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# The New Pension System in Argentina: Experiences and Lessons*

by Rafael Rofman**

In a context of serious financial and legal crisis, Argentina reformed its pension system in 1994, when a multipillar model with a funded scheme was introduced and first-pillar parameters, such as minimum age and vesting requirements, were tightened. The new system has a large first pillar (which offers a flat benefit of 28 percent of average wage to all retirees) and a second pillar that should provide a similar amount, once the transition is completed.

The new system has developed rapidly and most formal workers have joined the new funded scheme. However, there are some problems that must be solved. On the first pillar, the reform equilibrated the long-term finances, but it will also reduce coverage very rapidly, as a consequence of the combined effect of low formality in the labor market and higher requirements on contributions to obtain benefits. The most serious problems of the funded pillar are the administration costs and the need to improve regulation and supervision of insurance companies that provide disability and survivors', coverage and annuities to beneficiaries.

While these problems are serious, their consequences can be avoided if adequate policies are developed by the government. In this sense, the experience of pension reform in Argentina is an excellent lesson for other countries that are considering a reform in their own systems.

## 1. Introduction

This article presents a description of the pension system in Argentina, assessing its performance five years after the major reform that introduced a multipillar scheme. We particularly concentrate our attention on those aspects that are problematic and require further refinement.

The Argentine pension system includes a national system, the SIJP (Sistema Integrado de Jubilaciones y Pensiones – Integrated System of Retirement and Pensions), as well as smaller governmental provincial systems, provincial-level professional funds and some special systems that cover military and security forces.

The legal coverage of the SIJP is almost universal, since it includes public and private employees as well as the self-employed. The provincial systems cover government employees of the provinces or municipalities that have not yet joined the SIJP (approximately one-half of all provinces) and there are a large number of professional funds, mainly provincial, employers' funds (for instance, the Bank of the Province of Buenos Aires), and special systems (like the Military and the Federal Police). Out of the approximately 13 million active,

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** The author is Vice-President of NACION AFJP and advisor to the Ministry of Economy Buenos Aires, Argentina. The findings, interpretations and conclusions expressed in this paper are entirely those of the author and do not reflect in any way the official position of his employers.


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employed workers in Argentina, 4.7 million contribute to the SIJP, around a million contribute to provincial regimes and 500,000 to other schemes. Roughly 6.8 million workers do not contribute to any system (most of them should be part of the SIJP) and, therefore, may not have adequate retirement savings.

This analysis is focused on the SIJP, because it is the system with the widest scope and it is slowly absorbing the other schemes. Nevertheless, it is important to mention that the problems of provincial and sectoral regimes should be carefully addressed, because they appear in some cases to be financially unsustainable.

The second section describes the basic framework of the new system. The third section presents information on the evolution of the system in its first five years of operations. Section 4 discusses the performance of the new system and its success in providing adequate social insurance coverage. Finally, section 5 presents the main lessons of the Argentinean experience with pension reform.

## 2. The basic structure of the SIJP

### *2.1. The new system*

Argentina's new pension system, established in 1994, is made up of a Public PAYG (pay-as-you-go) Regime and an Individual Funded Regime. In this section, we briefly describe the operation of this new system, including the multipillar scheme, its coverage, contribution rates, benefits, and the government's role in the operation of SIJP. The structure of the new system is somewhat complex, and a diagram describing the main institutions and characteristics is included at the end of the section.

#### 2.1.1. The multipillar scheme

The national pension system in Argentina (SIJP) is designed according to a model known in the literature as "multipillar". The system has three pillars: one, run by the government, that is mostly compulsory and offers a basic benefit; the second, run by the government and private managers, is also compulsory and pays benefits in relation to past contributions; the third pillar, with voluntary participation, is run by private managers and is very small.

The first pillar is run as a pay-as-you-go scheme, by the National Social Security Administration (ANSeS). It is financed by employers' contributions (16 per cent of gross taxable income, according to the law) and the main benefit from this pillar is a Universal Basic Benefit (PBU), a flat monthly payment of approximately 28 percent of the average wage, that can be claimed by any worker with 30 years of contributions who has reached the minimum eligibility age.

The second pillar, financed by employees' contributions (11 per cent of gross taxable income), consists of two alternative regimes: a pay-as-you-go regime, managed by ANSeS and a Funded Regime, managed by privately owned Pension Fund Managing Companies (AFJP). Disability and survivors' benefits are financed by the second pillar, depending on the option (funded or pay-as-you-go) the worker has chosen, while survivors' benefits due to the death of a retiree are financed in the same way as the retirement payment.

Besides the elements already described, the SIJP has a transitional benefit, aimed at providing benefits to workers who contributed to the old system. All workers with contributions before the reform and retiring after 1994 will receive a Compensatory Benefit (PC), proportional to their pre-retirement income and the number of years with contributions under the old system.[1] In addition, workers who retired before the reform will continue to receive their benefits.

The administration of the new first pillar, the PAYG second pillar, the benefits paid out under the old system, and transitional benefits, are concentrated in one scheme, the "Public Pension Regime" (RPP), that is managed by a government agency, the National Administration of Social Security (ANSeS). Additionally, the RPP covers part of the cost of annuities for disability and survivors' benefits in the funded regime.

### 2.1.2. Legal coverage

Participation in the SIJP is compulsory for wage-earners in the private sector, employees of national government and of provincial or municipal governments that have joined the system, and for self-employed workers. Some special groups, such as directors and partners of companies, members of administration councils, clergymen, housewives and others, may join the system on a voluntary basis. Members of the military and security forces and other small groups are excluded.

When workers enter the labor force they are automatically included in the first-pillar scheme, and must choose between the PAYG and the funded regimes for their earnings related scheme. If they choose the PAYG, they can switch to the funded scheme at any time. If they choose funded, they cannot go back to PAYG. The default option (applied if the worker does not make an explicit choice) is funded.[2]

### 2.1.3. Contributions

Contributions to the SIJP are compulsory, and workers in the funded regime can also make additional voluntary contributions. Employees and employers are required to contribute 11 per cent and 16 per cent[3] of taxable income, respectively. The self-employed must contribute 27 percent of a pre-defined taxable income. Voluntary contributions can be made by workers (called "imposiciones voluntarias") or by employers (called "depósitos convenidos"). The law defines a minimum taxable income, equivalent to approximately 33 per cent of average wages, and a maximum, of about six times the average wage.

Employers' contributions, and 16 of the 27 per cent contributed by the self-employed, are transferred to ANSeS and used to finance the RPP. To complement these contributions, some earmarked taxes are also directed to the ANSeS, and any remaining deficit is covered by the National Treasury.

Employees' contributions, and 11 of the 27 per cent from the self-employed, are transferred to ANSeS and used to finance the RPP if workers choose that regime, or are transferred to a pension fund (after AFJP fees are deducted) if workers choose the funded regime. In this case, the AFJPs withdraw their commissions from the employee contributions, resulting in a smaller net contribution of around 7.5 per cent of taxable income. If workers do not make an explicit choice, they are assigned to an AFJP.

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[1] This method for dealing with the benefits accrued in a PAYG scheme contrasts with the recognition bond method used in other countries such as Chile.

[2] Workers in the labor force at the time of the reform were given a five-month period to choose which regime they preferred, the funded option being the default one.

[3] As mentioned before, the employers' contribution rate can be reduced by decree. Since 1994 a complex scheme of reductions by location and industry has been in place, generating an actual contribution rate of approximately 8 per cent as of the end of 1999.

### 2.1.4. Benefits

The public pension regime pays benefits to pensioners under the old system, and to affiliates of the new system. The benefits for the new system are (a) the Basic Universal Benefit (PBU); (b) Compensatory Benefit (PC); (c) Additional Benefit for Permanence (PAP); and (d) survivors' and disability benefits. In addition, the funded regime offers (e) Ordinary Retirement (RO); and (f) survivors' and disability benefits to those who choose this scheme.

(a) Basic Universal Benefit (PBU) is a redistributive, flat benefit. Retirees of the SIJP who have contributed to the system (either the new or the old one) for 30 years or more are eligible at 60/65 years old (females/males). The benefit level is approximately 28 per cent of the average wage;

(b) Compensatory Benefit (PC) is a benefit for individuals who meet the criteria for the PBU on age and years of contributions and have contributed to the old system. They receive 1.5 per cent of pre-retirement income per year of contributions to the old system. Thus, a worker with 35 years of contributions retiring immediately after the reform would have received a PC of 52.5 per cent of his or her previous salary, while young workers entering the labor force after the reform will not receive any PC.

(c) Additional Benefit for Permanence (PAP) is a benefit for workers who meet the criteria for the PBU and who decide to join the second-pillar PAYG scheme. They receive 0.85 per cent of pre-retirement income per year of contributions to the new second-pillar PAYG scheme. Thus, a worker with 35 years of contributions to this scheme will receive a PAP of 29.75 per cent of his or her pre-retirement income, while somebody who retired immediately after the reform (or who chose the funded second-pillar regime) will not receive any PAP.

(d) Survivors' and disability benefits are benefits for survivors of contributing workers in the second-pillar PAYG scheme (limited to the spouse and young children of active contributors) or the workers, if they become disabled. Benefits are pre-defined. Disabled workers receive 70 per cent of their salary before the disability and survivors receive between 50 per cent and 70 per cent, depending on the family structure. Benefits are reduced and even denied if compliance has been too low.[4]

(e) Ordinary Retirement (RO) is a benefit received by affiliates of an AFJP once they retire.[5] This benefit is paid in addition to any other from the RPP that the workers have accrued rights for, such as PBU and PC. Benefits are paid in the form of annuities, scheduled withdrawals or fragmentary withdrawals. In the first case, the beneficiary buys an annuity from a retirement insurance company (CSR), and the balance of the account is transferred to this CSR. Annuity contracts are highly regulated; only life annuities that include survivors' benefits are allowed. The basic parameters used to calculate the benefits (life tables and interest rates) are established by the Supervisory Agencies. Alternatively, beneficiaries can leave their balance in the pension fund, and agree with the AFJP to withdraw a monthly amount that cannot exceed what they would get from an annuity. Every year the agreement is reconsidered and amounts are adjusted, with a reduction unless returns were high enough to

[4] The "regularity" rule establishes that only workers with contributions in more than 29 of the preceding 36 months receive full benefits, those with fewer than 30 but more that 17 months receive reduced benefits (by 5/7ths) and those with fewer than 18 months receive no benefits.

[5] Assuming that a worker contributes 35 years in a row, with a commission of 3.5 per cent of his salary, a wage increase of 2 percent annually and 5 per cent annual earnings, he will receive approximately 30 per cent of his last wage as a pension for life.

compensate for the aging process. At any time, the beneficiary may use his balance to buy a regular annuity. In the event of the death of the main beneficiary, the balance of the account is used to finance the survivors' benefits (either as an annuity or a scheduled withdrawal, depending on the desire of the survivors) and, if there are no beneficiaries, the balance

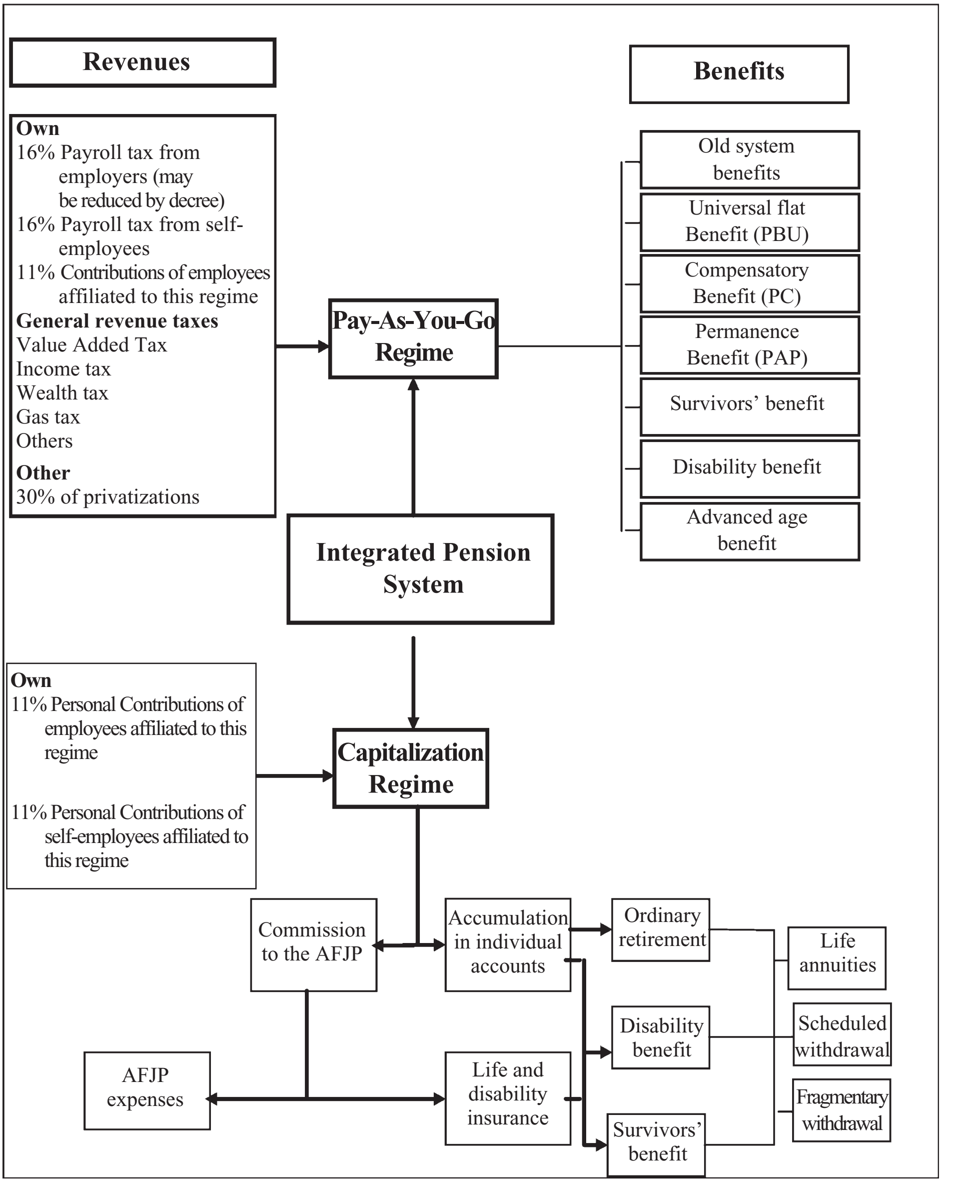


*Figure 1: Scheme of the Integrated Pension System (SIJP)*
*Source*: Isuani, Rofman and San Martino (1996).

becomes part of the deceased's estate. The third option, the fragmentary withdrawal, consists in a monthly withdrawal from the individual account that exceeds what the beneficiary would get from an annuity, but is less than 50 per cent of the maximum PBU.

(f) Survivors' and Disability Benefits are benefits for survivors of contributing workers in the second-pillar funded scheme (limited to the spouse and young children of active contributors) or the workers, if they become disabled. Benefits are calculated according to the same criteria as in the PAYG scheme (including the rules on regularity), but the financial arrangement is different. Once the right to a benefit is established and the monthly amount is calculated, the AFJP must calculate how much capital is necessary to acquire an annuity that would cover such benefit. The AFJP, then, drawing from the disability and survivors' insurance, must complement the balance of the account to reach this amount. Once the money is deposited, the beneficiaries may choose to buy an annuity or agree on a scheduled

*Table 1:*
*Benefits to be received by retiring workers, as percentage of their average salary*

| **Case** | **PBU** % | **PC** % | **PAP** % | **JO** % | **TOTAL** % |
|---|---|---|---|---|---|
| A worker with 35 years of contributions to the old system and a salary equal to . . . | | | | | |
| 50% of average | 57.8 | 52.5 | 0.0 | 0.0 | 110.3 |
| average | 28.9 | 52.5 | 0.0 | 0.0 | 81.4 |
| 200% average | 14.4 | 52.5 | 0.0 | 0.0 | 66.9 |
| A worker with 20 years of contributions to the old system, 15 years to the new system (in the *PAYG* regime) and a salary equal to . . . | | | | | |
| 50% of average | 57.8 | 30.0 | 12.8 | 0.0 | 100.5 |
| average | 28.9 | 30.0 | 12.8 | 0.0 | 71.6 |
| 200% average | 14.4 | 30.0 | 12.8 | 0.0 | 57.2 |
| A worker with 20 years of contributions to the old system, 15 years to the new system (in the *capitalization* regime) and a salary equal to . . . | | | | | |
| 50% of average | 57.8 | 30.0 | 0.0 | 11.1 | 98.9 |
| average | 28.9 | 30.0 | 0.0 | 11.1 | 70.0 |
| 200% average | 14.4 | 30.0 | 0.0 | 11.1 | 55.5 |
| A worker with 35 years of contributions to the new system (in the *PAYG* regime) and a salary equal to . . . | | | | | |
| 50% of average | 57.8 | 0.0 | 29.8 | 0.0 | 87.5 |
| average | 28.9 | 0.0 | 29.8 | 0.0 | 58.6 |
| 200% average | 14.4 | 0.0 | 29.8 | 0.0 | 44.2 |
| A worker with 35 years of contributions to the new system (in the *capitalization* regime) and a salary equal to . . . | | | | | |
| 50% of average | 57.8 | 0.0 | 0.0 | 35.8 | 93.6 |
| average | 28.9 | 0.0 | 0.0 | 35.8 | 64.7 |
| 200% average | 14.4 | 0.0 | 0.0 | 35.8 | 50.2 |

*Note:* Funded-scheme benefits calculated assuming a 4 percent real interest rate, and 1 percent real wage growth. Projected mortality rates.
*Source:* Own calculations.

withdrawal, according to their own preferences. During the transitional years, part of the complementary capital is paid by ANSeS.[6]

As a result of the combination of different benefits, workers in the earnings-related PAYG scheme will receive, once they retire, the PBU, PC and PAP, while those in the funded regime will get the PBU, PC and JO. In case of disability or death, members of either scheme will receive similar benefits, although the financial mechanism used is different.

### 2.2. *The status of the new system*

#### 2.2.1. Membership and coverage

The main difficulty in determining the coverage level of the new pension system is related to the need to define several concepts. Coverage is generally measured by the proportion of labor force that satisfies requirements to receive benefits. Argentina's labor force is currently close to 15 million workers. Not all of them are required to join the SIJP since, as mentioned before, some specific groups are covered by other programs. While there are no official data on this issue, it is estimated that approximately 1.5 million workers are in this group, leaving approximately 13.5 million workers to be covered by the SIJP.

Affiliation to the system (that is, registering and obtaining a social security identification number) is a necessary but not sufficient condition to be covered. Moreover, it is possible to be affiliated with the system and not to be in the labor force. As of December 1999, approximately 10.1 million workers were affiliated to the SIJP. Of those, nearly 7.9 million were in the funded scheme. Not all affiliated workers contribute regularly. In fact, by the end of 1999, only about 4.5 million workers were contributing, 3.5 million to the funded regime and about one million to the PAYG regime. The ratio of contributors to affiliates shows a steady decline over time, and it was around 45 per cent in 1999. This rate does not reflect compliance, since many workers who should contribute are not affiliated to the system and some affiliates are not required to contribute. This is the case where a person makes a few contributions and then withdraws from the labor force, but has not reached the minimum age for retirement. Instead, comparing contributors to labor force not covered by other systems shows that compliance is around 34 per cent (or 39 per cent if unemployed workers are excluded).

Due to the requirement of a minimum number of years with contributions, an affiliate is not necessarily fully covered against old age risks. If, for example, a male worker aged 63 years with no contribution history decides to join the system, even if he makes his contributions he will not receive most benefits, because he will not be able to complete the minimum 30 years with contributions. Likewise, somebody with or without contributions in the past, but with no contributions in the last 18 months, is not eligible for survivors' or disability benefits according to the rules. The only exception for this is that, in both cases, workers have the right to receive a benefit financed with whatever funds they have accumulated in their individual funded accounts, but they have no rights to public benefits or to disability or survivors' coverage.

While no data are available on compliance as defined by the law, information on contributors (defined as affiliates who actually make their compulsory contribution in any

[6] Decree 55/94 established that the national government participates in the constitution of the complementary capital with a sum proportional to the age of the workers in 1994.

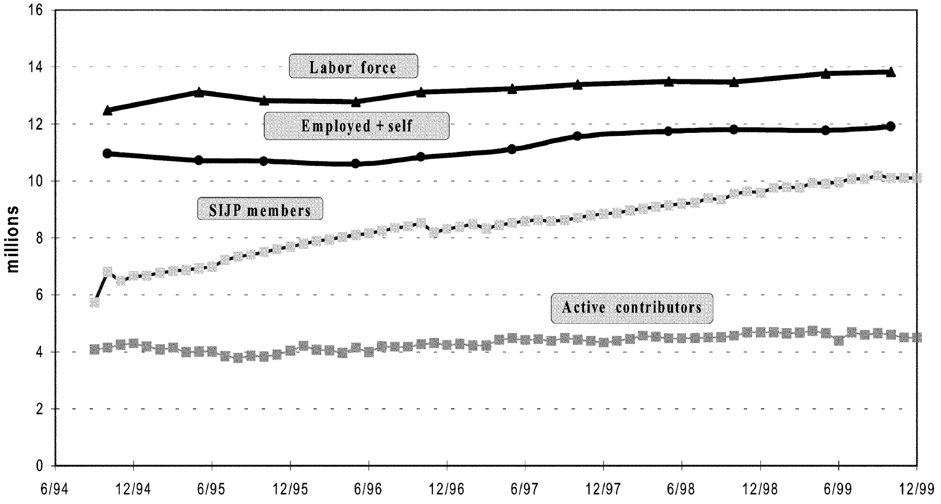


*Figure 2: Labor force, employed labor force, affiliates and contributors, 1994–1999*
*Source*: Own, based on data from SAFJP.

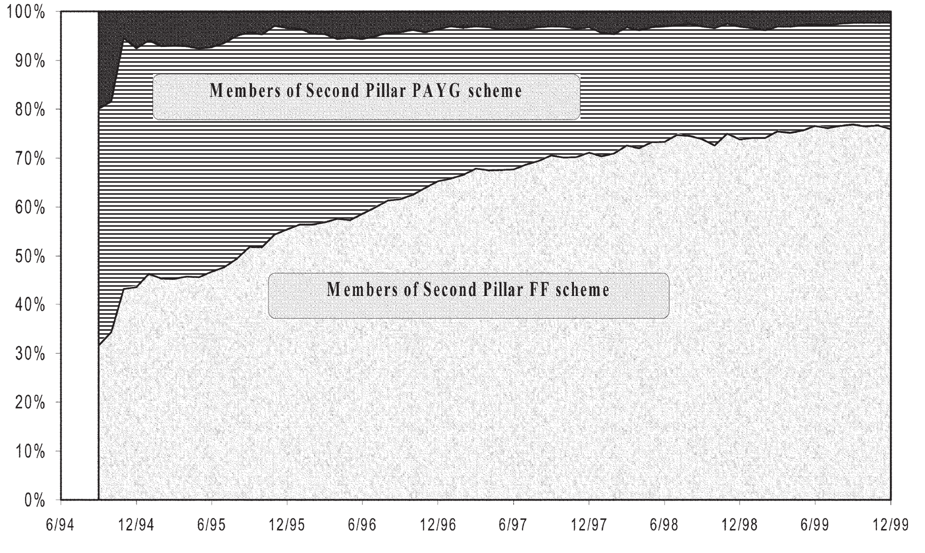


*Figure 3: Active contributors to SIJP, according to membership in public and private earnings-related scheme, 1994–1999*
*Note*: The dark area indicates the percentage of contributors who did not take the option and are waiting to be assigned to an AFJP.
*Source*: Own, based on data from AFJP.

specific month) may give an idea of the situation. As of June 1999, the proportion of actual contributors to the estimated number of workers who should contribute was around 37 per cent.

The sustained increase in participation in the funded pillar was caused by several factors. First, the law established that workers entering the system must make a choice between funded and unfunded schemes. If no choice is made, they are assigned to the funded scheme by default. A significant proportion of workers entered the system this way. Nearly 30 per cent of the enrolled labor force at the time the system was created was assigned to an AFJP, and the percentage of new workers that do not express their choice is now as high as 70 per cent. A second reason for this trend is that almost all new workers who do make a choice prefer the fully funded scheme. In addition, most workers who preferred to go into the PAYG scheme were older, and, consequently, the "replacement" process tilts the balance towards the funded scheme as time passes.

### 2.2.2. Transfers

One of the main characteristics of the new funded scheme is the existence of competition between AFJPs and the possibility for affiliates to switch between them. Argentina's system allows workers to make up to two transfers per calendar year, with a minimum of four contributions to the fund they are leaving. In five years, there have been 2.6 million transfers, a figure equivalent to approximately 75 per cent of total contributors at the end of the period. There have been some significant changes in the rate of switching funds during this period. After transfers were authorized in early 1995, the rate began to increase and reached a maximum during the second semester of 1997, when approximately 9.5 per cent of all affiliates switched funds. A change in the regulations, together with an implicit agreement among the largest AFJPs, led to a reduction in the number of transfers, and, during the second semester of 1999, only 2.2 per cent of affiliates changed funds.

This phenomenon is of particular interest because, on one hand, it shows the level of satisfaction of affiliates with the service they receive from managing companies and, on the other, the effort to attract affiliates from other AFJPs (and to convince their own to stay) explains a significant part of the companies' operating costs.

### 2.2.3. Fees and insurance costs

Managing companies can only charge fees on affiliates' contributions, either as a flat amount or as a proportion of taxable income. The managing companies charge a commission, and use it to pay a life and disability insurance policy and all activities of the AFJP.

Fees can take the form of a flat amount, payable every month when a new contribution is made, and/or a percentage of the taxable income payable as a part of the contribution. The combination of these two components is determined by the marketing strategy of the AFJPs. Thus, some companies have adopted a niche strategy, setting a high flat amount and a low percentage, attracting high-income affiliates. Others, targeting a wider market, have preferred to charge no flat amount and a higher percentage on taxable income.

Average total charges, including disability and survivors' insurance premiums, have been around 3.4 per cent of taxable income since the system began, with little change over time. In July 1994, the average was 3.44 per cent (about 31.12 per cent of contributions) and, five years later, it was 3.41 per cent. While total charges did not change, their composition experienced a major transformation: when the system first began, 63.6 per cent of commissions were used to pay insurance premiums and the remaining 36.4 per cent for

AFJPs expenses. By mid-1999, the distribution was 27.7 per cent for insurance and 72.3 per cent for the AFJP expenses. This trend started to reverse during 1999 and it is expected that the new insurance policies, valid from mid-2000, will result in a distribution closer to 50-50.

While selections of insurance companies are made through a bidding process, most AFJP contracts are with an insurance company related to them through ownership. Consequently, it is possible that changes in life and disability insurance premiums are more linked to financial strategies of the related financial entities than to changes in market conditions.

### 2.2.4. Investment restrictions and performance

*Description.* Pension fund assets are independent and separated from AFJP assets. The funds belong to the members and cannot be seized in case of bankruptcy of the managing company. The companies have no property rights over them and the balance sheet is completely separate. Managing companies cannot withdraw money from the funds except for payment of benefits or transfers of affiliates' balances to other funds. Consequently, all expenses related to managing the funds must be covered by the AFJPs, using the commissions they collect on contributions.

The funds are divided between shares of equal value and characteristics. The value of the shares is calculated daily, based on the market value of assets. Annual returns are calculated monthly on a rolling basis, as the ratio of the average share value in a given month to the average share value 12 months before. All AFJPs are required to guarantee a minimum return equivalent to the average for the industry minus 30 per cent or two percentage points, whichever is smaller. Symmetrically, if returns of any fund exceed the average plus 30 per cent or two percentage points, the share value has to be reduced to this maximum level and the excess is credited to a special account (that is part of the pension fund) that serves as a profit reserve.

When in any given 12-month period a fund's return is below the minimum guaranteed, the AFJP must compensate the affiliates, transferring funds from the profit reserve and, if necessary, from an investment reserve. If both reserves are depleted and compensation is still due, the state must pay the difference, take over the administration of the fund and withdraw the license of the AFJP.

The investment reserve is the property of the AFJP and must be maintained at all times. This reserve must be $3 million or 2 per cent of the fund, whichever is larger. The reserve must be invested and is subject to the same investment restrictions as the pension fund. In short, there is a multi-tier guarantee system to cover possible deficiencies in returns. First, a reserve is formed with the own fund resources. As a second level guarantee, the AFJP maintains an investment reserve. Finally, the state assumes a residual guarantee in case it becomes necessary.

*Investment limits.* As part of the system of safeguards, managers confront a number of limitations regarding investment instruments. The limitations aim to force a minimum amount of diversification (setting limits by type of instrument), reduce concentration of risks (limiting the percentage that can be invested in securities issued by one company), eliminate conflicts of interest (prohibiting investments in assets issued by companies related to the AFJP) and reduce overall risk (setting minimum risk rating levels). All certificates, stock shares and any other physical evidence of investments must be maintained under the control of a custodian institution, separated from the AFJP. Valuation of all instruments is made daily by the Supervision of Pension Funds, based on market value. A special valuation method is used for certain public bonds that will be kept until maturity in the funds' portfolios, in order to reduce the volatility of the funds. The AFJPs may invest the pension fund assets in the following categories listed below. There is a maximum limit for each category, defined as a percentage of total assets.

*Performance of the funds.* As of December 1999, pension funds had assets valued at US$16.8 billion, or about 6 per cent of GDP. Accumulated revenue since the start of the system is US$ 18.5 billion, almost totally from compulsory contributions. Monthly revenue has been growing over time, as a consequence of the growing number of contributors. The average in the last 12 months is US$ 360 million. The market is relatively concentrated; the largest six funds receive 83 percent of contributions, while the six smallest have less than 5 per cent. Because of the wide variation in taxable income, monthly collection per contributor ranges from US$225 to US$67, with an average of about US$100.

Accumulated nominal annual returns for the first six years of operation were around 13 per cent, in a context of very low inflation. Annual returns, measured on a rolling 12-month period, have shown a significant volatility, with a maximum level of 28.8 per cent (in August 1996–August 1997) and a minimum of −13.1 per cent (September 1997–September 1998).

Pension funds are invested in different types of instruments, within the limits described above. During the first years of operation, government bonds have absorbed around 50 per cent of the funds, although the percentage was temporarily smaller for some months in early 1998. Certificates of deposit, which started at 27 per cent, have declined to between 15 and 20 per cent. The investments in commercial papers and equities represent approximately one-fourth of the assets.

The portfolio structure is very similar across pension funds, reflecting a herding behavior

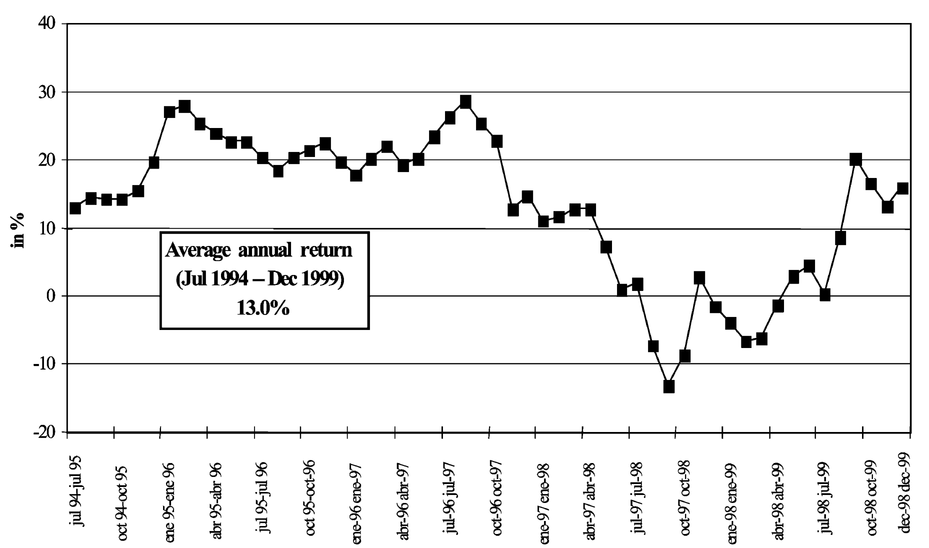


*Figure 4: Annual rates of return of pension funds, 1994–1999*
*Source*: SAFJP.

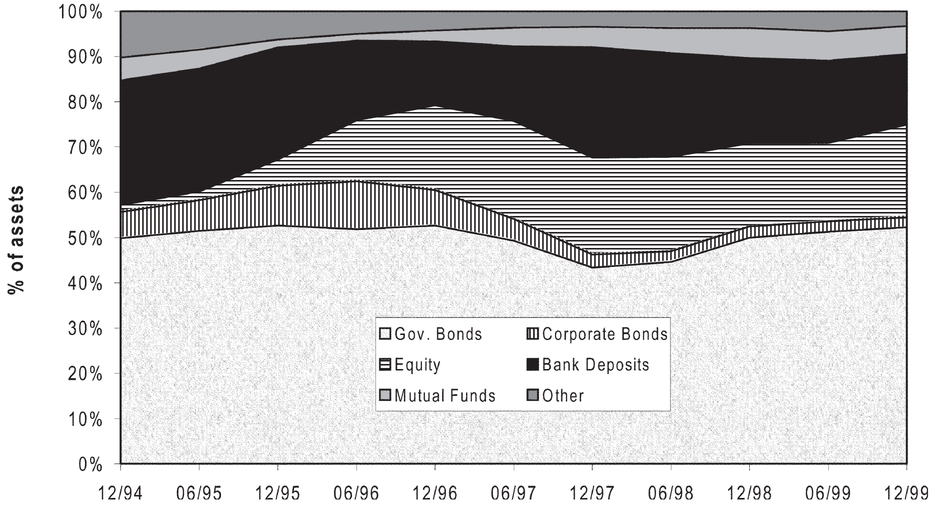


*Figure 5: Structure of pension funds portfolio, 1994–1999*
*Source*: SAFJP.

described by Srinivas and Yermo (1999). The lack of differentiation among asset managers may be a consequence of two different regulations: the investment limits or the minimum return guarantee. The limits have not been binding at any time, with the exception of those affecting government bonds. Instead, the risk of falling below the minimum return and having to compensate fund members with their own assets may have worked as a strong disincentive for diversification among pension-fund managers. Returns have been high (13 per cent annual average), but Srinivas and Yermo have shown that they might have been higher if asset managers had followed a benchmark portfolio. On the other hand, volatility has been much lower, reducing the short-term risk for future pensioners.

Investment in foreign assets has been minimal, well below 1 percent, despite the fact that regulations allow a maximum of 17 per cent. The main reason for the lack of international diversification seems to be that asset managers have preferred to invest in local instruments, aiming at higher short-term returns.

## 3. The problems of the new pension system

The new pension system in Argentina has several important advantages over other pension systems, both traditional and recently reformed ones. Having two clear and explicit pillars, a redistributive pillar based on a pay-as-you-go design, and another one proportional to contributions as a fully funded scheme, the SIJP allows a better distribution of short- and medium-term risks, both institutional and financial.

However, there are some serious problems with the Argentine pension system. These problems are not necessarily caused by system design or performance, but nevertheless they result in lower coverage, lower benefits or higher costs, and, consequently, affect the efficacy of the system. Some of the main problems that can be identified when considering the design and performance of the new pension system affect the PAYG scheme, while others are more specific to the funded regime. Regarding the PAYG scheme, there are the problems of low coverage of the system and the financial sustainability of the scheme in the medium and long term. The most serious problems in the funded scheme are those related to the charges paid by members.

### *3.1. Coverage*

Public pension systems around the world have the general goal of offering the highest possible benefits to the largest possible population, within a budget constraint. The Argentine social security system has traditionally had both a high level of benefits (replacement rate target of 82 per cent of gross wages), and coverage. As of 1995, nearly 70 per cent of the population over 65 years of age has had a pension benefit. To achieve these levels, however, the pension system incurred huge financial obligations, and one of the main reasons behind the reform in 1994 was to control rapidly growing pension expenditures.

In the past, high coverage, despite historically low female labor force participation that has only recently begun to increase, was due to relatively easy access to benefits. Low contribution-year requirements, plus a number of exemptions resulted in a high coverage rate measured by the proportion of elderly receiving benefits. As the number of beneficiaries expanded without a corresponding increase in revenue, the resulting financial difficulties led to a reduction of average payments and increasing deficits. The new social security law established several new restrictive requirements, including a five-year increase in the minimum age and a ten-year increase in the number of years of contribution required to retire. Requirements for eligibility for disability and survivors' benefits were made more stringent. The combination of these measures will gradually reduce the percentage of older persons receiving pensions, other things constant.

The trend could be reversed or at least reduced if the level of formality in the labor force and compliance of social security contributions increase significantly in future years.[7] Unfortunately, the evidence from 1994 up to now shows that the number of actual SIJP contributors has not increased, and it seems to have decreased slightly in absolute terms once we exclude the effect of the absorption of several provincial systems. Moreover, because of the aging population, projections indicate that coverage will seriously decline in the next few decades. For instance, the proportion of individuals reaching the normal retirement age who will actually receive a retirement benefit may decline by nearly 50 per cent in the next 25 years, even if the level of formality in employment increases steadily.[8] This decline is mostly explained by the increase in the vesting period to 30 years and the declining formality in labor markets in the last 20 years. Many of today's retirees obtained their benefit under much easier eligibility rules years ago, and the proportion of the labor force with formal employment is now below 50 per cent. Thus, as current beneficiaries age and die, the flow of new beneficiaries will be barely enough to maintain the total number of retirees around the current level, while the older population will grow steadily, resulting in a decline in coverage.

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[7] This effect was expected by proponents of the reform in the early 1990s. The main argument was that the higher incentives to contribute would increase compliance quite rapidly.

[8] The values projected are based on the assumption that female activity rates will grow slowly, reaching 50 per cent by 2050; unemployment will decrease to levels close to 7 per cent in 2009 and the percentage of employed who contribute to the SIJP will reach 50 per cent in that same year.

The stagnation in the number of contributors to the SIJP is worrisome, since it was expected that the introduction of the individual account scheme and the reductions in employers' contributions established in recent years would act as incentives to increase participation. Although it is not possible to determine unequivocally the reason for such low compliance, a number of processes, such as an increase in unemployment, and the proliferation of informal hiring mechanisms had a role in the poor performance of the new system with regard to participation. The solution to this problem is not simple, mainly because informality has deep structural causes that go beyond the design of the pension system.

The first issue to address urgently is related to the situation of self-employed workers. Law 24.241 requires that they contribute 27 per cent of a predefined income to the social security system plus 5 percent to old-age health insurance. There are ten income categories, and workers are assigned to them according to activity, seniority, etc. This structure generates important inequities among self-employed workers (because workers with similar income levels pay different contributions) and between self-employed workers and employees. Any self-employed worker who receives an average monthly income of \$300 has a clear disadvantage in relation to employees, because the labor taxes paid will be higher. In the same way, self-employed workers with a higher income could be affected because they are included in an excessively high category for their real incomes. In other cases, they may be paying too little. The low percentage of total contributions that is effectively transferred to their individual accounts (approximately 23 per cent), and the regulations on collection from self-employed workers that have had a tendency to increase the amounts contributed (almost 65 per cent in real terms from the beginning of 1994 to 1997), are a strong incentive to evade the system. Besides, the system currently includes several discriminating features for this group, such as not applying the recent reductions to the employer-contribution rates or the requirement that contributions be paid within established terms to be considered in the estimates of regularity for survivors' and disability benefits – a condition that does not apply to employees. Because of these problems, the number of self-employed contributors to the SIJP dropped between 1994 and 1999 from approximately 1.3 million to a little over 700,000.

It is both necessary and feasible to implement policies that facilitate the participation of self-employed workers. Certain measures like the link between contributions and net income would improve the transparency and the equity of the system. It also seems reasonable to extend to self-employed workers any benefit that is given currently to employees, like the reduction of employer contributions. The link between contributions and real income would eliminate the huge incentive to evade that currently exists for self-employed workers who do not undertake a regular activity, because it would eliminate the important bureaucratic constraints currently in force to entering and exiting self-employment.

A second measure worth considering is a serious review of the collection system. For many reasons, the Tax Authority has not been efficient in reducing evasion. Broad policy measures, such as reductions in contributions by employers and tax amnesty offers, have been taken without much success. Clearly, it is necessary to improve the enforcement strategies of the collecting agency, which seem to be weak.[9]

Finally, it is important to mention that, even if participation by active workers increases, the number of individuals who will reach retirement age without the minimum contributions

[9] For a detailed description of the collection system in Argentina and other Latin American countries, see Demarco and Rofman (1998).

will grow in the next ten to twenty years, due to their lack of contributions early in their working careers. For this group, a non-contributory pension system must be created or existing schemes expanded.

### *3.2. The financial feasibility of the public social security system*

The financial viability of the public scheme or RPP has been a controversial issue, because of the difficulties it will face in paying benefits due to both the underlying structural deficits and to the loss of revenues during the transition period. Additionally, the policy of reducing employer contributions has significantly affected the finances of the ANSeS, reducing contributions by approximately 40 per cent by mid-1999.

In the analysis of the financial situation of the public system, it is important to look separately at the expenditure and revenue issues. The system expenditures on Social security benefits are related to the number of beneficiaries and their average benefit levels. The process of population aging in Argentina, along with the maturity of the pension system, has meant that the number of beneficiaries has tended to grow steadily over time. The 1994 reform tried to restrict this effect by increasing the retirement age and imposing more stringent requirements to obtain benefits. It also reduced future benefits payable by the PAYG scheme, by effectively transferring part of them to the new fully funded scheme.

The future evolution of the PAYG revenue is not simple to analyse, mostly because the scheme is not expected to be self-financing in the future. The Argentine pension system has been allocated a growing flow of earmarked non-payroll taxes in recent years. The system was running a significant deficit before the reform and, of course, the creation of the second pillar reduced revenue. However, other policy measures had an even greater effect on collection. As discussed above, the government slowly reduced the employers' contribution rate from 16 per cent of gross wages to just under 7.5 per cent by the end of 1999. In addition, new legal contractual forms were authorized to promote labor demand, allowing in many cases the deferment or elimination of contributions for some categories of workers. Consequently, by the end of 1999, almost 65 per cent of benefit expenditures were financed by sources other than payroll tax contributions and this percentage continues to grow.

The evolution of the financial situation of the RPP will improve in future decades for the same reason that the coverage problem will emerge. The projections show that the public scheme's finances should improve significantly due to stagnation and even a decrease in the number of beneficiaries and to a reduction in the amounts paid as benefits begin to be replaced by those of the funded scheme. Obviously, if that happens, the system will be in better financial shape, because of the exclusion of an important part of society from the system. On the other hand, if the population excluded from the social security system were covered by a non-contributory pension of some kind, part of the financial savings would be offset by new expenditures in this area.

Of course, the financial outcomes for the RPP[10] will depend directly on the decisions adopted in relation to employer contributions. Figure 8 shows the results of a projection under

[10] In this paper, we consider the financial result of the RPP as the difference between ANSeS revenues coming from social security contributions and its expenditures due to social security benefits. Consequently, we exclude the effect of tax resources, transfers from the treasury, collection or payments of other ANSeS managed systems, etc.

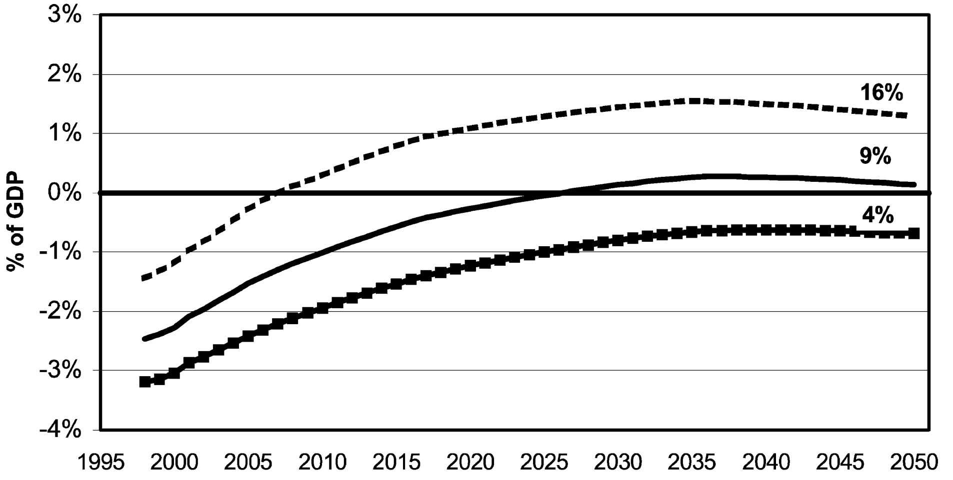


*Figure 6: Projected financial result of the RPP, according to different levels of employer contributions, 1998–2050*
*Source*: Own, based on Stirparo (1999).

three different assumptions regarding the rates of contributions: 16 per cent (indicated by law), 9 per cent (approximately the current level) and 4 per cent, a minimum level.[11]

As shown, if a 16 per cent rate were applied, the accounts would tend to equilibrate by 2010, while, with the current rate, an equilibrium level would only be reached by 2028. If further reductions were made the system would not be able to avoid a chronic deficit situation. The fiscal effect of the reduction of employer contributions is clear: each point of reduction in the rate currently translates into a loss of approximately $450 million (0.15 per cent of GDP) per year in revenues that must be financed with funds coming from other sources. This does not take into account any positive impact on the number of contributors that could be linked to lower labor costs, but four years after employers' contributions began to be reduced there is no evidence that such an effect can be expected.

### *3.3. Benefit uncertainty*

Law 24.241, which created the SIJP, established an automatic indexation mechanism for all the financial variables of the system. Benefits of the RPP, the minimum and maximum contributions, the fines applicable to AFJPs and contributions of self-employed workers were defined as a function of the Average Individual Mandatory Contribution (Aporte Medio Previsional Obligatorio (AMPO)). The AMPO would be recalculated every semester and its evolution would follow the evolution of average wages of the economy. Therefore, the system

[11] This model assumes a slight growth of the activity rate, a drop of unemployment rate to levels close to 7 per cent, an increase in the percentage of employed people who contribute from the current 40 per cent to 50 per cent, a drop in the percentage of employed workers and a steady increase of participation in the funded scheme, reaching 100 per cent of workers by 2025.

would be completely indexed to the wage level. This criterion was an important advance with regard to the previous system, which established multiple criteria for the different variables, in particular a link between the benefits and a wage index estimated by the Ministry of Labor and Social Security, whose methodology was far from being transparent and led to thousands of lawsuits. The value of the AMPO was calculated by the end of 1993 based on the Social Security collection during the first semester of 1993 at $61. Between this date and the first semester 1997, this value was increased by 31 per cent reaching $80. This important change does not reflect an increase in workers' wages (which, based on data from the same source, grew by approximately 3 per cent between 1993 and 1999), but rather in several methodological effects, in some cases unexpected and in other cases resulting from clear mistakes made by government officials. As a reaction to the fiscal cost that indexing all benefits would produce, the government modified the law and replaced the AMPO with a new index (the Social Security Module, Módulo Previsional (MOPRE)). The MOPRE value is defined by the Ministries of Economy and Labor (its value has been set at $80 since 1997).[12]

The lack of automatic indexation mechanisms seriously affects the predictability of the system, for both beneficiaries and policy-makers, and it increases the possibility of political manipulation. Therefore, it is necessary to reinstall a methodology that ties the value of the benefits to an objective indicator.

### *3.4. The cost-effectiveness of the funded regime*

#### 3.4.1. The magnitude of the costs of AFJPs

The system is designed in such a way that the funded scheme acts as the channel to transfer improvements in the economy at the macro level to beneficiaries. It also diversifies risks and protects the contributors from possible political manipulations of benefit levels. To fulfill these functions adequately, it is necessary for the system to generate reasonable rates of return, with reasonably low costs and limited risk.

Two of the main problems the funded scheme has faced since its creation are its relatively high operating costs and the risks to which contributors are exposed. Currently, average commissions, including disability and survivor insurance premiums, are slightly over 3.4 per cent of the taxable income (or 30 per cent of the tax collection). This seems high when compared with other countries with similar systems.[13] It is interesting to note that this high average is due, in part, to the existence of very low price elasticity in demand. The average

[12] At the beginning of 1995, and because of the evidence that a 14.3 per cent increase in the AMPO would generate a similar increase in Social Security system expenditures, the national government issued a Decree of Necessity and Urgency, afterwards confirmed by the Social Security Solidarity Law, that eliminated indexation, and instead ties adjustments to the definition Congress adopts every year when it discusses the National Budget. This measure, justified by the impossibility of paying the foreseen increases, eliminated a quite important component of Law 24.241, the automatic indexation procedure. Additionally, the Social Security Solidarity Act determined the freezing of benefits that were being paid, but it did not modify the mechanism to determine new benefits. Consequently, inequities started to emerge, since different workers received different amounts of money as PBU, depending on the date of retirement. By the end of 1997, again through a decree, the national government replaced the AMPO with the Social Security Module (MOPRE), a unit whose value is determined by the Ministries of Labor and Economy and that would determine the movement of all variables in the system.

[13] Currently, the commissions in other Latin American countries reach 27.2 per cent in Peru, 25.9 per cent in Colombia, 21.5 per cent in Chile (where there has been a decreasing tendency from the inception of the system) and 17.6 per cent in Uruguay, always in relation to total contributions and including insurance premiums.

commission could be approximately 2.95 per cent if each contributor chose the cheapest AFJP for his or her level of income. (Of course this comparison makes the possibly unrealistic assumption that qualitative differences, e.g. service, across the AFJPs are not related to price.)

The debate on the magnitude of the costs has been heated.[14] It is obvious that to define whether a service is expensive or cheap it is necessary to have a reference criterion, comparing the cost with other similar services, or trying to evaluate the utility the contributors get from the service. Whitehouse (2000) points out that the key question is the effect charges have on the net rate of return. While costs may be high relative to comparators, returns in Argentina have also been high, even after these charges.

Fees of approximately 30 per cent of contributions look high. However, it must be noted that there are no asset fees or any other charges except for the up-front fees. Considering an individual with contributions for 35 years before retirement, it is simple to estimate that a 30 per cent fee on contribution is similar to a 2 per cent annual fee on assets, if we include the cost of disability and death insurance in the calculation, and 1 percent if we exclude this cost. Thus, it is possible to estimate that the effect of administration fees on long-term returns should be between 0.7 and 1.5 per cent. Of course this effect will be larger if workers participate in the system for shorter periods (as would be the case of an older worker who joined the funded scheme in 1994) and smaller if workers contribute for more than 35 years. Nevertheless, lower costs are clearly desirable, and recent returns may not be maintained at such high levels in the long run.

While some analyses have found that the costs are actually low when compared with other alternative financial products, this comparison is fraught with problems. While comparisons are complex, it is interesting to consider the destination of the resources received by the AFJPs. Figure 7 shows the structure of operating expenses of the AFJPs, as a percentage of the social security collection for each fiscal year (July to June), since the beginning of the system.

We can easily observe that the total costs have decreased since the beginning of the system, when they exceeded 40 per cent of the collection, up to the fifth year, when they were below 25 per cent. This reduction was due originally to lower costs of disability and death insurance and the reduction of administrative expenses. Since late 1997, the reduction in expenditures on marketing and sales force has been greater.

Two different approaches have been proposed to reduce the fees in the system. One proposal is that the government should promote a reduction in costs of the managing companies, as an indirect way to promote price reductions. For example, a draft law has been presented in Congress to set maximum levels of commissions. While well intentioned, such measures could result in higher market concentration and decline in quality of service, as well as market cartelization. Instead, policies that would promote price competition may achieve a similar result without the negative outcomes.

In an attempt to reduce costs, industry representatives have proposed limiting workers' rights to switch funds. The logic of this restriction is that if switches are less common, AFJPs would reduce expenses in related activities to attract new contributors. This measure could facilitate a reduction in the expenses of AFJPs (because they would not need to spend as much on marketing), but it would limit the possibility of choice of the contributors and, therefore, the efficiency driven by competition. Consequently, the drop in expenses would not necessarily be translated into reductions of commissions if the administrators tended to

[14] For the international debate, see Whitehouse (2000).

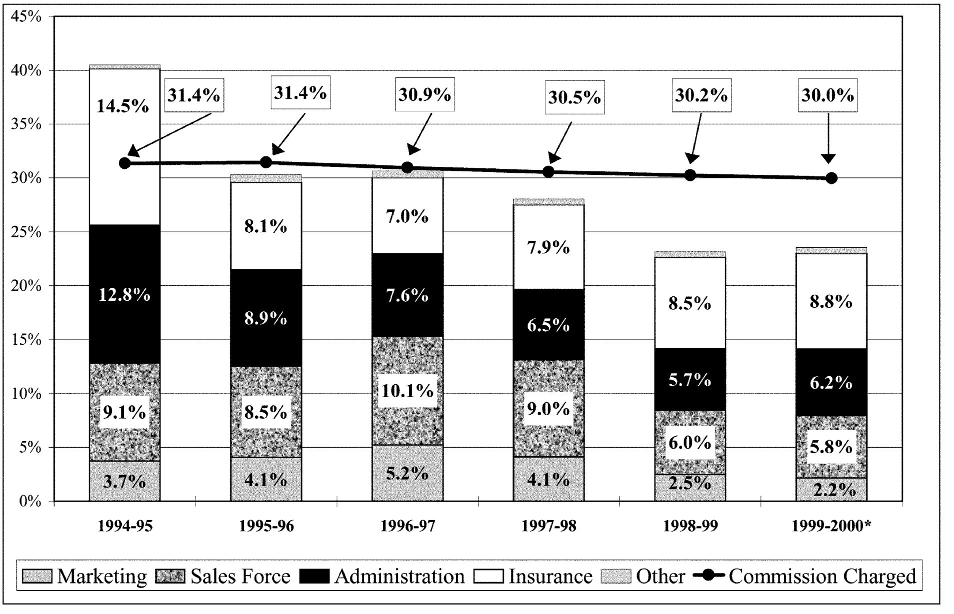


*Figure 7: Commissions and operating expenses, as a percentage of the collected contributions*

*Note*: 1999–2000 includes July 1999 to March 2000.

*Source*: Own, based on data from the SAFJP.

cartelize, and we could end up with a more concentrated, less competitive and equally expensive system.

Alternatively, other authors such as Braberman and Chisari (1999) have proposed simplifying and liberating the rules for transfers. The idea in this case is that the existing restrictions to transfer from one AFJP to another reduce competition in the market, and increase the benefit a managing company obtains when a worker joins it. Instead, if the contributor could change without the intervention of sales representatives (through automated mechanisms) and as often as he or she wants, the "value" of adding a contributor would be lower and the AFJPs would not spend large amounts to attract new affiliates.

*Market concentration.* The process of concentration in the sector, which had 24 administrators operating when the system began and 13 by the end of 1999, should be carefully monitored. As of the end of 1999, more than 70 per cent of the contributors belonged to four AFJPs, with the largest one covering 21 per cent of the market. While it is desirable to allow the different companies to develop their own strategies to reach the optimum number of contributors for their scale of activity, the risk of an excessive concentration that restricts competition in the industry should be considered. In this context, it would seem reasonable to establish a limit to participation, around 20 per cent, in order to avoid a situation where one or two firms control the market.

### 3.4.2. Regulation alternatives to increase efficiency: the problem of volatility

Another issue that deserves some attention is the risk AFJP contributors face due to volatility of returns on investments. Volatility generates two different problems. First, volatility of the funds while workers are still active affects credibility of the system, since workers may see their individual account balances drop rapidly in some periods. This does not generate any immediate harm to the workers, because their benefits depend on the balance of their personal accounts when they retire, and not before. The Superintendency must limit investment in highly volatile instruments as well as investments on low liquidity instruments with non-transparent markets.

Volatility at the time of retirement is more important, because of the real possibility that individual account balances may be reduced abruptly immediately before an annuity is purchased. One question to consider is how sensitive the benefit a worker will receive from the SIJP is to changes in capital markets. Considering the role of PBU and PC, plus the fact that an important percentage of pension fund assets are fixed-return instruments, it is possible to show that a drop in the capital markets would have a minor effect on all the workers who retire in the next few years. This is because neither the PBU nor the PC are affected by capital market volatility and, at the same time, the benefit generated by the individual account of the funded scheme will be small. In the longer term, the effect would still be small for an important number of workers, since more than 50 per cent of them may expect to receive more than half their retirement benefit in the form of a PBU. These lower-income workers will receive a high share from the flat-rate, public benefit because the level is high relative to their own wages.

Although the magnitude of the problem might not appear very great, it is reasonable to explore alternatives that restrict its effect. One possibility is that the AFJPs offer their clients a second portfolio concentrated on fixed-earnings instruments. This fund would allow members to restrict their exposition to market volatility, decreasing the risk of retiring at a relatively low level, although it is clear that the costs of more security would be reflected in lower expected returns. If a measure like this were implemented, it would be important to limit the possibilities of making fast and full transfers from a "traditional" to a "conservative" fund, in order to reduce the negative effects of financial panics.[15]

Another alternative is to allow the progressive acquisition of deferred annuities. If, for instance, a worker is five years from retirement, he or she could start to progressively acquire an annuity, every year transferring 20 per cent of the individual account balance to the retirement insurance company personally chosen. This would further reduce the person's exposure to short-term variations in the market, because these would only affect part of the funds. This mechanism would be relatively simple to implement, because it would only require a choice of retirement insurance company in advance with an automatic, progressive transfer of funds. The application of such an idea should be seriously considered for the medium and long term, when the benefits of the funded regime start to be a more significant part of the retirement payment. However, a successful implementation requires the existence of annuity providers operating in the context of a strong and well-regulated insurance industry, a requirement that is far from being fully achieved in Argentina, as we will see next.

[15] This option is already available in the private pension systems in Chile and Poland.

### *3.5. The insurance industry and its relation to the pension system*

Insurance companies have a role in the pension system at two different stages. First, AFJPs are required to buy an insurance policy to cover disability and mortality risks. If a worker contributing to the fully funded scheme dies or becomes disabled, the AFJP is required to complement that individual's account balance up to an amount enough to buy an annuity that would provide a lifetime defined benefit. In addition, beneficiaries may choose to receive their monthly payments through an annuity provided by an insurance company. The markets for both activities seem to have serious problems of competition and regulation as discussed next.

#### 3.5.1. Disability and death insurance

In the case of disability and life insurance, practically all the insurance companies are part of the same economic group as the AFJP that contracts them. (The only AFJPs that do not contract related companies are the two smallest, with less than 1.5 per cent of the market.) This situation makes it very difficult to assess whether prevailing insurance rates correspond to reasonable market value if they reflect financial transfers between related companies. Grushka (1999) showed that there is an important dispersion in the fees, ranging (in December 1998) from 0.59 per cent to 1.45 per cent of the taxable income, without it being possible clearly to associate these differences with any characteristic of the insured population, such as the scale of the AFJP, gender, employment condition, age or income level of the contributors.

Additionally, there are no serious studies on incidence rates, making it extremely difficult to assess if insurance companies' reserves are adequate, insufficient or excessive. Currently, the retirement insurance industry reports an annual loss of $25 million, and re-insurance companies have lost more than $120 million. These figures should be analysed considering that there are serious difficulties in defining the adequacy of the established technical reserves.

#### 3.5.2. Benefits in the funded scheme

The new system allows beneficiaries from the fully funded scheme to choose whether they want to receive their payout as an annuity (through a retirement insurance company) or as a scheduled withdrawal. In this last case, the beneficiary remains a member of the pension fund, and makes monthly withdrawals from her or his individual account, maintaining the ownership of the funds.[16] The main reason for creating this mechanism was to introduce competition with annuity providers. But it also has several negative effects on the system. It gives workers the possibility of opting out of annuities markets, making room for adverse selection. Since regulations establish that in the case of death of the beneficiary with no spouse or under-age children the balance of the account will be inheritable following the usual criteria, part of the resources accumulated with a retirement goal may end up being transferred out of the system, reducing the average benefits that are paid to the beneficiaries. Grushka (1999) estimated that the loss of funds might cause a reduction of as much as 15 per cent in average benefits as a result of unintended bequests.

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[16] The amount withdrawn every month must be agreed with the AFJP, with a maximum limit equal to what an annuity would pay to this beneficiary.

With regard to market transparency, there is a serious problem in the annuity providers industry. More than 85 per cent of annuities are issued by a retirement insurance company tied to the AFJP to which the beneficiary was affiliated prior to retirement. This suggests that competition is very weak. A partial explanation of this situation is the total lack of transparency in the market. Each insurance company offers an annuity product structured in a different way, making it almost impossible to fully compare them. Regulations should aim to produce simple products, making comparison between different offers easier.

There are other problems in the way annuities are defined that make them more expensive for retirees, reducing the benefits. On one hand, the mortality assumptions currently used are based on higher life expectancies than the real ones for the Argentine population, generating a reduction in benefits of 6 to 8 per cent (Grushka, 1997). It is not clear whether these reductions are justified by a higher life expectancy of annuitants. At the same time, no indexation is included in the contracts, so that the real value of benefits could drop significantly. This problem is partially solved since annuities can be defined as variable (with a percentage of returns obtained over the guaranteed 4 per cent being transferred to beneficiaries) and they can also be defined in U.S. dollars, reducing the country-specific risk.

Finally, the mechanisms of financial and institutional supervision of retirement insurance companies seem to be less solid than those applied to AFJPs. The reason is, partly, the institutional weakness of the National Superintendency of Insurance, as well as differences in criteria used by insurance versus pension system regulators. The debate over the need for appropriate regulations and market transparency in the annuity providers' industry in Argentina and other Latin American countries has been growing over the past couple of years. Palacios and Rofman (2000) present a detailed discussion on the current situation and policy options on this issue.

## 4. Conclusions

This paper has presented a general overview of the pension system in Argentina after the 1994 reform, describing the basic features of the new system and presenting some information on its performance in its first six years. The main section is devoted to considering the problems that have to be confronted and solved in order to guarantee successful development of the system in the future.

In the discussion, four areas critical for the consolidation of the system are identified. The first one is the coverage level, which will tend to decrease in the future unless structural changes take place quickly in the labor market in Argentina. The reform of the social security system implemented in 1994 made its contributory elements stricter, resulting in greater financial stability and the exclusion of a group of workers who previously had access to benefits. While this goal may seem reasonable to promote compliance, it has made it necessary to develop an efficient and transparent non-contributory pension system, in order to offer some financial support to people who do not have access to the benefits of the system. This would, of course, offset the fiscal savings from the reformed public scheme to a certain extent.

The second issue, financial sustainability of the public scheme (which includes the old system, the new first pillar, the new PAYG second pillar and the transitional benefits), seems stable in the medium term, as a consequence of the reform of the system. Nevertheless, the financing of the transition process, that will take approximately 20 years, should be planned in more detail. In addition, the reductions in the current and planned employer contributions will strongly influence the system's financial balance. In particular, there should be an explicit allocation of tax resources to cover the projected deficits caused by the reduction in earmarked labor taxes. It is interesting to note that there is so far no evidence that reducing labor taxes has had any positive impact on formal sector participation and compliance, although more study is needed before conclusions can be drawn.

Due to errors in the original implementation, the automatic indexation of the benefits of the public regime was eliminated in 1995, so that increases in benefits are now defined on a discretionary basis by the government. It is important to reintroduce a technically and financially reasonable mechanism for automatic indexation, to increase the transparency and predictability of the pay-as-you-go system.

The challenge of reducing administrative costs of the fully funded scheme was highlighted. Mechanisms to reduce them should be found while protecting the competitive aspects of the new system. Among the reasons identified that may explain costs, it is obvious that the low price elasticity of demand is fundamental. In fact, contributors do not seem to make their choice of AFJP taking into account the commission they are charged. To correct this, it is critical that supervising institutions make an effort to increase the information the affiliates have on the subject. An issue that should also be considered carefully is the level of concentration of the industry, which could lead to cartelization and price collusion. Therefore, careful supervision is required. Replacing the current mechanism of allocation of undecided contributors with one that favors the AFJP with lower fees would certainly generate an incentive to reduce the commissions.

Much has been said about the need to protect contributors from short-term market volatility. This problem may have received more attention than warranted in Argentina, since a large part of benefits will still come from the public scheme, and short-term volatility during contributing years has no serious consequences for most workers. Some additional protection to retiring workers could be devised, such as creating a second, less exposed portfolio for those close to retirement, or allowing the acquisition of deferred annuities before retirement, but the problem does not appear to be a critical one nor are the proposed solutions without problems.

The disability, life insurance and retirement annuities markets present potential conflicts that should be resolved. The main problems in this area are concentrated on the lack of reliable studies on incidence rates (which might be much higher than currently estimated), the use of unreasonable assumptions in actuarial estimates, and weak competition in the markets. Furthermore, the supervision of the industry is also weak and rather slow, generating important risks to the system. Regarding annuities, we conclude that mandatory annuitization of benefits (eliminating scheduled withdrawals) is to be recommended, although serious work to improve efficiency and competition in the annuities market is required.

In short, the new Argentine social security system, after six years of operation, is still going through a development process, and a number of problems, some of them important in the medium term, and others more urgent, should be corrected.

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