WPS 1853

POLICY RESEARCH WORKING PAPER 1853

Pension Reform and Private Pension Funds in Peru and Colombia

Monika Queisser

The new private pension systems in Peru and Colombia experienced difficulties during their first years of existence, but corrective measures strengthened their performance.

The World Bank
Financial Sector Development Department
November 1997

Summary findings

Queisser examines the performance of the new private pension systems in Peru and Colombia during their first years of existence.

Peru and Colombia were the second and third Latin American countries to implement a systemic reform of their pension systems. The reforms experienced difficulties in both countries, partly because of deficiencies in the design of the new systems and partly because of shortcomings in implementation.

Both countries, but especially Peru, took several additional measures to rectify the design problems of their reform programs. The systems now in place differ in several important respects from the systems initially introduced.

This shared experience suggests that, although flawed reform programs incur inefficiencies, the flaws can be removed and the reform programs significantly strengthened — if the authorities have a strong long-term commitment to a successful systemic pension reform.

Peru's private pension funds suffered unfair competition with its public pillars, which required lower contribution rates and lower retirement ages. They suffered poor financial results partly because of low salary levels and partly because they were not given permission to defer their high start-up costs, resulting in substantial capital losses.

Private pension funds in Peru have become increasingly diversified, with 25 percent of assets invested in equities by the end of 1996. But a big share of investments is in the banking sector and other financial institutions, giving the funds significant exposure to a sector that in most countries is highly leveraged and exposed to financial crises. Those investments should be more diversified sectorally.

Development of Colombia's private pension system was also limited because it coexisted with the public system. Competition with the public system was not as unfair as in Peru, but the slow pace of reform in the public system and the disincentives for older workers to join the new system were a significant obstacle to faster growth.

Despite using a preexisting fund management infrastructure, Colombia's private pensions funds incurred high start-up costs and suffered heavy losses. Although Colombia's financial sector was far more developed than Peru's when reform started, Colombia's portfolio has been much slower to diversify than Peru's — mostly because of high returns on fixed-income securities in Colombia and low trading in the stock market.

Queisser discusses the public pension systems only in terms of their relationship with and impact on the private systems' functioning.

This paper — a product of the Financial Sector Development Department — is part of a larger effort in the department to study private pension funding and contractual savings. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Priscilla Infante, room F6P-204, telephone 202-473-7642, fax 202-522-3198, Internet address pinfante@worldbank.org. November 1997. (37 pages)

Financial Sector Development Department
The World Bank

PENSION REFORM AND PRIVATE PENSION FUNDS IN PERU AND COLOMBIA

Monika Queisser

Contents

I am indebted to Mark Alloway, Martin Gerson, Edgardo Favaro, Ulpiano Ayala, Liliana Sarmiento, German Sanchez, Juan Carlos Checkley, Hermann von Gersdorff and, as always, Dimitri Vittas for their support and insightful comments on previous drafts. The usual disclaimer applies.

I. INTRODUCTION AND SUMMARY OF FINDINGS

This paper examines the performance of the new private pension systems in Peru and Colombia during the first years of their existence. While the public pension systems in these countries have many important economic implications, particularly with respect to the government's fiscal policy, they will only be discussed in their relation and impact on the functioning of the private systems. The first section of this paper introduces the main features of the private pension systems in Peru and Colombia and briefly summarizes the main findings. The structure and performance of the systems are discussed in detail in Section II for Peru and Section III for Colombia.

Table 1
Overview: The Private Pension Systems in Peru and Colombia

	Peru	*Colombia*
Start	June 1993	April 1994
Number of AFPs	5	9
Affiliates (end 96)	1.55 million	2.1 million
Coverage (% of labor force)	18%	18%
Total contribution rate	11%	13.5%
Income ceiling	no ceiling	20 minimum wages
Retirement age	65 years	62/57 years
Supervision	AFP Superintendency	Pension Department of Bank Superintendency
Funds per AFP	1	3
Recognition bonds	0% real interest	3-4% real interest
Transfer between public and private systems	Not allowed	Allowed
Funds (end 96)	US$ 1 billion (1.5%GDP)	US$ 820 million (1% GDP)
Tax treatment	Contributions not deductible Benefits taxed	Contributions and benefits tax-deductible
Minimum rate of return	abolished, new regulation pending	Composite of industry average and index
Minimum pension	no minimum pension, regulation pending	equal to one minimum wage

Peru and Colombia were respectively the second and third Latin American countries to implement a systemic reform of their pension systems. The reforms experienced difficulties in both countries, partly because of deficiencies in the design of the new systems and partly because of shortcomings in implementation. Both countries, but especially Peru, took several additional measures to rectify the design problems of their reform programs. The systems that are now in place differ in several important respects from the systems that were initially introduced. This shared experience suggests that, although flawed reform programs incur inefficiencies, the flaws can be removed and the reform programs significantly strengthened if the authorities have a strong long-term commitment to a successful systemic pension reform.

PERU

The Peruvian pension reform was launched in June 1993 on the basis of Law 25897 of 1992. A new defined-contribution pension scheme (SPP), decentralized and managed by private pension fund management companies (AFPs), was introduced as an alternative to the existing defined-benefit "pay-as-you-go" system (SNP). Contrary to the Chilean pension reform, which is phasing out the old public system, the Peruvian reform involves the continuing coexistence of two pension systems. As in Chile, workers switching to the private pillar were entitled to recognition bonds for their past contributions to the public pillar.

The impact of the Peruvian reform was constrained by three main factors: imposing a higher contribution rate and higher retirement ages on workers joining the private pillar; failing to allow the transfer of public employees, who were covered by "Cedula Viva" (CV), a generous and expensive defined benefit system; and permitting new entrants to the labor force to join the public pillar.

The Peruvian authorities took several measures on successive occasions to redress the balance and improve the prospects of the private pillar. Thus, in July 1995 they eliminated the difference in contribution rates and retirement ages (Law 26504). A year later, in July 1996, they allowed public employees to transfer from the CV to the SPP and even provided incentives for such transfers, while establishing a reserve fund (Fondo Consolidado de Reservas Previsionales, financed from privatization proceeds) to cover the liabilities of the public pillar (Legislative Decree 817).

Further measures were taken in November 1996 to encourage switching to the private pillar (Legislative Decree 874). The eligibility criteria to apply for a recognition bond were eased significantly, while changes in regulations were implemented that aimed at discouraging high fees and stimulating competition (World Bank 1996). LD 817 eliminated the use of a benchmark rate of return for the sector and of the "bands" around this rate of return, required investment results to be regularly reported on a net of fees basis and expanded the range of eligible investment instruments. The decree also provided for a minimum profitability requirement to be specified by an appropriate regulation, but no such regulation has been issued yet.

Main Features

Many of the features of the private pension system in Peru are modeled on the Chilean prototype. There are, however, some important differences from the Chilean example which are summarized below:

- There is no minimum pension guarantee in Peru. Although the law contemplates the possibility of introducing a minimum benefit, no such provisions have been made to date.
- Mandatory and voluntary contributions to the individual accounts are not tax-deductible, while pension benefits are taxed.
- There are no ceilings on mandatory pension contributions, but the premiums for disability and survivors' insurance are subject to a ceiling.
- The recognition bonds carry no real interest, i.e. they are indexed to prices and earn a zero real rate of interest.
- There is a maximum limit for recognition of past contributions to the old system.
- New workers are not automatically affiliated in the new system.
- There is a uniform retirement age of 65 years for men and women.
- The benchmark rate of return and the "bands" around this have been eliminated, although the law provides for an unspecified minimum profitability requirement.

At the end of 1996, about 1.55 million workers were affiliated in the SPP representing about 18 percent of the estimated economically active population, while another 1 million workers (about 12 percent of the economically active population) were affiliated with the public system.

The new pension system started up with 5 AFPs. By the end of 1993, 8 AFPs had been established. All AFPs are joint ventures with foreign partners. Market concentration has increased as a result of mergers and currently there are again 5 AFPs in the market. Out of the five AFPs, only one has been able to break even. All the other companies have been running high operating losses due to high start-up costs and expenses for advertising and sales.

The contribution rate to the individual accounts, which is used for long-term capital accumulation, is currently 8 percent of workers' salaries. The total funds under management by the AFP system amounted to about US$ 1 billion at the end of 1996, corresponding to about 1.5 percent of GDP.

The portfolios of the AFPs, though exhibiting high uniformity, have been diversified considerably since the start of the system. While most of the funds were placed in bank deposits in the beginning, already about a quarter of total assets were invested in shares by the end of 1996. The average real rate of return of the AFPs, before deducting operating expenses or commission fees, has been about 7 percent annually since the start of the system in 1993. The net real return to affiliates was slightly negative in the first two years but reached 4.5% in 1996 (Shah 1997). Over a worker's full career the expected net real rate of return is likely to be highly positive.

The number of pensioners in the Peruvian private pension system is still small. By August 1996, only 134 old age pensioners, 85 disability pensioners and 3,559 survivors were receiving benefits.

Main Findings

- The evolution of the private pension funds in Peru was seriously affected by the "unfair" competition between the private and public pillars. Lower contribution rates and lower retirement ages for affiliates of the public pillar greatly reduced the attractiveness of the private pension funds.

- The AFPs have suffered from poor financial results. AFP revenues have been lower than in Argentina and Chile due to the lower salary levels of affiliates. Peruvian AFPs have not been given the permission to defer start-up costs, which has resulted in substantial losses of the AFP's capital.

- In Peru, a continuous diversification of the pension funds' portfolio can be observed. The percentage of assets invested in equities has been growing particularly fast and reached more than 25 percent by the end of 1996.

- Despite increasing diversification of instruments, the AFPs' portfolios continue to have a high share of investments in the banking sector and other financial institutions. This represents significant exposure to an economic sector that is in most countries highly leveraged and exposed to the adverse effects of financial crises. A more balanced sectoral diversification of investments would be desirable.

COLOMBIA

In April 1994, Colombia introduced a new privately managed pension scheme as an alternative to its existing public pension system. Like in the case of Peru, affiliation in the new system is not mandatory but depends on the choice of each individual worker.

Main Features

The private pension system has many of the features of the Chilean system. As in Peru, it has been modified in several areas to take account of the characteristics of the Colombian financial sector and the existing institutional structure of social protection.

The most important differences from the Chilean model are:

- Workers are allowed to switch every 3 years between the public and private systems.
- New labor force entrants are not required to join the private system.
- Subsidies, financed through an additional percentage point of contributions and government transfers, are provided to enable low income groups to join either pension system.
- The contribution rate is payable by employers (75 percent) and employees (25 percent).
- AFPs are allowed to operate more than one fund.
- Workers are allowed to have more than one account.
- The regulations on ownership of AFPs are more relaxed.
- There is no separate independent supervisory agency for pensions. The pension funds are supervised by the Pension Department of the Bank Superintendency.
- A variety of AFP fees is permitted, including fee differentiation between affiliates. AFPs have so far applied fees per collection but not on assets.
- Fees are capped at 3.5 percent of workers' salaries and AFPs are required to report returns net of commissions.
- The retirement ages are 57 years for women and 62 years for men.

Affiliation in the private system stood at about 2.1 million in December 1996, corresponding to 18 percent of the economically active population. About 2.6 million workers are affiliated in the other pension schemes of the public system, which would correspond to an additional 22 percent of the economically active population; this number is a rough estimate, however, since the files of the public system have not been revised and cleaned and the errors in the registers are considered to be substantial.

The private pension system in Colombia used the pre-existing structure of privately managed severance funds as a basis. When the new pension system started in April 1994, 8 of the 10 existing severance fund management companies were licensed to manage pension funds. In December of the same year, an additional company was licensed to manage only pension funds. At the end of 1996, there were 8 companies managing both pension and severance funds, 1 company managing only pension funds and 1 company managing only severance funds. To date, there has been only one merger in the Colombian pension system. The Colombian private pension system is far less concentrated than the Peruvian system.

At the end of 1996, the funds under management of the mandatory pension system amounted to about US$823 million (approximately 1 percent of GDP). Voluntary pension funds had assets of an additional US$69 million. The mandatory severance funds had accumulated US$680 million or about 0.7% of GDP. Total assets administered by the pension and severance fund management companies thus corresponded to about 1.7 percent of GDP.

The contribution rate to the individual pension accounts was initially set at 8 percent in 1994. It was increased, as originally planned, to 9 percent in 1995 and to 10 percent in 1996. The investment regulations are much more relaxed in Colombia than in Chile and Peru, yet the portfolio of the Colombian AFPs has been diversified only slowly over the past years. In their investment strategy, the AFPs have consistently shown a strong preference for fixed income securities and there is a strong emphasis on bonds, particularly those issued by financial institutions as well as by quasi-public entities.

In real terms, the gross rates of return of the mandatory pension funds were 14.4 percent during May-December 1994, i.e. during the first nine months of the system, 15.9 percent in 1995, and 15 percent in 1996.

Main Findings

- As in the case of Peru, the growth of the Colombian private pension system was limited because of the co-existence with the public system. The competition with the public system was not as "unfair" in terms of contribution rates and eligibility conditions as was initially in Peru, but the slow pace of reform in the public system and the disincentives for older workers to join the new system did present a significant obstacle to faster growth.

- The ability of the private pension system to generate long-term savings and mobilize domestic resources has been limited by the low level of income in Colombia. More than 75 percent of affiliates to the private system earn less than 2 minimum salaries.

- The financial condition of the AFPs has also been negatively affected by the low incomes of the affiliated workers. Since the fees are charged as a percentage of salaries, the operating revenues of the AFPs have also been low. So far, none of the AFPs has broken even.

- Despite using an existing fund management infrastructure, the start-up costs of the private system were still very high. Expenses for advertising and marketing resulted in losses of almost 70 percent of the AFPs' capital compared to about 66 percent in Peru.

- Although the financial sector in Colombia was far more developed at the moment of reform, the diversification of the AFPs' portfolios has been much slower than in Peru. This is probably due to the high returns on fixed income securities in Colombia and to the low trading volumes on the stock market as a share of GDP.

II. STRUCTURE AND PERFORMANCE OF THE PRIVATE PENSION SYSTEM IN PERU

The Peruvian pension reform was launched in June 1993 on the basis of Law 25897 of 1992. A new defined-contribution pension scheme (SPP), decentralized and managed by private pension fund management companies (AFPs), was introduced as an alternative to the existing defined-benefit "pay-as-you-go" system (SNP). Contrary to the Chilean pension reform, which is phasing out the old public system, the Peruvian reform involves the continuing coexistence of two pension systems. As in Chile, workers switching to the private pillar were entitled to recognition bonds for their past contributions to the public pillar.

The impact of the Peruvian reform was constrained by three main factors: imposing a higher contribution rate and higher retirement ages on workers joining the private pillar; failing to allow the transfer of public employees, who were covered by "Cedula Viva" (CV), a generous and expensive defined benefit system; and permitting new entrants to the labor force to join the public pillar.

The Peruvian authorities took several measures on successive occasions to redress the balance and improve the prospects of the private pillar. Thus, in July 1995 they eliminated the difference in contribution rates and retirement ages (Law 26504). A year later, in July 1996, they allowed public employees to transfer from the CV to the SPP and even provided incentives for such transfers, while establishing a reserve fund (Fondo Consolidado de Reservas Previsionales, financed from privatization proceeds) to cover the liabilities of the public pillar (Legislative Decree 817).

Further measures were taken in November 1996 to encourage switching to the private pillar (Legislative Decree 874). The eligibility criteria to apply for a recognition bond were eased significantly, while changes in regulations were implemented that aimed at discouraging high fees and stimulating competition (World Bank 1996). LD 817 eliminated the use of a benchmark rate of return for the sector and of the "bands" around this rate of return, required investment results to be regularly reported on a net of fees basis and expanded the range of eligible investment instruments. The decree also provided for a minimum profitability requirement to be specified by an appropriate regulation, but no such regulation has been issued yet.

Many of the features of the private pension system in Peru are modeled on the Chilean prototype. There are, however, some important differences from the Chilean example which are summarized below:

- There is no minimum pension guarantee in Peru. Although the law contemplates the possibility of introducing a minimum benefit, no such provisions have been made to date.
- Mandatory and voluntary contributions to the individual accounts are not tax-deductible, while pension benefits are taxed.
- There are no ceilings on mandatory pension contributions, but the premiums for disability and survivors' insurance are subject to a ceiling.
- The recognition bonds carry no real interest, i.e. they are indexed to prices and earn a zero real rate of interest.
- There is a maximum limit for recognition of past contributions to the old system.
- New workers are not automatically affiliated in the new system.

- There is a uniform retirement age of 65 years for men and women.
- The benchmark rate of return and the "bands" around this have been eliminated, although the law provides for an unspecified minimum profitability requirement.

Coverage

In Peru, coverage in either the public pension system (SNP) or in the private pension system (SPP) is mandatory for all dependent workers. Independent workers may voluntarily join either system. At introduction of the SPP in June 1993, all workers already affiliated with the SNP were given the choice of switching to the SPP or remaining in the public system. This option does not expire and transfers from the SNP to the SPP are possible at any time.

New entrants to the labor force have to decide whether to join the SPP or the SNP within a period of 10 days. If the worker does not make this choice, the employer will automatically affiliate the worker in the private system. Until June 1996, switching back from the private to the public system was allowed for women and men who were older than 50 and 55 years, respectively. Affiliates, who had wrongly assumed that they would be entitled to a recognition bond for past contributions to the old system, were also allowed to switch back to the SNP. The number of affiliates who transferred back, however, was small. By the end of 1995, only about 2,800 workers had switched back to the SNP. The option of switching back was terminated in June 1996.

Past contributions to the old system are honored by the government through the issue of a recognition bond for workers who have contributed during the six months before the reform and for at least 4 years during the last 10 years prior to 1992. The face value of the bond depends on the years of contributions made and the average salary during the 12 months prior to December 1992.[1] Previous contributions, however, are recognized only up to a ceiling. This was originally set at S.60,000; due to adjustments for inflation, it now corresponds to about US$ 46,000. The recognition bonds are indexed to prices but carry no real interest. In the amendment to the pension law passed in November 1996, the requirements to obtain a recognition bond were loosened to offer a greater incentive for affiliates to switch to the new system. Now affiliates only have to have contributed for 4 years during the last 10 years in order to qualify for a recognition bond.

Affiliation

At the end of 1996, about 1.55 million workers were affiliated in the SPP representing about 18 percent of the estimated economically active population and 47 percent of all dependent workers. An estimated 12 percent of the economically active population are still affiliated with the public system. If only the 3.2 million workers under the age of 45 are taken into account as potential affiliates, the SPP affiliation represents a coverage of about 45 percent.

The SPP has been attracting predominantly the younger workers. Almost 70 percent of all SPP affiliates are below the age of 35 and only 4 percent are above the age of 50 years; the average age of all affiliates is 32 years. Male workers account for 67 percent of all affiliates. The majority of affiliates are dependent workers; about one fifth are independent workers. More than half of all affiliates live in the urban centers of Lima and Callao.

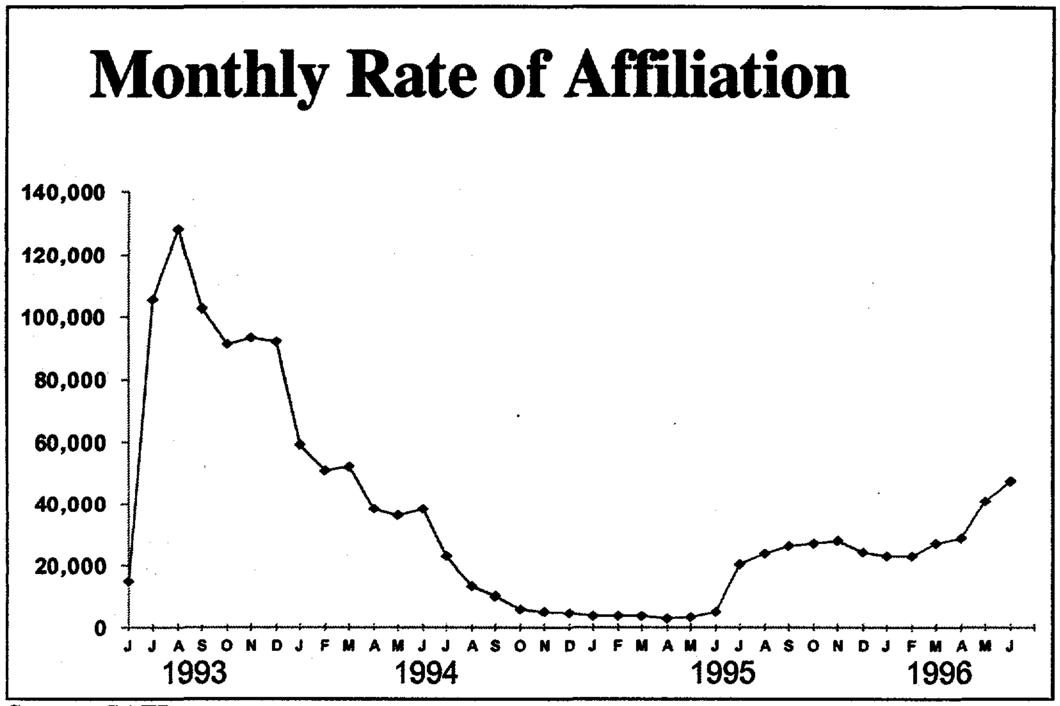
The pace of affiliation to the new private system was high in the beginning due to extensive publicity campaigns by the pension fund management companies. In 1993, 63 percent of the SPP affiliates were entitled to recognition bonds for their contributions to the old system which indicates that initially the majority of affiliates to the new system came from the SNP. But, as shown in Graph 1, monthly affiliation declined continuously from more than 100,000 workers during the first three months after the system was launched in July 1993 to less than 5,000 workers in June 1995.

The decline of affiliation was due to several factors. First, the uneven competition between the SPP and the SNP resulted in disincentives for workers to join the SPP. The contribution rate payable by the worker to SNP was only 3 percent compared to 14 percent in the SPP whose affiliates were also required to pay an additional 1 percent "solidarity" contribution to the SNP. Further, a sales tax of 18 percent was levied on the AFP commissions and insurance premiums payable by SPP affiliates. Workers who switched were given a salary increase of about 13.5 percent to compensate for the higher rates in the SPP. However, some private and public sector employers had difficulties paying this increase which effectively resulted in a rise of labor costs because employers had only paid a 6 percent contribution before.

Second, the retirement age in the SPP was 65 years for men and women while retirement ages in the SNP were only 60 and 55 years for men and women, respectively.

[1] For a discussion of the calculation of recognition bonds see Annex 3, World Bank (1996).

Third, implementation problems, particularly the failure of the government to issue the promised recognition bonds, reduced the confidence of workers in the new system. The regulations for the issue of recognition bonds did not come out until December 1994.



Source: SAFP

Fourth, until April 1994, the government did not pay the contributions for those public sector employees who had joined the SPP. The still outstanding debt, including interest and penalties, amounts to about S.400 million or US$ 162 million.

Fifth, affiliates were not properly informed about the implications of the pension reform; many workers thought, for example, that they would lose health insurance coverage if they switched from the public to the private pension system.

After contribution rates between the SPP and SNP were equalized at 11 percent and a uniform retirement age of 65 years was set for both systems in July 1995, monthly affiliation increased by a factor of 5. In the last quarter of 1996, about 40,000 workers on average joined the SPP every month. It should be noted that the July 1995 changes also removed the "solidarity" fee of 1% that affiliates to the private pillar were required to pay.

As observed in the case of Chile and other countries which operate AFP systems, there is a large discrepancy between the number of affiliates and those who actually regularly contribute to their accounts. In Peru, the share of affiliates who are regularly contributing to their accounts is estimated to be around 45 percent.

There are various reasons for this discrepancy. In the case of dependent workers, employers may default on their payment obligations and mistakes are made in the contribution data submitted to the AFPs or in the payment of contributions. Some of the evasion is simply due to the fact that workers leave the labor market to pursue further studies, stay at home or start up their own business in which case they are no longer obliged to contribute. Independent workers often stop contributing due to the instability of their incomes, other priorities in the allocation of their savings, or misunderstanding of the benefits and mechanics of the system. However, as highlighted by Vittas (1997b), what matters from the point of view of adequate income in retirement is the extent to which household heads or breadwinners have a full contribution period. As in the other Latin American countries, this is an issue that merits further study.

The SAFP conducted a study (Aporte 7/ 1996) of the contribution pattern which showed the following results: (i) irregular contributions were much more frequent among independent, voluntarily affiliated workers than among dependent workers; (ii) there was no difference in the contribution patterns of male and female affiliates; (iii) the older the affiliates were, the higher the density of their contributions; (iv) there were regional differences in contribution patterns with rural areas showing a lower density of contributions; (v) there was a positive correlation between income and contributions; and (vi) affiliates who were entitled to recognition bonds contributed more regularly. These results, however, were based only on a small representative sample of affiliates which had been in the system from the start and therefore should be interpreted cautiously.

Since the start of the new system, there have been two official programs to retire the employers' debt to the system. These programs enable AFPs to negotiate directly with the employers a scheduled repayment of the overdue pension contributions. The program applies a market interest rate of about 18 percent instead of the much higher rates normally charged on outstanding contributions.

Management Companies

The rules and regulations to which the pension fund management companies are subject in Peru are very similar to those applied in Chile. Like in Chile, the Peruvian companies are called *Administradoras de Fondos de Pensiones (AFPs)*. These companies are not allowed to do any other business than pension fund management. They have to be set up as joint-stock companies. Banks, insurance companies, and other financial institutions that already operate in Peru as well as the public social security institution IPSS are prohibited from owning AFPs. The holding companies of such banks and other financial institutions, however, may invest in AFPs.

The AFPs are licensed, regulated and supervised by a specialized agency, the *Superintendencia de AFPs* or SAFP. The SAFP is an autonomous agency, its staff is subject to employment terms of the private sector including the payscale, and the superintendent is nominated by the President for a term of 5 years. The agency is financed through a fee levied on the AFPs in relation to the size of the funds they administer. This fee started out at 0.2 percent of assets and was subsequently reduced to 0.05 percent in 1996 and 0.00048 percent at the beginning of 1997. The annual expenditure of the supervisory agency has amounted to about US$ 4-5 million; in 1994, annual assessments on the AFPs covered approximately half of the costs while in 1995 they were sufficient to finance practically all the supervision expenditure.

Each AFP is allowed to manage only one fund for all affiliates. The retirement capital managed by an AFP is an independent entity, which is legally and financially separated from the companies' capital in order to ensure that members' assets are protected in case of an AFP's bankruptcy. The assets of the pension fund belong exclusively to the affiliates, they are not attachable, and are not affected by any financial losses suffered by the AFP. The transaction requirements and custodial arrangements are similar but a little less stringent than in Chile. In Peru, all transactions other than CD primary issues must be made through the securities exchange. In Chile in the beginning only the Central Bank was allowed to act as custodian for AFP transactions but now private companies are authorized as well. In Peru, any independent financial institution may perform the role of custodian.

AFPs must have a minimum capital of S.500,000 or approximately US$200,000. Further, they must keep a mandatory investment reserve so that possible shortfalls arising from the minimum profitability guarantee can be compensated for. This reserve (*encaje*) is equal to 0.7 percent of the total fund under management plus an add-on depending on the risk-rating of the fund's investments. This usually results in a total reserve of about 1 percent of assets under management, which is equivalent to the *encaje* requirements in Chile. Until recently, the Peruvian system had the same regulations on minimum profitability as the Chilean system. But in Peru, this minimum guarantee was not backed by the government but had to be provided by the AFPs alone. In the November 1996 amendment to the pension law, however, the benchmark rate of return based on the average return of the whole sector and the "bands" around this return were eliminated. Although a minimum profitability requirement has, in principle, been retained, it has not been specified yet.

Market Concentration

The new pension system started up in June 1993 with 5 AFPs. By the end of 1993, 8 AFPs had been established. All AFPs are joint ventures with foreign partners including Citibank, Aetna International, ING, the International Finance Corporation (IFC), the American International Group (AIG) and Grupo Bansander. The Chilean AFPs are also participating: Santa Maria, Provida, Banmedica and Union are shareholders in Peruvian AFPs.

Market concentration has increased as a result of mergers. The first merger of AFPs occurred in August 1994 between **Horizonte** and **Megafondo**, followed by the merger of **Nueva Vida** and **Providencia** in November 1994; **Profuturo** and **El Roble** merged in September 1996.

The three largest AFPs account for 76 percent of all affiliates and 74 percent of total funds. The Herfindahl index of concentration is 2312 in the case of affiliates and 2295 in the case of funds under management. The concentration of the Peruvian market is higher than the concentration of the Chilean market when the AFP system was first launched in 1981 and the Herfindahl index was 2200 for funds under management; it has since fallen to 1260 in 1994 (Vittas 1997c). It is also higher than in Argentina where the index was 1121 and 1158, respectively (Vittas 1997a).

The two largest AFPs, as measured by the number of affiliates, **Profuturo** and **Horizonte**, each took over smaller AFPs in 1994. Both AFPs are majority owned by non-Peruvian shareholders; foreign investors account for 61 percent of Profuturo's equity and for 56 percent in the case of Horizonte. In the largest AFP in terms of assets managed, **Integra**, foreign shareholders account for just over half of total equity with large stakes by Aetna and ING.

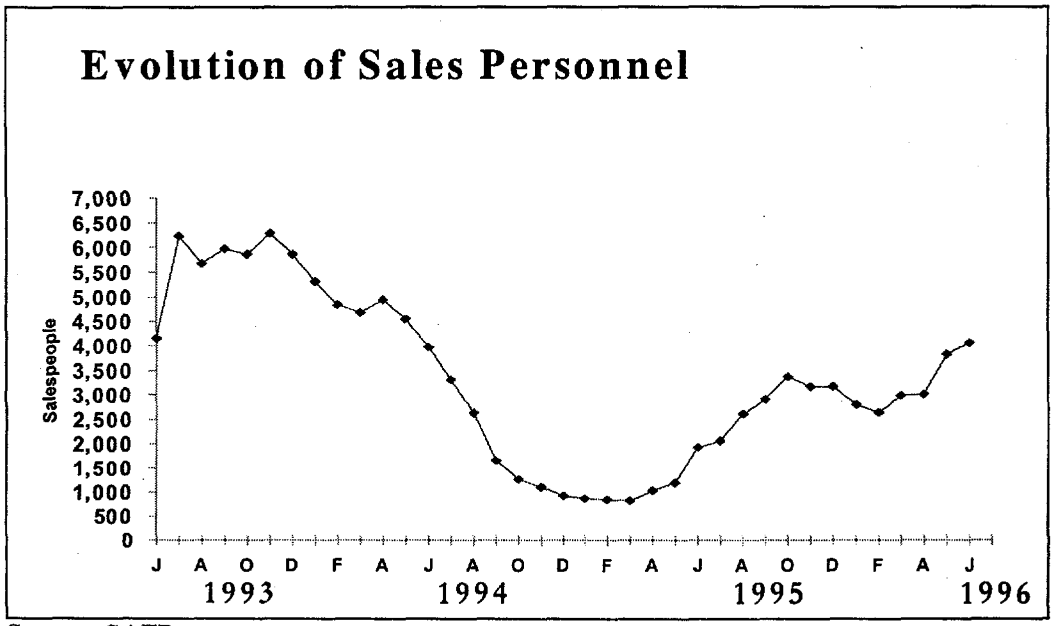
Table 2
Market Concentration in the SPP (12/96)

AFP	Affiliates	%	Fund (million soles)	%
Profuturo	417,634	26.9	509.7	20.7
Horizonte	390,925	25.2	585.9	23.7
Integra	377,118	24.3	735.1	29.8
Union	284,084	18.3	479.9	19.4
Nueva Vida	80,878	5.3	157.2	6.4
Total	1,550,639	100.0	2,467.8	100.0

Source: SAFP, December 1996

The evolution of the sales force in the SPP matches the evolution of affiliation discussed earlier. At the outset of the new system, the AFPs had a salesforce of more than 3,000 agents which rapidly increased to almost 6,000 in December 1993. In the initial phase, AFPs competed intensely for affiliates paying less attention to actual contributions and income levels of their affiliates. Since the number of workers switching over to the new system was considerably lower than the AFPs had originally projected, marketing efforts were increased to attract more affiliates. The advertisements, however, were often confusing and unsuccessful in convincing workers of the benefits of the SPP.

As it became evident that affiliation rates were declining and the AFPs were running large operational deficits, the number of agents was reduced. As shown in Graph 2, the reduction of sales personnel was gradual at first, as marketing strategies were revised, and then more rapid as the AFPs started closing branches and drastically cutting their operational costs. In December 1994, there were less than 800 agents employed by the whole system. The number of AFP branch offices was reduced from 139 in December 1993 to 71 in December 1994.



Source: SAFP

Since July 1995, when the law was amended to create a level playing field for the SPP and SNP and the government started issuing recognition bonds, the number of agents has increased again, reaching about 4,300 in October 1996. Transfers of affiliates between AFPs were not allowed until November 1995. Members can now switch from one AFP to another after a minimum of 6 consecutive months of contributions. In order to switch, the affiliate has to go the AFPs' offices and sign transfer forms. Further, a fixed fee of S.80 (about US$ 32) is charged per transfer payable to the AFP the affiliate wishes to leave. The number of affiliates switching AFPs is still fairly low. By December 1996, 68,638 affiliates had requested to switch; this corresponds to 4.4 percent of affiliates and almost 10 percent of contributors. Transfers are likely to increase as AFPs step up their marketing and advertising efforts. In Chile, about 50 percent of all contributors switched between AFPs in 1996.

Financial Condition of AFPs

The 8 APFs started out in 1993 with a capital of about US$ 30 million; approximately half of the total equity was owned by foreigners. Due to the high start-up and expansion costs, the total AFP capital was increased to US$ 150 million by the end of 1996. The AFPs with the most affiliates are also the highest capitalized companies. **Horizonte** has a capital of S.75 million (US$ 30 million) and **Profuturo** of S.74 million. **Integra**, the AFP with the largest fund under management, however, has a capital of only S. 28 million.

The AFPs adopted different strategies in their efforts to attract affiliates. Both **Profuturo** and **Horizonte** set out from the beginning to become the market leaders in terms of affiliates. **Integra,** the only AFP which has been able to break even, adopted a mass policy as well but focused on high quality of services from the start. It now has the most assets under management as well as the highest fund per affiliate.

As can be expected with a large share of high-income affiliates, **Integra** has the most regular contribution pattern of all AFPs; while the system's average ratio between contributors and affiliates is only 45 percent, 56 percent of Integra's affiliates contribute regularly to their accounts. **Nueva Vida** adopted a niche policy concentrating only on the higher income segment by charging very high fixed but low variable commissions. The dispersion of contributions collected per contributor is very high; in August 1996, collection per contributor ranged between S.75.58 (**Profuturo**) and S. 149.41 (**Nueva Vida**).

Initially, the AFPs were allowed to charge affiliates three different types of commissions for the administration of pension funds: (i) a monthly fixed commission per affiliate; (ii) a monthly variable commission calculated as a percentage of the pensionable salary; and (iii) a monthly variable commission calculated as a percentage of the balances administered. There is an additional fixed fee of S. 80 payable by affiliates who wish to transfer their balances to another AFP. Each AFP is free to set these commissions; however, they are still required to charge the same fee to all of their affiliates and discrimination, for example discounts to encourage affiliates to stay, are not permitted yet but the law enables the Superintendencia to allow discounts in the future.

During the first year of operations, AFPs charged on average 1.6 percent of salaries as variable commission as well as a fixed commission of about 1 Sol per month. In the second year of operations, commissions were increased by 25 percent on average. The commissions charged by the

Peruvian AFPs are higher than those charged in Chile and about the same as those charged in Argentina. In October 1996, the average fixed commission in Peru amounted to US$ 1.40, compared to US$ 0.40 in Chile and US$ 1.35 in Argentina. The average variable commission of 2.02 percent and the average premium payable for disability and survivors' insurance added up to 3.25 percent, however subject to a ceiling, compared to 2.97 percent in Chile and 3.3 percent in Argentina.

Table 3
AFP Commissions (October 1996/January 1997)

	Horizonte	Profuturo	Integra	Union	Nueva Vida
Fixed (soles)	2.54	2.95	2.54	2.54	5.51
Variable (%) (October 1996)	2.03	2.03	2.03	2.03	1.99
Variable (%) (January 1997)	2.30	2.50	2.35	2.28	2.29

Source: SAFP

Since January 1997, the law allows only the variable commission as a percentage of contributions. Fixed fees on monthly contributions as well as variable fees charged on the balance of the affiliates have been disallowed. None of the AFPs had been charging the commission on the balance administered. After the fixed fee had been abolished, AFPs increased their variable fees, as shown in Table 3. They now range from a low of 2.29 percent of salaries to 2.5 percent. The amendment also allows for discrimination of commission between affiliates in order to discourage them from switching AFPs. For benefit payments, both fixed and variable commissions are still allowed.

In 1994, the commissions collected by the AFPs covered only 45 percent of the operating costs. Although income from commissions more than doubled during 1995, it was sufficient to cover only 80 percent of operating costs due to the AFPs expansion of their salesforces. As a percentage of covered salaries, the operating costs have fallen from 2.6 percent in 1994 to 2.2 percent in 1995 and declined further to 1 percent in 1996. This represents a decrease from 26 to 13 to 4.5 percent of the total assets accumulated in the funds at the end of each year.

Out of the five AFPs only one, **Integra,** has been able to break even. All other companies have been running high operating losses. The accumulated losses of the system amount to more than S. 200 million (approx.US$82 million) corresponding to two thirds of the AFPs' total capital .

Fund Accumulation and Investment

The total funds under management by the AFP system amounted to S.2.3 billion or about US$ 1 billion at the end of 1996, corresponding to about 1.5 percent of GDP. Out of the total contribution rate of currently 11 percent, 8 percent is used for long-term capital accumulation. The monthly inflow is about US$25 million. It was originally planned to increase the contribution rate for capital accumulation to 10 percent starting January 1997, but in the recent amendment to the law, this increase has now been delayed until after December 1998. There is no income ceiling for the calculation of pension contributions and mandatory contributions are not deductible from income tax. Pensions are also subject to income tax, which means that effectively workers are taxed twice.

Voluntary contributions by employers are possible without limit; contributions made by employers on behalf of their employees are deductible from taxation. There are no tax incentives for individual workers' voluntary contributions, however. Independent workers are not allowed to contribute more than 20 percent of their earnings because of the non-attachability of the affiliates' funds.

In the November 1996 amendment, the scope of voluntary savings was widened. Now affiliates are allowed to save voluntarily not only for their retirement but also for other purposes. Eligibility for these savings plans, however, is subject to several restrictions such as a minimum period of affiliation with the private pension system or a minimum age of the affiliate. AFPs are allowed to charge a fee for the withdrawal of voluntary savings for purposes other than retirement.

The investment of the funds is subject to strict rules and regulations which are issued by the SAFP. These rules are designed to protect the interests of the affiliates and are aimed at ensuring safety and profitability of the funds' investments. To meet these objectives, pension funds must be properly diversified and invested only in approved assets, while at the same time the investments must seek to achieve the highest return possible under the given restrictions. Like in Chile and Argentina, the rules prescribe only maximum but no minimum investment limits.

The maximum investment limits are established by the Central Bank in consultation with the SAFP. Table 4 summarized the investment limits for the authorized classes of instruments. Central bank authorization is required for investment in foreign securities. Up until now foreign investment has not been allowed. However, it is expected that investment of pension funds in Brady Bonds will soon be authorized by the SAFP.

Corporate and financial sector issues are also subject to limits determined in relation to the consolidated capital of the issuer, the size of the AFP and its market share as well as the risk rating of the issue. All instruments except for securities issued by the government and the Central Bank are subject to risk classification. Companies classifying the risk of AFP investments are required to register with the SAFP. Since this industry has yet to develop, however, a Risk Classification Commission consisting of government officials and financial sector representatives will be in charge of risk classification until mid-1998.

Pension funds are valued daily and marked to market. Like in Chile and Argentina, the Peruvian system originally had a minimum profitability guarantee in order to protect affiliates from strong fluctuations in the return of the funds. The minimum return was defined, like in Chile, as the lesser of 50 percent of the average 12-month real rate of return of the system or 2 percentage points under the real rate of return. Peruvian AFPs, just like Chilean AFPs, were required to maintain a fluctuation reserve. If an AFP performed above the benchmark, it was required to transfer the excess return to a fluctuation reserve instead of crediting it to the affiliates' balances. If an AFP underperformed, the shortfall had to be made up first from the fluctuation reserve and, if this was not sufficient, then from the mandatory reserve (*encaje*).

In the November 1996 amendment, the upper band of the profitability guarantee was removed and thus the fluctuation reserve was abolished. At the moment, there is no minimum profitability guarantee at all; the law provides for a minimum profitability requirement to be regulated by the SAPF but, as already noted above, no such regulation has been issued to date. The only reserve that the AFPs still have to keep to protect affiliates in the case of fraud or mismanagement is the *encaje*. This mandatory reserve not only depends on the size of the fund under management (as in Chile) but also on the risk of the fund's investments.

Table 4
Investment Limits (11/1996)

Instruments	% of assets
Individual limits	
a) Government securities	30
b) Central Bank securities	30
c) Fixed-term deposits	30
d) Financial sector bonds	25
e) Short term debt	10
f) Corporate bonds	35
g) Common shares	20
h) Workers' shares	20
i) Preferred share certificates	10
j) Short term margin loans	10
k) Derivatives	10
l) Mutual funds	10
m) Primary issues for new ventures	10
n) Foreign securities	5
Combined limits	
a + b	40
c + d	40
g + h + i + j + k + l	35

Source: SAFP, Decreto Ley No. 25897

Table 5
AFP Investments (% of total assets)

	12/93	12/94	12/95	12/96
Government bonds	13.0	6.0	1.7	0.6
BCR deposits	18.9	20.0	20.5	0.0
Bank deposits	61.4	34.2	27.0	25.0
Bank bonds	6.7	20.2	21.7	18.2
Corporate bonds	0	3.3	9.5	22.1
Equities	0	14.2	18.1	31.9
Other	0	1.9	1.4	2.3

Source: SAFP

The portfolio of the AFPs has been diversified considerably since the start of the system. While most of the funds were placed in bank deposits in the beginning, already about a quarter of total assets were invested in shares by the end of 1996. This represented about 1 percent of the market capitalization of the Lima Stock Exchange (Salomon Brothers 1996). In Chile, pension fund investment in equities was still zero 5 years after the start of the AFP system, but they have now reached 30% of assets and about 10% of the Santiago market capitalization.

Investment of pension funds in foreign securities is theoretically subject to a limit of 5 percent of assets. However, the real restriction appears to lie in the fact that a list of foreign investments needs to be permitted and risk-rated before AFPs can invest and that not many permitted foreign instruments have been identified yet. Further, as observed in other countries, pension fund managers seem to have a home bias in their investment strategies for reasons such as the costs of hiring staff to analyze overseas markets, opposition of affiliates to foreign investment and the assumption that the downside risk of overseas investment outweighs the potential benefits of higher returns (Downs 1996). It is expected that the SAFP will authorize AFP investments in Peruvian Brady Bonds in 1997 and that the AFPs will take advantage of this investment opportunity.

About 77 percent of the portfolio is denominated in soles and 23 percent is in US dollars. Bank deposits are generally of less than 90 days term. Of these, 25 percent are dollar denominated, 20 percent sole-denominated but indexed, and 55 percent sole-denominated but non-indexed. Fixed-income investments account for about 70 percent of all assets.

The AFPs portfolio shows a very high exposure to the banking sector which at the end of 1996 accounted for 39 percent of all investments (bonds, deposits and shares). The AFP regulations do not limit the overall exposure of AFPs to the banking sector. If investments in other financial institutions, such as leasing companies and consumer credit institutions, are also taken into account, the share of financial sector investments reaches 46 percent. Particularly the large share of subordinated bank bonds in the AFP portfolio could cause problems. These bonds are treated as capital in the Peruvian banking regulations and are admitted for the AFPs reserving purposes as *encaje* (Downs 1996). Since in terms of risk, the subordinated bonds are closer to equity than bonds, this could mean that the reserves might turn out to be insufficient, particularly as AFPs are no longer required to maintain fluctuation reserves. Moreover, the subordinated bonds, though quasi-equity instruments, are likely to be remunerated like debt instruments.

Investments in the industrial sector make up 20 percent of the portfolio; the mining sector accounts for 7.8 percent and public services for 18.6 percent. The single largest investment of the private pension system is in corporate bonds and shares of the telephone company, Telefonica del Peru, amounting to 14.3 percent of all assets.

The differences between the portfolios of the 5 AFPs are small. The reason for the similar investment choices may be due to several factors, including the direct and indirect regulatory restrictions and the limited availability of investment instruments. The Peruvian government has not issued long term debt since the late 1980s and there is a limited supply of long-term government bonds on the market. Trading on the Lima Stock Exchange is very limited; it averages less than US$ 20 million a day and only about half of the stocks are actively traded. In 1996, the equity trading volume corresponded to about 6 percent of GDP (IFC 1997). There are 60 bonds of 21 corporate issuers listed with a total face value of about US$ 340 million with two large companies, Telefonica del Peru and Consorcio de Alimentos Fabril Pacifico, accounting for 30 and 26 percent, respectively (Downs 1996)

As shown in Table 6, the real rate of return of the Peruvian AFPs has been 7.1 percent since the start of the system in 1993. Until January 1997, AFPs were only required to report and publish their returns without taking account of their commissions. Now, however, returns net of commissions will have to be reported. According to World Bank calculations, the returns net of commissions for a worker who joined the new pension system in July 1993 were - 0.32% in 1994. - 0.92% , and 4.46% in 1996 (Shah 1997).

Although it is important to inform affiliates about the actual costs of the system, it is questionable whether reporting on net of commissions basis will greatly increase transparency. Since commissions are charged as percentage of the workers' salaries, the rate of return on the affiliates' balance depends on the time that the affiliate has been contributing. In Colombia, for example, the net rates of return are given for members who joined at the beginning of the system only. Unless the rates are given for members who joined at different times, the information will be of limited value to the workers. Any information on net returns given to workers should also include projections of expected future performance over their full careers. Otherwise, the front loading of commission charges might discourage workers from joining the AFP system.

Table 6
Real Rates of Return (in %)

AFP	12/93-12/94	12/94-12/95	12/95 - 12/96	Annual average 7/93 - 12/96
Profuturo	10.6	5.9	7.4	7.6
Horizonte	8.6	6.0	5.0	6.9
Integra	7.9	5.3	6.3	6.8
Nueva Vida	10.2	5.4	5.5	7.9
Union	7.9	5.8	4.6	7.2
El Roble	7.5	3.5	-	-
Average	8.6	5.5	5.8	7.1

Source: SAFP

Old Age Benefits

The retirement age in the Peruvian pension system is 65 years for men and women. At retirement, the accumulated balance and, if the pensioner had contributed to the old public pension system, the recognition bond are converted to monthly pension payments. Early retirement is possible only if the balance accumulated in the individual account is sufficient to finance a pension equivalent to 50 percent of the average salary during the last 10 years. The law contemplates 4 different types of old age benefits: programmed withdrawal, personal annuity, family annuity, and a combination of programmed withdrawal and annuity. A pensioner choosing the programmed withdrawal option will receive monthly payments based on the individual life expectancy. If the beneficiary dies before the balance is drawn down, the survivors will inherit the remaining balance.

Under the option of personal annuity, the beneficiary would use the balance in the individual account to purchase an annuity from the AFP. In this case, the AFP would be required to establish a system of self-insurance by creating a longevity fund using the balances of all affiliates which have chosen this option. This mechanism is regulated by the pension law. Currently, however, AFPs are not yet permitted to offer this option and all annuities are available only from insurance companies. Family annuities, which provide first a pension to the affiliate and later survivors' benefits to dependent family members, are available only from insurance companies and the law does not envisage AFPs offering this option.

The Peruvian AFP pension system does not have a minimum pension guarantee. In Chile, members who have contributed for at least 20 years but do not reach the minimum pension level are entitled to a supplement payable by the government. Further, pensioners with at least 20 years of contributions who choose the phased withdrawal option and outlive their benefit payments also receive a government-financed minimum pension. Neither of these guarantees currently exists in Peru. In 1995, an amendment established the possibility of introducing a minimum pension by decree, but no guarantee has been given yet, however. Since the minimum profitability requirement has also not been specified yet, there does not seem to be a safety net at all for pensioners of the private pension system. Peru also does not have a social assistance scheme, which would take care of old age poverty.

The absence of a minimum pension guarantee and of a specified minimum profitability requirement, coupled with the continuing requirement to place all funds with one AFP account exposes individual workers to the risk of substantial losses in cases where fund managers were to suffer substantial, and much above average, losses. Individual workers could suffer from a wide dispersion of returns that could be the result of the greater choice given to AFPs to have less uniform portfolios and of aberrant behavior by some fund managers. This is an issue that confronts all privately managed mandatory pension pillars based on individual capitalization accounts.

Contributions to the pension system were initially tax-deductible but since June 1995 have been payable out of after-tax income. However, pensions are subject to income tax, which means that workers are subject to double taxation.

The number of pensioners in the Peruvian private pension system is still small. By August 1996, only 134 old age pensioners, 85 disability pensioners and 3,559 survivors were receiving benefits. Of the old age pensioners, about a third had chosen phased withdrawal, a third an annuity, and a third the combination of the two.

Disability and Survivors' Benefits

The AFPs are required to provide their affiliates with coverage against the risks of disability and survivorship. Currently, all AFPs insure their members with approved insurance companies. The law contemplates, however, that after five years of operations, AFPs may also self-insure these risks in which case they would be required to establish a special fund and purchase additional reinsurance. Further, it is envisaged that in the future workers will be able to individually choose their insurance company instead of the AFPs negotiating a group insurance plan for all its affiliates.

In Peru, the premium for disability and survivors' insurance is not included in the total commission but charged separately. The insurance premium has come down considerably since the start of the system. While insurance companies charged 2.2 percent of salaries in the beginning, the premium now amounts to 1.23 percent of salaries. Insurance premiums are payable up to a monthly salary ceiling of currently about S. 4,700 or US$ 1,900. Disability is determined by two medical committees, first by the AFPs' committee and then by the superintendency. Insurance coverage does not extend to preexisting conditions leading to death or disability in the first 6 months after affiliation in the SPP.

The benefit for full disability amounts to 70 percent of the insured's salary. Survivors' benefits amount to 35 percent for the widow and 14 percent for each child or surviving parent. In addition, the insurance covers funeral grants for which purpose a lower contribution ceiling is applied than for disability and survivors' insurance.

The disability and survivors' insurance will top up the disabled or deceased members' accounts in order to reach a lump-sum sufficient to provide the defined benefits. Currently, however, a temporary exception is made to reduce the impact on the insurance companies' cash flow. Instead of providing a lump-sum to the AFPs, the insurance companies receive the member's balance from the AFPs and then pay out the benefits to the disability pensioner or the survivors.

Conclusions

- The evolution of the private pension funds in Peru was seriously affected by the "unfair" competition between the private and public pillars. Lower contribution rates and lower retirement ages for affiliates of the public pillar greatly reduced the attractiveness of the private pension funds.

- The AFPs have suffered from poor financial results. AFP revenues have been lower than in Argentina and Chile due to the lower salary levels of affiliates. Peruvian AFPs have not been given the permission to defer start-up costs, which has resulted in substantial losses of the AFP's capital.

- In Peru, a continuous diversification of the pension funds' portfolio can be observed. The percentage of assets invested in equities has been growing particularly fast and reached more than 25 percent by the end of 1996.

- Despite increasing diversification of instruments, the AFPs' portfolios continue to have a high share of investments in the banking sector and other financial institutions. This represents significant exposure to an economic sector that is in most countries highly leveraged and exposed to the adverse effects of financial crises. A more balanced sectoral diversification of investments would be desirable.

III. STRUCTURE AND PERFORMANCE OF THE PRIVATE PENSION SYSTEM IN COLOMBIA

In April 1994, Colombia introduced a new privately managed pension scheme as an alternative to its existing public pension system. Like in the case of Peru, affiliation in the new system is not mandatory but depends on the choice of each individual worker. The private pension system has many of the features of the Chilean system. It was modified, however, in several areas to take account of the characteristics of the Colombian financial sector and the existing institutional structure of social protection.

The most important differences from the Chilean model are:

- Workers are allowed to switch every 3 years between the public and private systems.
- New labor force entrants are not required to join the private system.
- Subsidies, financed through an additional percentage point of contributions and government transfers, are provided to enable low income groups to join either pension system.
- The contribution rate is payable by employers (75 percent) and employees (25 percent).
- AFPs are allowed to operate more than one fund.
- Workers are allowed to have more than one account.
- The regulations on ownership of AFPs are more relaxed.
- There is no separate independent supervisory agency for pensions. The pension funds are supervised by the Pension Department of the Bank Superintendency.
- A variety of AFP fees is permitted, including fee differentiation between affiliates. AFPs have so far applied fees per collection but not on assets.
- Fees are capped at 3.5 percent of workers' salaries and AFPs are required to report returns net of commissions.
- The retirement ages are 57 years for women and 62 years for men.

Main Features of the Pension System

Affiliation in either the public or the private pension system is mandatory in Colombia for all dependent workers of the public and the private sector; independent workers may join either system voluntarily, provided their contributions reach a minimum level. Workers already affiliated in the old system are allowed to switch to the new system at any moment and affiliation of new labor force entrants in the new system is not mandatory.

The Colombian law is even less restrictive than the Peruvian in that workers may switch back and forth between the public and the private system every three years while in Peru this was allowed only during an initial period and only for a restricted group of affiliates. Moreover, various groups of workers, such as workers in the oil sector, have their own schemes, which continue in existence after the passage of the reform program.

The coverage of the public and private pension systems together amounts to less than 40 percent of the economically active population. The low coverage is partly due to the large size of the informal sector in Colombia but also partly to a high degree of evasion on the part of employers. In addition, the public pension system is still highly fragmented and is only slowly becoming more unified. Before the pension reform of 1994, pensions were provided by a pension system for private sector employees and more than 1,000 public sector pension institutions.

In addition, various other pension plans were offered directly by public and private enterprises for their employees; these plans in some cases allowed the employers to opt out of the mandatory public system. The fragmentation of the system caused considerable administrative problems and presented an obstacle to labor mobility as benefits were usually not portable between the various schemes. This fragmentation continues to be a problem as unification or even a harmonization of terms and conditions has yet to take place.

To further extend coverage, particularly to low income groups, Colombia has introduced an element of redistribution in its private pillar. All workers earning more than 4 times the minimum wage are required to contribute an additional 1 percent of their income to the Solidarity Pension Fund (Fondo de Solidaridad Pensional). These contributions are matched by government transfers to the fund. The fund is managed by the government and its resources are used to supplement the contributions of workers, both wage earners and independent workers, to enable them to join the pension system. The workers supported with this subsidy have the choice of joining either the public or the private system. There is no universal entitlement to this subsidy for all low-income workers, however. The program is targeted in certain areas and subsidies are given on a discretionary basis.

Recognition Bonds

Like Chile and Peru, Colombia has chosen the concept of recognition bonds to compensate workers switching over to the new system for previous contributions to the old system. The Colombian recognition bond, however, is not calculated to reflect the actual amount of contributions that workers made to the old system; instead, it seeks to compensate workers according to the net present value of the future pension they would have received from the old system. This approach was chosen because contributions to the public system were mostly very low and it was very difficult to reconstruct the individual workers' contribution histories (Ayala 1996).

The bond is calculated as the amount that should have been saved in the individual account in order to accumulate the necessary capital to finance an annuity equal to the corresponding pension entitlement in the old system. The calculation mechanism is complicated. First, the future pension entitlement of a worker remaining in the public system is estimated. This projection takes into account the current salary of the worker and the ratio of pre-retirement salaries and the national average salary. There is a maximum ceiling set on the projected benefit: 90 percent of the last salary or 15 minimum salaries whichever is lower. Then, the net present value of the projected pension is calculated. The value of the bond is determined as the amount that the worker would have had to save corresponding to his or her period of contributions to the public system in order to finance the reference pension assuming a constant pace of accumulation. For the calculation, a constant real rate of return of 3 percent per year is assumed.

Recognition bonds are endorsed to AFPs or insurance companies and the proceeds must be deposited in the individual account. The bonds mature upon retirement, disability or death of the worker. If a workers' balance in the individual account is sufficient to finance 110 percent of the minimum pension, the bonds may also be redeemed earlier, either for early retirement or for other uses of the excess capital; for example to purchase shares of public enterprises. In these cases, recognition bonds can be traded on the secondary market by AFPs and insurance companies, although the trading has to be authorized by the affiliate. Recognition bonds have started to trade on the secondary market with a discount of 8 percent (Salomon Brothers 1996).

As in the case of the Peruvian pension reform, Colombia too has been experiencing implementation problems with the recognition bonds. In contrast to the other Latin American countries, which reformed their pension systems, Colombia is faced with a special difficulty due to its extremely fragmented system for public sector employees and the fiscal decentralization of the country (Queisser 1995). Unlike Chile, which unified the different systems in an umbrella organization, Colombia has kept all of its different public pension institutions with the result that there is not one single institution responsible for issuing the bonds.

While the bonds, for which the central government is responsible, are now being issued without major delays, the regional governments are still not fully complying with their obligation to issue bonds for affiliates switching from regional public sector funds to the new private system. Problems also arise with the regional recognition bonds, which are due to workers who are switched to the public system ISSS as more and more regional public funds are closed down. The option of switching back and forth between the public and private systems will further complicate the management of recognition bonds. The bonds are cashed in and the proceeds go to the public system when affiliates who switched first from the public to the private system return to the public scheme again.

Affiliation

Affiliation in mandatory private pension funds stood at about 2.1 million in December 1996, corresponding to 18 percent of the economically active population. About 2.6 million workers are affiliated in the other pension schemes of the public system, which would correspond to an additional 22 percent of the economically active population. This number is a rough estimate, however, since the files of the public system have not been revised and cleaned and the errors in the registers are considered to be substantial.

Ninety five percent of the affiliates in the private system are dependent workers. The majority of affiliates are young: 79 percent are between 15 and 34 years old. The income distribution of affiliates is the following: 77 percent earn less than 2 minimum salaries; 14 percent earn between 2 and 4 minimum salaries; and 9 percent have an income of more than 4 minimum salaries.

The new pension system started in April 1994 with about 300,000 affiliates. During the first months, the affiliation pattern was very similar to that observed in Peru with more than 100,000 workers joining the new system every month. Monthly affiliation then declined, the monthly increase of total affiliation was about 4.4 percent on average during 1995 and around 3 percent during 1996.

The private pension system in Colombia took off more smoothly than in Peru and monthly affiliations in the initial period were within the range of what the industry had expected. This was due mainly to two reasons. First, competition between the public and private system took place under more even conditions than in Peru. In Colombia, the public system was at least partly rationalized as part of the reform. Benefit eligibility conditions as well as contribution rates were brought in line with the parameters of the private system so that there was no cost differential between the two systems. But the impact of the rationalization could have been greater if the transition period to the new less generous conditions was shorter. The incentive to affiliate with the new system would also have been stronger if the new rules had been applied to all workers and not just to younger ones (those below 35 for women and below 40 for men).

Second, workers were already familiar with the concept of private fund management companies due to the Colombian severance program. Severance funds, which are compulsory, are already administered by private fund managers. Employers are required to provide severance benefits of one month's salary per year of employment with an interest rate of 12 percent. These benefits are financed with a contribution rate of 8.33 percent of wages. Workers are allowed partial withdrawal of the funds for housing and education expenses. Since 1990 the severance program has been administered by private mutual funds. These funds have provided the basis for the establishment of the new private pension system.

Due to the short existence of the new system and given the requirement of three-year intervals between transfers, there has not been any switching back to the public system yet. It is not expected, however, that workers who are in the accumulation phase will switch back to the public system in great numbers. More transfers may take place shortly before retirement if, depending on the investment performance of their individual accounts, workers might find it beneficial to switch back to the public system in order to collect higher pension payments.

At the end of 1996, 41 percent of all affiliates in the private system were new entrants to the labor force, while 59 percent had switched over from the public system. According to the Banking Superintendency, the majority of new labor force entrants choose to join the new private system, although there are no official numbers available. Affiliates are allowed to switch AFPs every six months.

There is no official data on the ratio of affiliates and contributors in Colombia. Given that in Chile, Argentina and Peru, about 45 to 50 percent of all affiliates contribute regularly to their accounts, a similar ratio can also be expected for the case of Colombia. Further, there has been a serious problem of duplicate affiliation in the private system. More than 177,000 workers were found to be simultaneously affiliated with more than one AFP. The revision of the files has led to substantial adjustment of affiliation numbers in some AFPs. In the case of one AFP, the cleaning of files resulted in a decrease of affiliation by more than 46,000 workers.

Management Companies

The Colombian rules and regulations for the management of pension funds follow the Chilean example closely but are less draconian in several areas. The management companies, called *Administradoras de Fondos de Pensiones Obligatorias* (AFPs) have to be set up as joint-stock companies or as cooperatives with the sole purpose of managing pension funds. Companies, which were already managing severance funds, have been allowed to also manage pension funds as long as the two businesses are separated financially. Further, AFPs may also manage voluntary pension funds, which are subject to less strict rules and regulations. The voluntary pension business has to be separated from the management of the compulsory pension funds.

The ownership regulations for pension fund management companies are less restrictive than in Chile. In Colombia, AFP shares can be held by public sector institutions, by cooperatives, labor unions, mutual funds, cooperative banks ,and family benefit funds (*Cajas de Compensacion Familiar*). Insurance companies and other financial institutions are also allowed to be shareholders of AFPs.

Colombia did not choose to establish a separate independent supervisory agency for the new pension system. Instead, the AFPs are licensed, regulated and supervised by the Pension Department of Superintendencia Bancaria, the agency supervising the banking system as well as insurance companies and other financial institutions. The rules and regulations for the pension system are issued by the Ministry of Finance. The decision to integrate pension fund supervision with banking supervision was motivated by the fear that an additional superintendency might be subject to regulatory capture. Further, much of the existing regulatory framework for the financial sector also applies to the pension system and therefore it was seen as inefficient to create an additional agency (Ayala 1996). The Superintendencia Bancaria also supervises the public pension system, including the decentralized public sector pension funds. The Superintendencia Bancaria is effectively an umbrella regulatory body with departments dealing with banks, insurance companies, and pension funds.

The minimum capital required to set up an AFP is defined as 50 percent of the capital required to establish a financial corporation. The minimum capital for AFPs currently corresponds to about US$4 million. To limit concentration in the AFP market, there is a ceiling on the maximum capital of AFPs set at 10 times the minimum capital. AFPs are allowed to manage assets up to 40 times their capital. The law contemplates the possibility of government subsidies and other incentives for cooperatives and other institutions of the "solidarity sector", i.e. cooperatives and other non-profit organizations, to set up AFPs.

All pension fund management companies have to establish compulsory reserves to ensure safety and liquidity. First, AFPs are subject to the reserve requirements for financial institutions, which mandate a reserve of 50 percent of the subscribed capital. In addition, 10 percent of annual profits have to be transferred to this reserve.

Second, AFPs must establish a reserve for stabilization of returns. Like in most other Latin American countries, AFPs are required to reach a minimum profitability benchmark. In Colombia, the benchmark is calculated as a combination of the average performance of the industry and a composite index of financial sector performance. The stabilization reserve requirement is identical to the *encaje* rule in Chile mandating a reserve of 1 percent of assets under management.

Third, AFPs in Colombia must also contribute to the financial sector guarantee fund (FOGAFIN), which protects members' contributions in the case of liquidation of an AFP. This fund guarantees 100 percent of the mandatory contributions plus interest and voluntary contributions up to a ceiling of 150 minimum salaries (Ayala 1996). If any of the mandatory pension reserves are not kept at the required levels, AFPs must pay penalties. These go to the Solidarity Pension Fund, which is used for extension of coverage as described earlier.

Like in Chile, the pension assets have to be legally and financially separated from the assets of the pension fund management companies. In Colombia, however, AFPs are allowed to manage more than one pension plan for the affiliates. Affiliates who have reached a minimum balance in their individual account are allowed to invest the excess in different pension plans. In order to make use of this option, affiliates must have saved at least 50 percent of the capital necessary to finance a minimum pension and the Superintendency has to verify that the alternative plans provide sufficient coverage in the events of longevity and survivorship. If a worker has saved 100 percent of the necessary capital there are no further restrictions. The law also envisages the possibility for affiliates to reject the minimum profitability guarantee if they want to invest in riskier portfolios. At the moment, no such alternative pension plans are offered yet. Given that almost 80 percent of the affiliates are younger than 35 years and incomes are low, not many workers qualify yet for this option. However, several AFPs are in the process of developing new products.

Market Concentration

When the new pension system started in April 1994, 8 of the 10 existing severance fund management companies were licensed to manage pension funds. In December of the same year, an additional company was licensed to manage only pension funds. At the end of 1996, there were 8 companies managing both pension and severance funds, 1 company managing only pension funds and 1 company managing only severance funds. To date, there has been only one merger in the Colombian pension system: in late 1996, the funds under management and the affiliates of the fund management company **Invertir** was taken over by **Horizonte**.

The Colombian private pension system is far less concentrated than the Peruvian system. The top three companies control 60 percent of the market in terms of affiliates and 55 percent of the assets under management compared to 76 and 74 percent in Peru. The Herfindahl index of concentration is 1776 in the case of affiliates and 1710 for the assets under management. In Peru, the figures are 2312 and 2295, respectively. Market concentration in Colombia is also lower than in Chile when the system first started and the Herfindahl index was 2200. Compared to Argentina, however, the Colombian market is much more concentrated; in Argentina, the index in March 1997 was 1121 for affiliates and 1158 for assets under management (Vittas 1997a).

There are 4 AFPs with foreign shareholders: **Porvenir,** the largest AFP both in terms of affiliation and assets under management, has a 20 percent participation of the Chilean pension fund management company Provida. Citibank Overseas and the Chilean group Cruz Blanca, which is also involved in the Chilean pension system, each own 26.6 percent of **Colfondos**, while 50 percent of

Colmena is owned by AIG Holding. **Pensionar** has a 30 percent participation of the Swedish insurer Skandia.

Table 7
Market Concentration of Compulsory Pension Funds (1/1997)

AFP	Affiliates	%	Fund (billion Pesos)	%
Porvenir	619,423	29.85	212.3	24.36
Colfondos	309,434	14.91	146.1	16.76
Horizonte	331,756	15.99	121.9	14.00
Proteccion	279,027	13.45	186.2	21.37
Colmena	239,594	11.55	94.7	10.85
Davivir	157,452	7.59	45.6	5.23
Colpatria	121,856	5.87	53.0	6.08
Pensionar	16,524	0.80	11.7	1.34
Total	2,075,066	100.00	871.5	100.00
Herfindahl Index	1776		1710	

Source: Asofondos

Porvenir focuses on mass affiliation in its marketing strategy targeting predominantly the lower income groups. Two of its largest shareholders are Banco de Bogota and Banco de Occidente, which have extensive national networks. 85 percent of **Porvenir**'s affiliates earn less than 2 minimum salaries. While **Colfondos** also has more than 70 percent of its affiliates in that income bracket, it has also been able to attract a considerable share of the high income earners. It has been targeting large companies in order to achieve a high ratio of contributors to affiliates (Salomon Brothers 1996).

The other two AFPs, which have been successful in attracting higher income affiliates, are **Protección** and **Pensionar. Protección** captures about 27 percent of the market in the income brackets above 10 minimum salaries. **Pensionar**'s share in total affiliates in this income range is low due to its small size, but higher income earners correspond to a higher percentage of its total affiliation than in the other AFPs. In terms of fund per affiliate, **Pensionar** ranks first, followed by **Protección** and **Colfondos.**

Porvenir is also the market leader in the area of severance funds with a share of 29 percent of all affiliates and 27 percent of severance assets under management, followed by **Horizonte** and **Protección.** The voluntary pension market is dominated by **Protección,** which has 59 percent of all affiliates contributing for voluntary pensions and 46 percent of assets under management, followed by **Colfondos** with 15 percent of affiliates and **Davivir** with 6 percent.

Financial Condition of AFPs

The total capital of the AFP industry amounted to about 250 billion pesos (about US$ 236 million) at the end of 1996. Due to high operational losses of more than 170 billion pesos (about US$ 160 million), which corresponded to almost 70 percent of total capital, the net worth of the AFP system amounted to only 73 billion (about US$68 million). The operational losses were basically due to high advertising costs and salaries for the salesforce. In 1996, about 40 percent of operational expenditure was spent on the salesforce and 10 percent on advertising. The share of advertising expenditure is relatively low in the AFPs' financial statements, because the superintendency took account of the high start-up costs in advertising and allowed the AFPs to amortize the costs incurred in 1994, i.e. during the first 9 months of the system, over a two-year period. Compared to the treatment of start-up costs of the Argentine system, this regulation is still relatively strict. In Argentina, the AFJPs were first given a 3-year period to amortize the costs, but this was later extended to 10 years. According to AFP industry studies, the Colombian companies expect to break even after 4 years of operations.

According to the law, AFPs are allowed to charge 5 different kinds of commissions:

- a commission for the management of mandatory contributions;
- a commission for the management of voluntary contributions;
- a commission for the management of dormant balances;
- a commission for the administration of phased withdrawal of balances upon retirement; and
- a commission for the transfer of balances of affiliates switching to other AFPs.

The AFPs are free to choose the base for the calculation of commissions, i.e. they can charge fees as a percentage of the affiliates' base salary, of the contributions, or of the balance in the individual account. The only restriction imposed by the law is that total commissions, including the premiums charged for disability and survivors' insurance, may not exceed 3.5 percent of the contributor's base salary. Also, the Colombian law allows for fee differentiation for affiliates within the same AFP, for example to offer discounts to affiliates who stay for a certain minimum period in one AFP. **All of the commissions currently charged are variable commissions calculated as a percentage of the contributor's base salary; none of the AFPs is charging a fixed commission or any asset-based fees.**

Table 8
AFP Charges

AFP	Commission	Insurance premium	Total
Porvenir	1.50	2.00	3.50
Colfondos	1.45	2.05	3.50
Horizonte	1.50	2.00	3.50
Proteccion	1.50	2.00	3.50
Colmena	1.70	1.80	3.50
Davivir	1.50	2.00	3.50
Colpatria	1.40	2.10	3.50
Invertir	1.50	1.70	3.50
Pensionar	0.75	1.74	2.49

Source: Superintendencia Bancaria, 1/1997

There is a different fee structure for severance funds. In the severance business, fund management companies are allowed to charge fees on assets under management (calculated on a daily basis) corresponding to a maximum of 4 percent of assets per annum. All but one of the severance fund management companies are charging the maximum fee of 4 percent.

The sales force of the Colombian AFP system increased from about 3,000 agents at the end of 1995 to about 4,800 agents at the end of 1996. Measured by the number of affiliates per agent, the Colombian AFPs employ less agents than the Peruvian pension system. While the Peruvian AFPs employed one agent for every 360 affiliates, there were 430 affiliates per agent in Colombia at the end of 1996. In Argentina, the private pension system employs one agent for 3,600 affiliates.

Fund Accumulation and Investment

The total funds under management of the mandatory pension system amounted to about 870 billion pesos at the end of 1996, corresponding to about US$823 million and approximately 1 percent of GDP. Voluntary pension funds had assets of an additional 74 billion pesos or about US$69 million. The assets managed by the mandatory severance funds amounted to about 720 billion pesos or US$680 million with a total of 1.7 million affiliates. Total assets administered by the pension and severance fund management companies thus amounted to US$1.57 billion and corresponded to about 1.7 percent of GDP.

The contribution rate to the individual pension account was initially set at 8 percent in 1994 and, as originally planned, was increased to 9 percent in 1995 and to 10 percent in 1996. In addition, up to 3.5 percent of salary are payable to cover disability and survivors' insurance as well as the fund management commissions. 75 percent of the contribution is payable by the employer and 25 percent by the worker. Contributions are mandatory up to a pensionable salary of 20 minimum wages. The mandatory and voluntary contributions to the AFPs are deductible from income tax.

The investment regulations are much more relaxed in Colombia than in Chile or Peru. Investment in public debt is limited to 50 percent of assets under management. Investment in equities and foreign securities was allowed from the beginning of the system. Contrary to the practice in most other Latin American countries, the Colombian supervisors require no risk evaluation prior to investment. In Colombia, no separate Risk Classification Commission like in Chile and Peru was established. This was motivated by the desire to avoid the systemic risk that would arise in having only one public entity classifying investment instruments (Valdes Prieto 1996). A private risk classification sector is developing slowly. APFs must value their assets daily but no uniform valuation rules are applied (Ayala 1996).

Slightly different investment rules are applied to voluntary pension funds and to severance funds. Severance funds are also subject to a minimum rate of return requirement guaranteed by the government; the benchmark calculation is very similar to that applied to mandatory pension funds. For voluntary pension funds there is no minimum return requirement nor any government guarantee beyond the guarantee of the financial sector fund FOGAFIN.

The portfolio of the Colombian AFPs has been diversified only slowly over the past years. As observed in other Latin American countries, the portfolios of the different AFPs are very similar in their composition. In their investment strategy, the AFPs have consistently shown a strong preference for fixed income securities. In 1995, almost 60 percent of assets were invested in bonds and term deposits. By the end of 1996, the share of term deposits was reduced significantly to less than 12 percent but there is still a strong emphasis on bonds, particularly those issued by financial institutions as well as by quasi-public entities such as the coffee stabilization fund and the rural development fund. The high percentage of assets invested in the financial sector gives less cause for concern than in the case of Peru since the Colombian financial sector is considered more solid than the Peruvian financial institutions. The AFPs' equity investment declined from 3 percent of assets at the end of 1994 to about 0.5 percent at the end of 1996. The low share of equity investment is primarily due to the fact that Colombia's stock market it not deep and trading is low. In 1996, the equity trading volume amounted to only 1.6 percent of GDP compared to 6 percent in Peru and about 11 percent in Chile (IFC 1997).

Table 9
Investment Limits for Mandatory Pension Funds

Instruments	% of assets
Individual limits	
a) Government securities	50
b) Other public debt instruments	20
c) Equities	30
d) Financial sector bonds	50
e) Corporate bonds	20
f) Securitized instruments*	20
g) Mortgage-backed securities	30
h) Foreign bonds and international mutual funds invested in bonds	10
i) Stock index instruments	5
j) Mutual fund shares	5
k) Repurchase agreements	15
Combined limits	
a + b	50
c + j	30
h + i	10
c + f + h + i	50

* limit of 15% for instruments backed by non-admitted assets, real estate and infrastructure projects

Source: Superintendencia Bancaria, Circular Externa 041, May 1996

The Colombian AFPs have not yet invested in foreign securities although the law allows for investment abroad of up to 5 percent of assets. One reason for the absence of foreign investment is the appreciation of the Colombian peso vis-a-vis the US dollar. But more importantly, there is still no uniform mechanism for the daily valuation of foreign securities, which effectively prevents AFPs from investing abroad.

The portfolio composition of voluntary pension funds is similar to that of the mandatory pension funds but with an even stronger emphasis on financial sector bonds, which account for 39 percent of assets and bank term deposits with a share of 17 percent. The severance funds' assets are invested more heavily in short-term instruments due to the liquidity needs of the severance program and the option for workers to withdraw funds for housing and education expenses. More than half of the severance funds' assets are invested in financial sector bonds and 24 percent of assets are kept in term deposits.

Table 10
AFP Investment Portfolio

	12/95	9/96
Bonds*	33.8	0.0
Financial sector bonds	0.0	33.5
Term deposits	33.2	11.5
Corporate bonds	0.0	10.7
Treasury bills	0.0	9.4
Securitized instruments	0.0	7.3
Government bonds	0.0	6.1
Mortgages	3.9	6.0
Coffee savings bonds	6.3	5.6
Rural development bonds	9.4	3.3
Equities	0.7	0.4
Others	12.7	6.2

*government, financial sector, and corporate bonds
Source: Superintendencia Bancaria

The calculation of the minimum rate of return for mandatory pension funds in Colombia is very complicated. It is determined as a composite of the AFP industry's average performance and the performance of a reference portfolio defined by the superintendency. Half of the minimum return is determined as 90 percent of the weighted average performance of all pension funds. In calculating the average, the maximum weight of any one AFP may not exceed 20 percent. The other half of the minimum return is calculated as the weighted average of (i) 90 percent of the performance of the country's three stock exchanges taking into account the percentage of pension assets invested in equities (but at least 5 percent) and (ii) 95 percent of the return achieved by a reference portfolio, which in its composition takes into account the existing average portfolio of the AFP industry.

The performance of the mandatory pension funds is calculated as annualized rate of return during the last 36 months (24 months in the case of severance funds). During the first three years of a pension fund's existence, the rate of return will be calculated for the period since the start of operations. Compliance with the minimum rate of return will be checked by the Superintendency on a quarterly basis. If an AFP underperforms the benchmark, the shortfall has to be covered through the stabilization reserve, which is established as described above.

In Colombia, AFPs are required to publish their returns both gross and net of commissions (but not net of insurance premiums). This rule applies to mandatory and voluntary pension funds as well as to severance funds. Nominal gross and net returns are reported by the APFs and published by the superintendency quarterly.

Nominal returns have been relatively stable given that fixed income securities make up the largest part of the AFPs' portfolios. On average, the annual nominal return has been 35.7 percent from the start of the AFP system to March 1997. The returns of the individual APFs for the same period fluctuated between 37.4 and 34.7 percent. The best performance was achieved by **Colpatria**, followed by **Protección** and **Colmena.**

In real terms, gross rates of return of the mandatory pension funds were 14.4 percent during May-December 1994, i.e. during the first nine months of the system, 15.9 percent in 1995, and 15 percent in 1996. Returns net of commissions are reported only for affiliates who joined the system at the beginning, i.e. in May 1994.

For affiliates who joined the private system later, the returns would be lower since their balances are lower. Table 11 shows that real net returns were highly negative for the affiliates during the first six months of the new pension system and slowly increased to more than 10 percent during the third quarter of 1996.[2]

Table 11
Real Rates of Return Net of AFP Commissions (%)

	5/94-12/94	1/95-6/95	7/95-12/95	1/96-9/96	5/94-9/96
Real net return*	-16	0	4.1	10.5	-3.4

* only for affiliates who contributed from 5/94-9/96
Source: Superintendencia Bancaria

Old Age Benefits

The benefit entitlement in the Colombian pension system differs between the public and the private system. Workers still have the choice of switching systems before retirement if they find that the public system offers a more attractive benefit than the private system.

In the private system, the official retirement age is 57 years for women and 62 years for men. But early retirement is possible as soon as the balance in the individual account is sufficient to finance a pension of at least 110 percent of the minimum wage. Any excess capital may be withdrawn and used for purposes other than retirement. As mentioned earlier, affiliates whose balance is sufficient to finance a minimum pension may also choose other investment plans for the excess capital. An affiliate retiring in the private system has essentially the same type of options as in the Chilean pension system: Upon retirement, the worker can choose to convert the accumulated balance in the individual account plus the recognition bond to pension payments under a programmed withdrawal program, use the amount to purchase an annuity from an insurance company, or opt for a combination of the two.

[2] These figures are not fully consistent with the gross rates of return published by the Superintendencia Bancaria.

Pension benefits are tax-exempt up to the limit of 20 minimum wages. However, if funds accumulated in the individual account are used for any other, non-retirement purposes, taxes are due. In both the public and the private systems, pensions are adjusted according to the consumer price index.

Like in the other Latin American countries, which have implemented similar reforms, the government guarantees the payment of a minimum pension provided the worker has reached the official retirement age and has contributed at least 1150 weeks (22.12 years). The minimum pension amounts to 1 minimum wage and currently amounts to approximately US$ 170. This amount is roughly equivalent to 60 percent of the average wage. The guarantee entitles workers to draw a monthly amount equal to the minimum pension from their balance; once the balance is exhausted, the government takes over the benefit payments.

In the public system, the retirement age is currently still set at 55 years for women and 60 years for men. By the year 2014, it will be increased to 57 years for women and 62 years for men. Originally, it had been planned to raise the retirement age to 60 and 65 years for women and men, respectively, over a period of 10 years, i.e. by the year 2004, but this proposal was diluted during the negotiations in Congress. Also, all new regulations apply only to new entrants to the labor force as well as female and male affiliates, who were 35 and 40 years, respectively, at the moment of reform. For older affiliates, the previous (more generous) eligibility conditions and benefit formulae are still in force.

The pension of the public system now replaces between 65 and 85 percent of the average income during the last 10 years before retirement depending on the amount of contributions made. The minimum contribution period to receive a 65 percent replacement rate is 1,000 weeks; the replacement rate is increased by 2 percentage points for every additional 50 weeks of contributions up to 1,200 weeks and then by 3 percentage points for every 50 weeks of contributions between 1,200 and 1,400 weeks.

Although these replacement rates are still high, they represent a substantial reduction from rates of up to 90 and even more than 100 percent for certain occupational groups before the reform. Further, pension benefits were previously calculated on the basis of only the last 2 years before retirement, which presented a strong incentive for strategic manipulation; this provision has been removed for all affiliates.

In March 1997, there was only one old age pensioner receiving benefits from the new system.

Disability and Survivors' Benefits

The disability and survivors' benefit offered in the public and the private system are the same. There are different medical committees to determine disability for public and private systems but both are subject to the same set of rules issued by the government. A disability pensioner receives benefits amounting to 45 to 75 percent of the average salary, depending on the individual degree of disability and on the length of the contribution period. In order to receive a disability pension, a worker must have contributed for a minimum of 26 weeks. A worker who has suffered disability resulting in a 50 percent loss of earnings capacity and has contributed for 500 weeks is entitled to a benefit of 45 percent of previous earnings. For every 50 weeks of contribution between 500 and 800 weeks, the replacement rate is increased by an additional 1.5 percent of earnings, thereafter by 2 percent up to maximum replacement rate of 75 percent. Survivors' benefits are within the same ranges but depend on the number of eligible survivors.

Affiliates of the private pension system are entitled to essentially the same benefits. Like in the other Latin American countries with private pension systems, the disability and survivors' risk is insured with private insurance companies. The benefit is financed using the balance in the worker's individual account plus the recognition bond, if any, topped up by a lump-sum to be provided by the insurance company. Disability pensioners have the option of increasing their benefits through voluntary top-up contributions.

In March 1997, there were 79 disability pensioners and 841 beneficiaries of survivors' benefits receiving payments from the private system.

Conclusions

- As in the case of Peru, the growth of the Colombian private pension system was limited because of the co-existence with the public system. The competition with the public system was not as "unfair" in terms of contribution rates and eligibility conditions as in Peru but the slow pace of reform in the public system and the disincentives for older workers to join the new system did present a significant obstacle to faster growth.

- The ability of the private pension system to generate long-term savings and mobilize domestic resources has been limited by the low level of income in Colombia. More than 75 percent of the affiliates to the private system earn less than 2 minimum salaries.

- The financial condition of the AFPs has been also been negatively affected by the low incomes of the affiliated workers. Since the fees are charged as a percentage of the salaries, the operating revenue of the AFP has also been low. So far, none of the AFPs has broken even.

- In spite of using an existing fund management infrastructure, the start-up costs of the private system were still very high. Expenses for advertising and marketing resulted in losses of almost 70 percent of the AFPs' capital compared to about 66 percent in Peru.

- Although the financial sector in Colombia was far more developed at the moment of reform, the diversification of the AFPs' portfolios has been much slower than in Peru. This is mostly due to high returns on fixed income securities in Colombia and low trading on the stock market.

References

Ayala, Ulpiano. 1996. *El nuevo sistema pensional colombiano y su proceso de implementacion.* Paper prepared for the Conferencia Internacional del Taller de Politicas Publicas de la CIEPLAN, Santiago de Chile.

Downs, Katherine. 1996. "The Private Pension Fund System of Peru: Policies to Increase Enrollment and Improve Investment Returns and Diversification". *Peru: Beyond the Reforms.* Lima: PromPeru.

Horizonte. 1996. *Tres años del sistema privado de pensiones, 1993-1996.* Lima: Horizonte.

IFC. 1997. *Emerging Stock Markets Factbook 1997.* Washington, D.C.: International Finance Corporation.

Queisser, Monika. 1995. "Chile and Beyond: The Second-Generation Pension Reforms in Latin America", *International Review for Social Security*, Vol.48, 3-4.

Salomon Brothers. 1996. *Private Pension Funds in Latin America.* New York: Salomon Brothers.

Schmidt-Hebbel, Klaus. 1995. *Colombia's Pension Reform, Fiscal and Macroeconomic Effects.* World Bank, Discussion Paper No. 314. Washington, D.C.: World Bank.

Shah, Hemant. 1997. *Towards better regulation of private pension funds.* Policy Research Working Paper 1791. Washington, D.C.: World Bank.

Valdes-Prieto, Salvador. 1996. *Pension Reform: The Latin American Implementation Experience.* World Bank, mimeo.

Vittas, Dimitri. 1997a. *Private Pension Funds in Argentina's New Integrated Pension System.* World Bank, Financial Sector Development Department, World Bank, mimeo.

Vittas, Dimitri. 1997b. *The Argentine Pension Reform and its Relevance for Eastern Europe.* World Bank, Financial Sector Development Department, World Bank, mimeo.

Vittas, Dimitri. 1997c. *Strengths and Weaknesses of the Chilean Pension Reform.* World Bank, Financial Sector Development Department, World Bank, mimeo.

World Bank. 1996. Peru: Pension Reform Adjustment Loan. Report No. P-7031-PE. Washington, D.C.: World Bank.

Policy Research Working Paper Series

	Title	Author	Date	Contact for paper
WPS1828	The Determinants of Banking Crises: Evidence from Developed and Developing Countries	Asli Demirgüç-Kunt Enrica Detragiache	September 1997	P. Sintim-Aboagye 38526
WPS1829	Economic Reform and progress in Latin America and the Caribbean	Norman Loayza Luisa Palacios	September 1997	E. Khine 37471
WPS1830	Private Ownership and Corporate Performance: Some Lessons from Transition Economies	Roman Frydman Cheryl W. Gray Marek Hessel Andrzej Rapaczynski	September 1997	B. Moore 38526
WPS1831	How Trade Patterns and Technology Flows Affect Productivity Growth	Wolfgang Keller	September 1997	J. Ngaine 37947
WPS1832	Pension Reform in Bolivia: Innovative Solutions to Common Problems	Hermann von Gersdorff	September 1997	C. Pavlak 82099
WPS1833	Cost Recovery and Pricing of Payment Services	David B. Humphrey Robert H. Keppler Fernando Montes-Negret	October 1997	T. Ishibe 38968
WPS1834	The Comparative Advantage of Government: A Review	Pedro Belli	October 1997	L. Schunk 31779
WPS1835	Cost-Benefit Analysis of the Global Dracunculiasis Eradication Campaign	Aehyung Kim Ajay Tandon Ernesto Ruiz-Tiben	October 1997	A. Kim 35029
WPS1836	Health and Labor Productivity: The Economic Impact of Onchocercal Skin Disease	Aehyung Kim Ajay Tandon Asrat Hairu and Others	October 1997	A. Kim 35029
WPS1837	How Estonia's Economic Transition Affected Employment and Wages (1989–95)	Rivo Noorkoiv Peter F. Orazem Allan Puur Milan Vodopivec	October 1997	S. Fallon 38009
WPS1838	The Limits and Merits of Participation	Paulo Vieira da Cunha Maria Valeria Junho Pena	October 1997	E. Thomas 31019
WPS1839	The Effects of Financial Liberalization and New Bank Entry on Market Structure and Competition in Turkey	Cevdet Denizer	November 1997	E. Khine 37471
WPS1840	Efficient Public Sector Downsizing	Martin Rama	November 1997	S. Fallon 38009
WPS1841	Patterns of Metropolitan Development: What Have We Learned?	Gregory K. Ingram	November 1997	J. Ponchamni 31052

Policy Research Working Paper Series

	Title	Author	Date	Contact for paper
WPS1842	Motorization and the Provision of Roads in Countries and Cities	Gregory K. Ingram Zhi Liu	November 1997	J. Ponchamni 31052
WPS1843	Externalities and Bailouts: Hard and Soft Budget Constraints in Intergovernmental Fiscal Relations	David E. Wildasin	November 1997	C. Bernardo 37699
WPS1844	Child Labor and Schooling in Ghana	Sudharshan Canagarajah Harold Coulombe	November 1997	B. Casely-Hayford 34672
WPS1845	Employment, Labor Markets, and Poverty in Ghana: A Study of Changes during Economic Decline and Recovery	Sudharshan Canagarajah Dipak Mazumdar	November 1997	B. Casely-Hayford 34672
WPS1846	Africa's Role in Multilateral Trade Negotiations	Zhen Kun Wang L. Alan Winters	November 1997	J. Ngaine 37947
WPS1847	Outsiders and Regional Trade Agreements among Small Countries: The Case of Regional Markets	Anju Gupta Maurice Schiff	November 1997	J. Ngaine 37947
WPS1848	Regional Integration and Commodity Tax Harmonization	Valeria De Bonis	November 1997	J. Ngaine 37947
WPS1849	Regional Integration and Factor Income Taxation	Valeria De Bonis	November 1997	J. Ngaine 37947
WPS1850	Determinants of Intra-Industry Trade between East and West Europe	Chonira Aturupane Simeon Djankov Bernard Hoekman	November 1997	J. Ngaine 37947
WPS1851	Transportation Infrastructure Investments and Regional Trade Liberalization	Eric W. Bond	November 1997	J. Ngaine 37947
WPS1852	Leading Indicators of Currency Crises	Graciela Kaminsky Saul Lizondo Carmen M. Reinhart	November 1997	S. Lizondo 85431