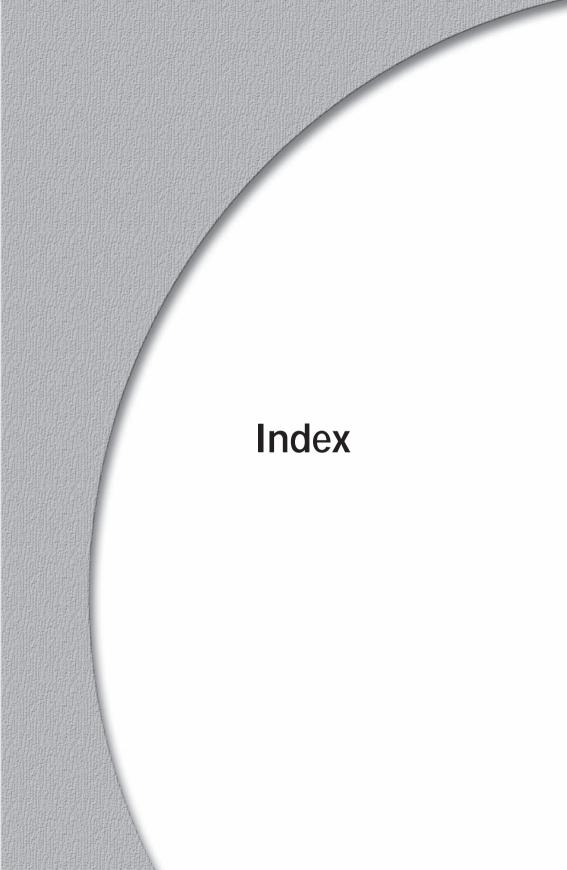
I do not know whether or not to call it a privilege but I hold two positions: I am the Vice Minister of the Treasury and Director of the Central Bank. The fundamental fact of the movement of capital flows, the impact this has on the exchange rate is, or should be the only reason that must be of interest to us in order to define the foreign limit.

In 1997 I visited Chile in another capacity, as an Official of the International Monetary Fund, and I was lucky enough and had the privilege to get to know Mr. Guillermo Larraín in another capacity as well. And it was clear back then that in Chile there were two objectives: the interest rate and the exchange rate. And a fundamental reason they used (but not the only one), the prudential reasons they had, in order to be able to maintain that was the lifting of foreign limits so as to make thin the exchange appreciation that Chile went through in the mid 90's before Asia and Russia.

Another fundamental aspect that is not mentioned either, at least not in the few working papers I have been able to read, is the fiscal surplus the country had and which helped sterilize a considerable portion of the excess of dollars in the system. Therefore, as far as the Treasury and the monetary authority are concerned we should look and move in that direction.

I would have loved to have –as Guillermo said at the end– more authorities attending this meeting. And I have to be honest that at the time the Minister brought this up and showed me the program, I would have loved to have actively participated in some of the discussions.

I hereby bring this event to a end. Thank you very much.



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# **Publications**

# PUBLICATIONS BY CIEDESS

- 12 years of modernization of the Social Security in Chile (1992).
- Strategies for the development of an integrated model of Social Security (1993).
- Financial and Economic aspects of the Social Security in Latin America and the Caribbean. Trends, problems and alternatives for the year 2000. Author: Carmelo Mesa-Lago (1993).
- Modernization of the Social Security in Chile (1994).
- The reform of Social Security in Latin America and the Caribbean: Towards a decrease in the social cost of the structural adjustment. Author: Carmelo Mesa-lago (1994).
- Social Security Reform: An entrepreneurial reform (1995)
- Policies of Housing Financing. Edited in Spanish and English(\*).
- The Pension Saving: Impact in the housing and capital markets (1995)(\*).
- Chilean Chamber of Construction: its educational challenge. Educational corporation of the Chilean Chamber of Construction (1995 1996).
- Health Maintenance Organizations (Isapres): towards modernization in health, Association of HMOs. Editors: Juan Giaconi and Rafael Caviedes (1999).
- Modernization of the Social Security in Chile. Reedition (1996).

<sup>(\*)</sup> Books elaborated on the basis of the presentations that many authors gave in the seminars that CIEDESS organized to cover the same issue.

- PFA: The three letters that revolutionize Latin America. Editor: Juan Ariztía (1997).
- PFA: A three letter revolution. Editor: Juan Ariztía (1998).
- The administration of health insurance in Latin America (1998) (\*).
- PFA: The three letters that revolutionize the world. Editor: Juan Ariztía (1999).
- 18 years of PFAs: Achievements and Challenges, Association of PFAs (2000).
- Symptoms of the Chilean Health System, its diagnosis and treatment. Editor Rafael Caviedes (2000 2001).
- Translation of the book "PFA: The three letters that revolutionize the world" into Mandarin (2001 2002).
- Modernization of the Social Security in Chile (2001 2002).
- The Unemployment Benefit (2002-2003) (\*).
- Reverse Mortgage: An innovative formula to improve pensions (2003).
- Results and Challenges of the pension reforms, edited for FIAP in 2003.
- Regulation of Social Security, published by CIEDESS for OISS Chile (2004).
- Medical Pandora. Author Rafael Caviedes, Edited by CIEDESS
- The unemployment benefit in Chile; Evaluation and perspectives two years from its implementation (\*), Edited by CIEDESS.

<sup>(\*)</sup> Books elaborated on the basis of the presentations that many authors gave in the seminars that CIEDESS organized to cover the same issue.





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Nigeria (\*)

The year given corresponds in each case to the beginning of the operations of the mandatory pension system.

\* Reform in process of implementation.



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