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Aging and Social Security in Argentina: Institutions, Public Policies and Challenges

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Summary

In this paper we briefly describe the characteristics of the aging process and the Social Security-Pensions System in Argentina. We analyze the evolution of coverage through different concepts, both at "working" and "old" ages. This analysis takes into account the recent changes in social security demands derived from demographic trends and the changing aspects of the labor market. Later we discuss the general goals and restrictions of pension systems, considering issues like coverage, level of benefits and financing. In the following section, we analyze the advantages and disadvantages of three alternative pension schemes: a universal minimum income, a targeted minimum income, and an income tied to incentives. Finally, we discuss these alternatives for Argentina quantifying both the targeted population and the possible fiscal costs for the period 2000-2025.

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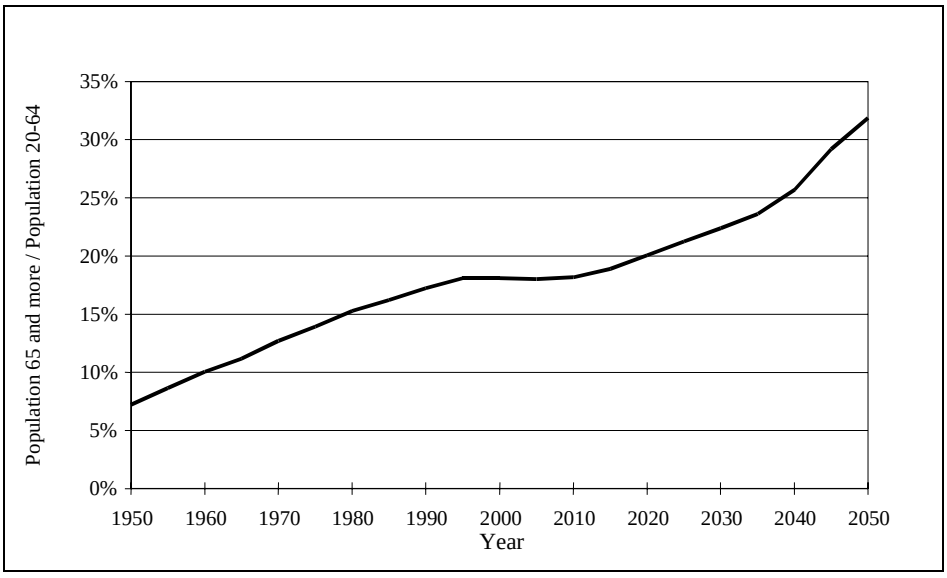
Preliminary version, do not quote.

1. Introduction: aging, labor markets and social security in Argentina

Similarly to what is happening in other high and middle income countries worldwide, Argentina has been facing a continuos aging process over the last decades. This process is the result of both a reduction in fertility rates and an improvement in survival rates at old ages. As a consequence of the aging process, the potential dependency rate, defined as the number of elderly every one hundred adults[1], has gone from 7% in 1950 to 18% in 2000, and it will reach 32% in 2050 (Figure 1).

Figure 1: Dependency Rate, Argentina 1950-2050



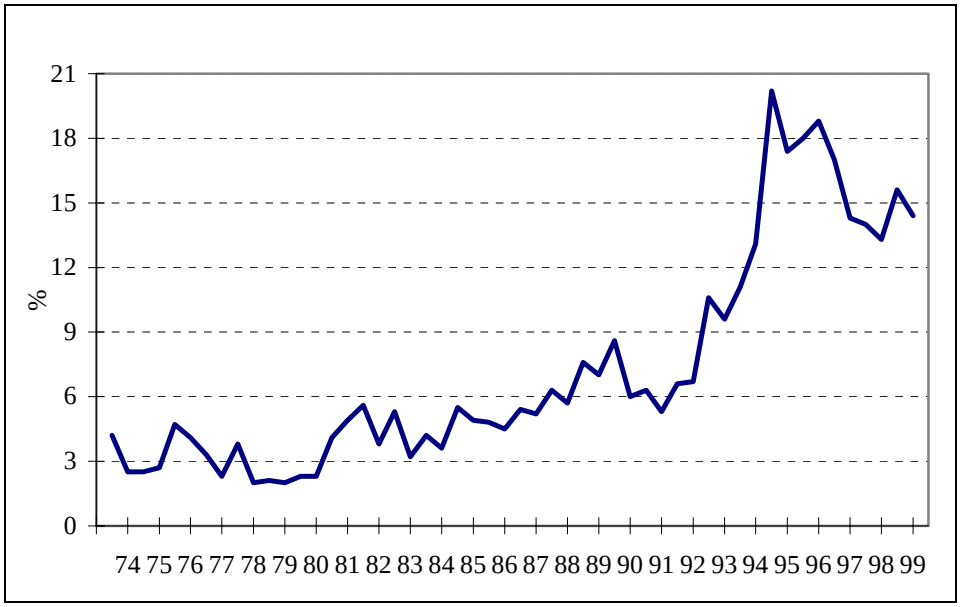
The consequences of an aging process for a society, have been well studied in the literature, in particular those that affect social security-pension systems. The demands for income maintenance at old age grow substantially giving the higher needs (for instance in medical and home care) and the limited possibilities of the elderly to generate labor income by their own.

The fact that public policies toward fertility and longevity are in general ineffective in the short term, the social security pension system needs to be adapted to this new demographic scenario. Moreover, this is not the only problem that social security faces in Argentina. There are other important restrictions originated in the nature and current situation of labor markets. Traditionally, these markets have shown in Latin American countries a dual dimension with large proportions of the labor force relegated to the informal market usually without any social security protection. This characteristic of labor markets has been aggravated over the recent years in Argentina because the

[1] "Elderly" defined as people 65 years old and more, and "adults" as people between 20 and 64 years old.

structural reforms and the huge increase in unemployment rates (see Figure 2). From 1974 (first year with labor data from population surveys) to 1986, the urban unemployment rate was kept under 5%, i.e. close enough to full employment. The following ten years, the unemployment rate moved upward to a step lying between 6 and 8%. In 1993, however, the unemployment rate jumped to reach higher levels because the economy started gaining in labor productivity due to the process of structural reforms with intensive substitution of the labor factor and a wide program of privatization. With the 1995 Mexican crisis, the economy entered a recession and the unemployment continued raising to reach 20%, and later declining to approximately 15%. The high unemployment rates urged the government to implement policies to promote employment by reducing employers' social security contributions and promoting employment programs without social benefits taxes. Consequently the higher incidence of unemployment and the policies to promote employment by reducing or eliminating social security contributions seriously deteriorated the fiscal imbalances of the social security budget.

Figure 2: Urban unemployment rate, Argentina 1974-1999



2. The Argentine pension system

Social security-pensions is provided in Argentina by a complex arrange of public and private institutions (Table 1), however the bulk of the coverage is provided by the national contributory system denominated *Sistema Ingregrado de Jubilaciones y Pensiones* (SIJP). Participation in the SIJP is mandatory for salaried and wage earners in the private sector, self-employed workers, public servants in the National Government and public servants in Provincial and Municipal Governments that have joined the SIJP.

There are also other contributory and non-contributory schemes. Among the contributory schemes not included in the SIJP we find: (1) the armed and security forces, (2) the provincial and municipal public servants that have not joined the SIJP, and (3) professional workers pension funds. The non-contributory scheme (*Programa de Pensiones No Contributivas* or PNC), which is financed from general tax revenues, is not administered by social insurance but by the Ministry of Social Development.

Table 1

Institutions Providing Social Security-Pensions

	Type of Scheme	Institution	Type of administration
SIJP (*Sistema Integrado de Jubilaciones y Pensiones*)	Contributory	ANSES	Public / Social Insurance
		AFJP [1/] and Insurance Companies	Private
Other Social Security Institutions	Contributory	Armed and Security Forces Schemes	Public / Social Insurance
		Provincial and Municipal Public Servants Schemes[2/]	Public / Social Insurance
		Professional Workers' Schemes	Private
PNC (*Programa de Pensiones No Contributivas*)	Non-Contributory	Ministry of Social Development	Public

[1/] *Administradoras de Fondos de Jubilaciones y Pensiones* (Pension Fund Management Companies)

[2/] Provincial and Municipal Governments that have not joined the national SIJP.

The national contributory system was structurally reformed in 1993 and the new system (SIJP) started operations in June 1994. The SIJP follows a "multi-pillar" "mixed" structure made up by a combination of a Public PAYG Regime and an Individual Fully Funded Regime. All workers are contained in the first pillar but they can choose the modality of the second pillar. The three pillars of the system have the following characteristics:

- *First pillar*: run by the state, compulsory and offers a basic defined benefit (PBU)
- *Second pillar*: two alternative compulsory schemes, one run by the government with a PAYG defined benefit (PAP), the other it is funded and run by private managers that pay an ordinary retirement benefits (JO) in relation to past contributions based on savings in individual accounts.[2]
- *Third pillar*: run by private managers, it is voluntary and allows additional savings for those who choose the fully funded regime as the second pillar.

Workers in transition from the old system to the new one are also entitled to recognition for contributions to the previous system. The acknowledgment of these contributions takes the form of a defined benefit at the moment of retirement denominated Compensatory Benefit (PC). This benefit is based on pre-retirement income and the number of years with contributions to the old system.

The benefits of the first pillar (PBU), the PAYG benefit in the second pillar (PAP), the compensatory benefit (PC) and the benefits paid out under the old system are administered by a social insurance government agency, the National Administration of Social Security or ANSES (see Table 2). Entitlement conditions for any public benefit paid under the new system require 30 years of contribution and a minimum eligibility age (65 for men and 60 for women).

[2] Disability and survivors benefit are financed by the second pillar depending the option made by the worker (PAYG or fully funded).

Table 2

Pension Benefits and Administration in Social Security in Argentina

SIJP and PNC

		Worker's choice		Administration
		PAYG Public Regime	Individual Funded or Mixed Regime	
Contributory system	1st pillar	PBU	PBU	State-Social Insurance
	2nd pillar	PAP		State-Social Insurance
			JO	Private managers and insurance companies
	Workers in transition	PC	PC	State-Social Insurance

Non-contributory system	Social assistance benefits [1/]	State-Welfare

PBU is a defined universal basic benefit paid in both schemes (PAYG and IF)

PC is a defined benefit for workers in transition that acknowledges contributions to the old system.

PAP is a defined benefit for workers who choose the public PAYG regime.

JO is an ordinary benefit that takes the form of an annuity or a phased withdrawal

[1/] Include different type of pension benefits: old age, disability, special benefits granted by members of Congress, etc.

The fully funded individual accounts are managed by privately owned Pension Fund Managing Companies denominated AFJP (*Administradoras de Fondos de Jubilaciones y Pensiones*). The fully funded scheme pays an ordinary benefit (JO) in the form of annuities, scheduled withdrawals or fragmentary withdrawals. In the first case, the beneficiary can buy an annuity from a retirement insurance company by transferring the balance of the individual account to the chosen insurance company.[3] Alternatively, beneficiaries can leave their balance in the pension fund, and agree with the AFJP to withdraw a monthly payment that cannot exceed what they would get from an annuity.

[3] Annuity contracts are regulated and only life annuities that include survivors benefits are allowed. The basic parameters used to calculate the benefits (life tables an interest rates) are defined by the supervisory agencies. (Grushka 1999, Rofman 2000)

Every year the agreement is reconsidered and amounts are adjusted, with a reduction unless returns were high enough to compensate for the aging process. At any time, the beneficiaries may use their balance to buy a regular annuity.[4]

In summary, as a result of the combination of different benefits, workers in the SIJP earnings-related PAYG Public Regime receive after retirement the PBU, PC (only if contributed to the system before 1994) and PAP, while those in the Individual Fully Funded (Mixed) Regime obtain the PBU, PC and JO. In case of disability or death, members of either scheme receive similar benefits, although the financial mechanism used is different (see for details Grushka and Demarco 1998, and Rofman 2000).

While membership to all pension schemes is estimated to be 11 millions, the number of actual contributors is less than 6 millions. The SIJP represents about 79% of the total contributors to pension schemes. The number of beneficiaries in the SIJP is about 3.3 millions, while the non-contributory program PNC accounts for 0.3 millions. (For detailed data, see Appendix)

Th financial indicators of the SIJP indicate that in 1999, total revenues were about US$ 9,485 million, from which $5,098 million corresponded to PAYG and $4,387 million to the fully funded scheme. Given that the last resources are kept in individual accounts, the PAYG system faces an important imbalance. Its expenditures totaled in 1999 about $14,681 million that were almost totally allocated to pay for retirement and pension benefits from the old system. The expenditure of the non-contributory scheme was about $680 million, meaning that overall pension expenditure (SIJP+PNC) was about 6% of GDP.

3. Two dimensions of social security-pensions coverage: active workers and old age

3.1 Concepts and definitions

The goal of measuring and predicting the levels of coverage of the Argentine Pension System is a task of extreme complexity given that not only individual factors are involved (age, sex and labor situation), but also family (such as marital status and presence of underage children) and time factors (cross-section and longitudinal). The mostly used indicator of old age coverage in the literature is the proportion of the elderly who perceive pension benefits. This personal coverage indicator has at least three limitations: (a) it changes significantly with the age group selected; (b) people who are still attached to the labor market is usually considered uncovered; (c) it ignores that in many cases (specially women), coverage can be available through the spouse's wage or pension. The last shortcoming is conceptually equivalent to evaluate coverage by household units instead of individuals. For the Argentine case, the recent evolution and alternative measures of coverage in old age will be presented and discussed in more detail in the following section.

[4] For more details on retirement, survival and disability benefits see Rofman (2000), SAFJP (1998) and SAFJP: www.safjp.gov.ar.

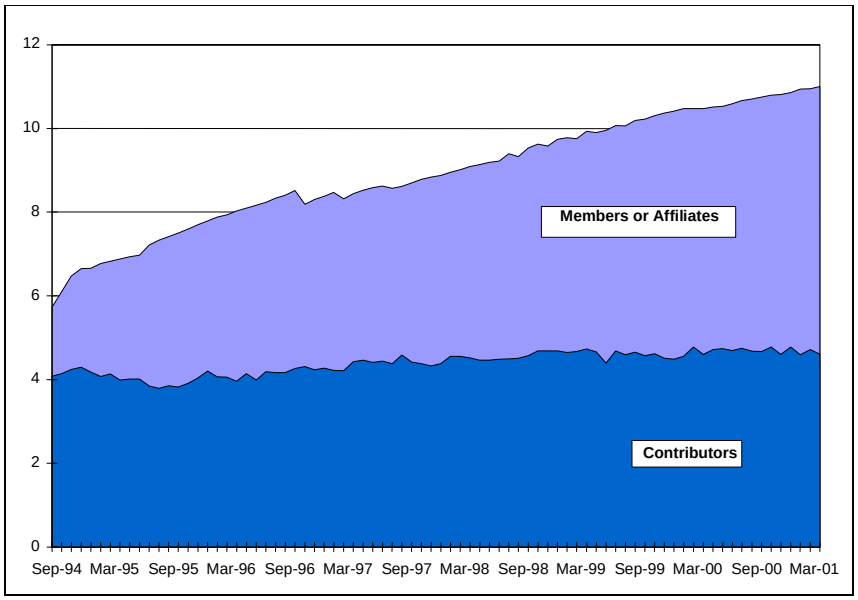
An alternative approach consists of considering that in the long term, coverage strongly depends on the level of population participation in pension programs during working ages. This is particularly relevant in systems that are organized on a contributory basis and workers "earn" entitlements during their working careers. Consequently, many studies use as indicator of coverage the proportion of people in working age that are members (affiliates) of pension regimes. The definition of affiliates implicitly includes the typical wage earner, i.e., an employee in the formal sector of the economy who maintain such category through the entire course of their active life, whose risks of mortality and disability are covered and, more likely, she has entitlements for a retirement pension.

The definitions and indicators of coverage, however, have increased their complexity, and diminished its precision with the changes that have been recently taking place in the labor markets (specifically the greater rotation of workers, the growth of unemployment and the proliferation of flexible forms of hiring or 'promoted modalities of employment'). Also the implementation of the new SIJP Pension System in 1994 made necessary to adapt the concepts previously mentioned.

The available statistics on coverage, at the moment, have not accompanied the mentioned changes (Pok 1999, Wainerman 1999). After the 1994 reform, the relationship "contributors / membership" (the proportion of those who indeed paid mandatory contributions during a given month over all the affiliates to the SIJP) is usually used as indicator of coverage. Thus, the complement is misleadingly denominated "evasion". The former relationship diminished between September 1994 and August 1999 from 76% to 46%, since the number of affiliates increased from 6 to 10 million (growth of 76%), while the number of contributors oscillated around 4.5 million (growth of 3.5%).

The reason for the remarkable reduction for the relationship contributors / membership is not a change in compliance, but the conceptual difference between the variables involved. While the membership indicator has "memory" (i.e., once workers have made a contribution, they remain in the database even though they may have changed their labor status to unemployed, etc.), the number of contributors only depends on the effective number of workers who have complied with contributions in such period. A much better approach would be relating contributors to another indicator without "memory." Two variables that fulfill this requirement are the number of employed people and the labor force.

Figure 3: Evolution of affiliates and contributors in the SIJP (millions)



Source: SAFJP based on data from AFIP-DGI.

3.2. Pension coverage at old ages

3.2.1. Trends in old age pension coverage

If the measurement of the levels of coverage at a given date is a complex task, to follow its evolution through time is still more difficult. This is due to the multiplicity of conceptual, legal, institutional and socioeconomic changes that take place simultaneously. Nevertheless, some indicators can provide a reasonable idea of the recent evolution of coverage. Using data from the Household Permanent Survey (EPH), it is possible to compare the proportion that perceives any kind of pension among people aged 65 and over, in 1999 and five years earlier, before the reform of the pension system that established more restrictive requirements to get access to benefits. According to the information displayed in Table 3, the levels of coverage fell significantly, from 77% in 1994 to 72% in 1999. The fall was more significant for men (from 85% to 78%) than for women (from 71% to 68%) and it specially affected those younger than 75 years old (they lost between eight and nine percentage points).

The reduction observed in all groups is also verified if alternative definitions are considered, like the percentage of the population that perceive pensions of their own or through their spouse, or even if those who remain in the labor force are included. The effects are clear: the greater restrictions to acquire the benefits limited the flow of new beneficiaries. This phenomenon affected women (and widowers) to a lesser extent since they are mainly beneficiaries of survivors' pensions.

Table 3

Trends in pension coverage at old age by age group and gender

Population 65 years and over that perceives income from pensions.

Current Population Survey (EPH), May 1994-1999

Age Group	1994	1999	Difference
65-69	64.2 %	55.5 %	-8.8 %
70-74	80.3 %	72.3 %	-7.9 %
75-79	85.2 %	80.3 %	-4.9 %
80 +	87.2 %	89.6 %	2.3 %
Males	85.2 %	77.7 %	-7.5 %
Females	71.1%	68.0 %	-3.1 %
Total 65 +	76.7 %	71.8 %	-4.9 %

Source: authors based on 1994 and 1999 EPH.

3.2.2. Old age pension coverage: age and gender differentials using alternative definitions

A more detailed analysis of the cross section coverage allows a better identification of differentials by sex and age groups and the alternative definitions previously cited (Table 4). Coverage increases with age due to, among other factors, the granting of pensions at advanced ages (with lesser requirements) and the acquisition of pensions by widows. Widowhood among women grows from 35% for the age-group 65-69 years, to 73% for those 80 years and over. In addition, stricter requirements to accede to benefits might generate a cohort effect, and thus the current cross-sectional observation by ages exaggerates the growth of coverage with the age of each generation.

An alternative approach might consider that coverage should be measured at the household level since it is important that at least one of the spouses receive benefits. Thus, a definition more compatible with the one previously posited, is to count as covered all people who receive a pension directly or indirectly (through the spouse). In this case, the indicator of coverage grows to 82% for the population 65 years and over and to 94% for those aged over 80 years.

Additionally, it is possible to say that one reason for not perceiving retirement or pension is to remain attached to the labor force in order to receive a monetary remuneration for the work carried out. If it is considered that the permanence in activity is a voluntary selection, then a third indicator of coverage arises, that includes all people who receive direct or indirectly (through the spouse) an income through employment and/or pension. Obviously, coverage grows in this case, reaching 87% for population 65 years and over and 95% for those aged over 80 years. Nevertheless, the permanence in activity could be due to the impossibility to obtain pension benefits, which would constitute a serious limitation to this approach for measuring coverage.

Table 4

Pension coverage at old age

Alternative definitions by gender and age group, May 1999

Age Group	Men	Women	Total
Own Coverage (individual)			
65-69	62.7 %	50.5 %	55.5 %
70-74	81.2 %	67.0 %	72.3 %
75-79	86.8 %	76.1 %	80.3 %
80 +	91.8 %	88.4 %	89.6 %
Total 65 +	77.7 %	68.0 %	71.8 %
Own or Spouse Coverage (household)			
65-69	63.3 %	72.5 %	68.8 %
70-74	82.4 %	84.0 %	83.4 %
75-79	87.4 %	87.9 %	87.7 %
80 +	92.4 %	94.5 %	93.8 %
Total 65 +	78.5 %	83.3 %	81.5 %
Coverage by pension and/or employment			
65-69	82.2 %	82.0 %	82.1 %
70-74	88.9 %	85.4 %	86.7 %
75-79	89.6 %	89.4 %	89.5 %
80 +	93.5 %	95.3 %	94.7 %
Total 65 +	87.5 %	87.2 %	87.3 %

Source: Grushka (2001).

Summarizing, the proportion of population aged 65 and over without individual coverage reaches 28%, without joint coverage 19%, and without coverage by pension or employment 13%. Men present very superior levels of coverage with the first definition, slightly superior with the second one and equivalent to those of women in the last case. The lack of coverage diminishes with age, with variable proportions that depend on the definition used and the age groups considered. Note that the preference between the three alternative indicators of coverage depends on the intended use.

3.2.3. Old age pension coverage by type of benefit

The 1997 Social Development Survey (EDS) allows a more detailed analysis of the coverage by type of benefit. This is not possible with the EPH data because it only identifies the presence of pension income. Thus, pension coverage can be evaluated overall, and by each type of benefit individually.

The Argentine pension system considered as a whole (that is to say, in addition to the SIJP, the other smaller systems as the provincial ones, the armed and security forces, and professionals) offers coverage to a large proportion of the elderly population (65 years and over): 73.5%. Pension coverage grows, in average, from 22% for the age group 55-59 years, to 81% for those aged over 75 years (Table 5).

Table 5

Coverage of the elderly population (50 years and +) by type of pension benefit and age groups. EDS Survey. Percentages

Total						
Age	*50-54*	*55-59*	*60-64*	*65-69*	*70-74*	*75 y +*
Pension income	**11.5 %**	**21.6 %**	**36.3 %**	**57.6 %**	**73.4 %**	**80.6 %**
Retirement pension	7.0 %	13.4 %	23.4 %	42.6 %	52.7 %	48.2 %
Survivorship pension	3.4 %	7.0 %	11.4 %	14.9 %	22.0 %	34.4 %
Non-contributive pension	1.2 %	1.9 %	2.9 %	2.9 %	3.7 %	7.4 %
Men						
Age	*50-54*	*55-59*	*60-64*	*65-69*	*70-74*	*75 y +*
Pension income	**8.2 %**	**18.1 %**	**33.9 %**	**64.2 %**	**81.8 %**	**84.5 %**
Retirement pension	7.6 %	15.6 %	29.9 %	60.1 %	76.0 %	75.4 %
Survivorship pension	0.4 %	1.5 %	2.4 %	3.3 %	4.9 %	8.2 %
Non-contributive pension	0.3 %	0.9 %	1.6 %	1.3 %	2.3 %	3.9 %
Women						
Age	*50-54*	*55-59*	*60-64*	*65-69*	*70-74*	*75 y +*
Pension income	**14.5 %**	**24.6 %**	**38.4 %**	**52.7 %**	**66.8 %**	**78.2 %**
Retirement pension	6.6 %	11.5 %	17.8 %	29.4 %	34.5 %	32.2 %
Survivorship pension	6.1 %	11.6 %	19.1 %	23.7 %	35.4 %	48.7 %
Non-contributive pension	2.0 %	2.6 %	4.0 %	4.1 %	4.8 %	8.6 %

Source: Bertranou (2001).

Women display in general greater coverage until age 65, and later on coverage for men increases substantially and reach its maximum level for those aged 80 years and over (Bertranou, 2001). Considering separately retirement and survivorship pensions, men show greater coverage of the first type of benefit, and women the latter. These differences reflect the typical pattern of provision of benefits by the social security system, structured on the model of bismarckian social insurance, where each family had a family head "breadwinner" working man with formal employment and a woman in charge of family caring and household work. The changes that took place in the labor market during the last decades suggest that the demographic composition of benefits will change given that a larger proportion of women will be entitled to pension benefits for their own.

A particular look needs to be done over the coverage of the denominated non-contributive benefits. These benefits, that include old age pensions (smaller amounts but lower requirements) and pensions granted by the National Congress, reach 3% in the group of 60-64 years and rise gradually up to more than 7% for those aged 75 and over. In terms of the total coverage, this type of benefit constitutes approximately 8% for the first mentioned age group and 9% for the oldest age group.

3.3. Pension coverage at working ages

The growth in the number of contributors to SIJP is largely due to the transfer of some provincial regimes, since they involve jobs that were making their contributions but were not counted in the SIJP. Thus, in the five considered years, the SIJP extended its reach registering a growth of 140,000 contributors (3%), although pension coverage, including from the beginning the contributions of provincial employees later transferred, decreased 4%. This represents a fall of more than 200,000 contributors.

In Table 6 data of the labor and pensions situation of the active population for years 1994-1999 is presented. Only the urban labor force is considered given the difficulty in obtaining reliable information for the rural sector. Pension coverage in Argentina also includes approximately one million of public employees from provinces that did not transfer their plans and about one hundred fifty thousand contributors of he Army and Security Forces and other professional plans. Based on approximate figures, the total number of contributors to the different pension regimes is near six million, with a slightly decreasing tendency in spite of the population increase.

Table 6

Labor and social security status of working age population 1994-1999

Population (in thousands)	October 1994	October 1999	Change in %
Urban population	30088	33230	10.4 %
Labor force	11929	13705	14.9 %
Employed	10529	11871	12.7 %
Unemployed	1400	1834	31.0 %
Affiliates to SIJP	5731	10065	75.6 %
Contributors to SIJP	4432	4571	3.1 %
Contributors to other contributory schemes1/	1500	1150	-23.3 %
Total contributors	5932	5721	-3.6 %

1/ Provinces, armed and security forces.

Source: Grushka (2001).

Table 7

Indicators of labor and social security coverage for working age population 1994-1999

Ratios	October 1994	October 1999	Difference
Labor force / Population (urban)	39.6 %	41.2 %	1.6
Unemployed / Labor force	11.7 %	13.4 %	1.6
Contributors SIJP / Affiliates SIJP	77.3 %	45.4 %	-31.9
Contributors SIJP / Employed	42.1 %	38.5 %	-3.6
Contributors SIJP / Labor force	37.2 %	33.4 %	-3.8
Total Contributors / Employed	**56.3 %**	**48.2 %**	**-8.1**
Total Contributors / Labor force	**49.7 %**	**41.7 %**	**-8.0**

1/ Provinces, armed and security forces.

Source: Grushka (2001).

In Table 7 different relationships tie the concepts described earlier. The ratio of total contributors to employed shows levels that decreased from 56% to 48% in the period October 1994-1999. The total contributors over the labor force experienced a similar decrease, from 50% to 42%. In our opinion, these are the best indicators of the level of pension coverage in Argentina.

To understand the reasons of the low levels of coverage (whichever it is the chosen indicator) it is possible to tie the lack of contributions with the growing frailty of the registered employment: in this period, unemployment grew simultaneously to the worsening of working conditions for employees. The urban unemployment rate (proportion of unemployed people over the urban labor force) grew from 11.7% in October 1994 to 13.4% in 1999, with a remarkable growth during the intermediate years and a tip of 18.4% in May 1995. The proportion of wage earners that do not contribute also increased, from 28% to 37% in the case of Buenos Aires Metropolitan Area. Additionally, an important variability exists among urban agglomerates ranging, in May 1999, from less than 30% to 49% (MTSS, 1999).

The 1991 National Census, that also includes the rural population, showed an average of 35%, with two provinces surpassing 45%. The analysis by area of activity indicates that domestic service was the most unprotected (93%), followed by construction (70%) and that the low percentage of the public sector (6%), did not reach to compensate the level of frailty (37%) of the private sector (INDEC, 1995).

The growth of the proportion of wage earners without pension contributions is due, among other factors, to the increase of the so-called promoted modalities (apprentices, fixed-term contracts in its great majority without pension contributions) that was impelled with the intention to fight unemployment. During October 1998, employment direct programs reached to 135 thousand people (305 thousands in all the year), standing out the program '*Trabajar*' with two thirds of the benefits (MTSS, 1999). The fixed-term contracts and apprentices involved 500 thousand people. According to the Survey of Labor Indicators (made by the Ministry of Work and Social Security in Great Buenos Aires), the proportion of contracts under those modalities was 5% in April 1996, a year later grew to 18%, reaching 15% in the third quarter of 1998. In April 1997, 85% of the registered incorporations to the formal labor market corresponded to these frail modalities, proportion that was reduced to 67% in October of 1998 (MTSS, 1997; MEOSP, 1998).

Another indicator of the changes in the labor market is tied to the growth of the rotation; unemployment grows not only because it is more difficult to find a job for those already unemployed but also because many employees lose their state. The proportion of employees that six months later was unemployed was around 4% during 1991 to 1994 but almost duplicated, surpassing 7% from 1994 to 1997. While between 1991 and 1994 less of a quarter of the unemployed stayed in that category six months later, this proportion grew to more than 40% between 1994 and 1997 (INDEC, 1997).

In summary, the analysis of the evolution of coverage in the pension system in Argentina has demonstrated that it faces a crisis of important dimensions again. When trying to improve the fiscal situation of the system, the 1993 reform (implemented by mid-year 1994) exposed the weakness of the contributing model due to its excluding character in the presence of a labor market with high unemployment and structural informality. Argentina maintained a pension system that, historically, carried out its roll suitably, in the sense to replace income and to preserve workers and their families off poverty, but its capacity to cover these problems has been reduced significantly. From 1994, the number of beneficiaries decreased, in a context of population aging. The combined effect produced a reduction in the pension coverage for those aged 65 and over of near a

percentage point per year falling from 77% in 1994 to 72% in 1999. This is equivalent to exclude about 40,000 aged people every year. If this trend continues, a significant proportion of the old ones will be without coverage in the next decades.

The panorama is really worrying if it is considered that the pension system is based mainly on the formal employment, and that the indicators of the labor market have clearly deteriorated. The perspectives for pension coverage are shady because trends in the coverage of the active workers are also negative. The level of contributors to the pension system fell between 1994 and 1999 in approximately 8%, as proportion of either total or employed labor force.

4. Alternative schemes for re-organizing the pension provision

The limits of the SIJP contributory scheme, the structural problems of labor markets and the nature of current financing of the pension system[5] force us to think about new ideas to re-organize social protection through pension programs in Argentina. These new ideas do not necessarily imply a new structural reform but avenues that could contribute to overcome two of the main problems of the current system: coverage and financial sustainability.

A good way to start thinking about new ideas is to characterize public provision of social security-pensions around the globe. Table 8 defines four group of countries with alternative schemes of public pension provision along with characteristics of labor markets and coverage outcomes.

As it was discussed in the previous section, Argentina has reached a relatively large coverage at old age thanks to policies that in the past allowed relaxing entitlement conditions in the contributory system and by implementing a non-contributory scheme to reach people in special needs excluded from the contributory program. The high extent of informal labor markets, the decline in compliance and the limits in fiscal resources to expand coverage within the current social security framework make us think that Argentina is slowly moving from the second to the third group of countries. In the five years after the reform, old-age coverage has declined 1% per year, meaning that a large proportion of the elderly is not getting any pension benefit and in risk to fall into poverty.

[5] Approximately 70% of the resources of the public programs come from general tax revenues while the remaining 30% correspond to employee and employers wage and salary contributions.

Table 8

Alternative scenarios for pension schemes, labor markets and coverage outcome

Characteristics of public pension provision, labor market and old-age coverage		Countries
1	- Contributory pension scheme - Low extend of informal labor markets - High coverage in old age	Germany, France, Spain
2	- Contributory pension scheme - High extend of informal labor markets - High coverage in old age	Argentina, Chile, Brazil
3	- Contributory pension scheme - High extend of informal labor markets - Low coverage in old age	Mexico, Peru
4	- Non-contributory pension scheme - High coverage in old age	Australia, New Zealand, Maurice Republic

Source: authors based on Palacios and Pallares (2000).

The main policy question is, therefore, how to re-organize social security pension programs towards a strategy of reaching universal coverage minimizing the demand on new fiscal resources. Table 9 briefly summarizes three alternative schemes that could be useful to think about re-organizing pension provision in Latin America. The three alternatives summarized are: a universal minimum pension income, a targeted minimum pension income, and a pension income tied to incentives. These alternatives have been widely discussed theoretically and empirically in the literature and Table 9 only summarizes their main characteristics, highlighting pros and cons.

Given that one of the most important current drawbacks of the Argentine pension system is its limits to extend coverage, the only way to guarantee reaching this social policy goal would be considering an alternative between the universal or the targeted minimum income. Therefore, the following section discusses the magnitudes of the targeted population and the fiscal burden of several alternative programs that might contribute to fulfill the mentioned goal.

Table 9

Three stylized schemes of pension provision for Latin American countries

Evaluation criteria	Alternative Schemes		
	Universal minimum income	Targeted minimum income	Income fully tied to incentives
	Non-contributory	Partially non-contributory	Contributory
Coverage	HIGH By definition covers all population in old age	MEDIUM It depends upon the extend of the non-contributory component	MEDIUM / LOW It depends upon the extend of the informal labor market
Income replacement	LOW In general low replacement given the fiscal limitations to implement a large benefit	LOW / HIGH It depends how targeted is the benefit and the fiscal resources available for it.	MEDIUM It depends if the benefit is tied to incentives such as years of service and amount of contributions
Fiscal burden 1/	HIGH Specially if the population is aging	MEDIUM It depends upon the definition of the targeted population	LOW Unless the system faces bankruptcy
Pros	1. There are no errors of exclusion 2. The benefit may be interpreted as a "citizenship benefit"	1. There is a minimization of errors of inclusion	1. There is a clear match between effort (contributions) and benefit
Cons	1. Benefits may be perceived as insufficient if there are no other saving mechanisms for retirement 2. It may be less progressive than a well-targeted program 3. It may generate disincentives for private saving	1. There may be errors of exclusion if the program is not well targeted 2. It generates incentive distortions for private savings or compliance with the mandatory contributory scheme	1. People with higher risk of falling into poverty is less likely to be entitled to benefits
Policy options in Argentina	1. Changes in current contributory PBU benefit and the non-contributory program (PNC) towards a universal basic income program 2. Changes in current non-contributory program and extension of coverage to everyone not covered by SIJP.	1. New minimum income program for those without coverage from SIJP, PNC and other contributory programs. 2. Changes in current non-contributory program and extension of coverage to everyone not covered by SIJP.	1. It currently exists within the SIJP
Other relevant issues	Harmonization and compatibility with other social security and welfare programs such as the provincial public servant contributory schemes that have not joined the SIJP, and other non-contributory cash benefit programs at the provincial level		

1/ Understood as the fiscal resources needed besides those required by a contributory scheme from wage and salary contributions.

5. Alternatives for Argentina: targeted population and fiscal costs

According to the previous discussion and keeping in mind the short-term institutional restrictions, four relatively viable alternatives of implementation can be defined for a pension program that could fulfill the target of providing universal coverage. Another dimension to keep in mind refers to the fiscal requirements that will be discussed in each particular case. The alternatives to cover people older than a given age would be:

A. Universal minimum income, monthly benefit for every old age person

B. Targeted minimum income, monthly benefit for every old age person without any other personal retirement or pension income

C. Targeted minimum income, monthly benefit for every old age person without any other personal or spousal retirement or pension income

D. Targeted minimum income, monthly benefit for every old age person without any other personal or spousal labor, retirement or pension income

The alternative A presents advantages in terms of its low cost of implementation and supervision (particularly when the institutional capacities to carry out these tasks are limited). It also avoids opportunistic behaviors towards being included in targeted programs and it eliminates errors of exclusion in the program. This alternative, however, is in practice extremely costly in terms of fiscal resources.

Alternatives B, C and D are viable from the fiscal point of view, especially because the reengineering of existent programs would provide at least part of the necessary resources for its implementation. Also, the approach of having focused programs not only generates economy of resources, but rather it avoids the population of high resources to receive benefits that intend to eliminate poverty at advanced ages.

One of the inconveniences of targeted programs is the administrative cost that implies to minimize the inclusion errors. This cost should be kept in mind for the choice among alternatives B, C, and D. The administrative cost implied in targeting benefits for certain households might be higher than the benefits of increasing coverage. These programs may generate strong incentives to misreport household characteristics such as family composition and income sources.

Targeted programs face another possible problem: if they are intended to reach only poor elderly, the program may be seen and understood as social assistance. In this case, it is likely that eligible people exclude themselves due to the possible stigma that means to be beneficiary of this type of benefit.

In principle, alternatives B, C and D would be viable from the fiscal burden point of view and could be financed from two sources: new fiscal resources (i.e., those currently are not allocated to social security programs), and resources that currently are part of the social security budget but are allocated to other programs. There are two susceptible programs that could be reengineered to implement any of these alternatives: (i) the non-contributory pension program (PNC), and (ii) the contributory universal basic benefit (PBU) which is part of the set of benefits paid out by the SIJP.

The reengineering of PNC would imply to define clearer and stricter entitlement conditions according to age and socio-economic vulnerability. In practice, this would imply to replace these benefits by those of the new universal or targeted program proposed here. In the case of the PBU, one feasible alternative would be to reduce its level for all or part of the beneficiaries, sacrificing the goal of income substitution in favor of increasing the coverage.

Beneficiaries and fiscal burden of four alternative ways of re-organizing pension provision

The goal of defining the number of potential beneficiaries as well as the cost of a program is not an easy task. Consequently, we are forced to make some assumptions and simplifications. The main problem refers to the availability of detailed information on the quantity of people that are currently in the targeted population for each alternative. There are also difficulties in forecasting the targeted populations, particularly for the alternatives B, C and D. Moreover, given that the definition of the targeted populations generates behavioral responses, the forecasting task could be quite troublesome. For example, if alternative D is chosen, some older people may decide to retire earlier, increasing the number of potential beneficiaries of this program, instead of continuing in the labor force and getting a labor income.

The first problem outlined before was confronted by using the estimates obtained from the EPH population survey when studying coverage in the second part of this paper. Since it is not possible to distinguish different types of benefits in EPH, the percentages represent the population that do not perceive retirement benefits or survivorship pensions of any contributory or non-contributory system. Accordingly, the percentage of population 65 years old and over without personal pension coverage is about 29%, without personal coverage or through the spouse is 19%, and without coverage neither through pension nor employment (personal or through the spouse) is 13%. Thus, we use these figures in our estimates for strategies B, C and D, being aware that they are only approximations because they only represent the urban population of largest urban areas. Therefore, it may be reasonable to think that the actual values of people uncovered may be a little higher.

Table 10 contains estimates considering the target of providing coverage to the elderly population over 65. The goal of offering universal coverage as stated in alternative A (i.e., a monthly benefit of $150, or $1800 per year to 3.6 million aged over 65 years) would cost around $6,480 millions, equivalent to 2.2% of GDP. This figure could diminish to about $840 millions (alternative D), equivalent to 0.3% of GDP, as more restrictive approaches in coverage are applied.

Table 10

Alternative programs with benefits for elderly age 65 and more 1/

Year		Alternative A	Alternative B	Alternative C	Alternative D
		Universal minimum income	Targeted minimum income for every old age person without social security income	Targeted minimum income for every old age person without personal or spousal social security income	Targeted minimum income for every old age person without personal or spousal labor or social security income
2000	People aged 65 and more = 3.6 millions				
	- % to be covered	100 %	29 %	19 %	13 %
	- Population to be covered (thousands)	3600	1044	684	468
	- Cost (million $ year 2000)	6480	1879	1231	842
	- % of GDP	2.16 %	0.63 %	0.41 %	0.28 %
2025	People aged 65 and more = 5.8 millions				
	- % to be covered	100 %	29 %	19 %	13 %
	- Population to be covered (thousands)	5800	1682	1102	754
	- Cost (million $ year 2000)	8197	2377	1558	1066
	- % of GDP	2.73 %	0.79 %	0.52 %	0.36 %
2025 2/	People aged 65 and more = 5.8 millions				
	- % to be covered	100 %	50.3 %	35.2 %	29.2 %
	- Population to be covered (thousands)	5800	2917	2042	1694
	- Cost (million $ year 2000)	8197	4123	2886	2394
	- % of GDP	2.73 %	1.37 %	0.96 %	0.80 %

1/ Benefit of $150 monthly, or $1800 yearly, growing at the same rate of GDP per capita. Alternatives B, C and D are based on the three definitions of coverage given in section 2.
2/ Assuming a 30% fall in coverage.
Source: Bertranou, Grushka and Rofman (2001).

These values will increase progressively as a consequence of the aging population[6] since benefits are assumed to grow at a rate similar to GDP per capita (GDP growth less total population growth). Thus, assuming that coverage from current pension programs and labor income remains constant, the percentage of GDP that should be devoted to the different alternatives grows with time. This means that the cost of each of the proposed alternatives, *ceteris paribus*, should increase 27% in terms of GDP.

An alternative scenario could consider that coverage from current contributive pension programs fall. As pointed out previously, the 1994 reform implied tightening entitlement conditions generating a reduction in coverage of the SIJP. Although it is difficult to predict the exact magnitude of this fall, it is interesting to consider their possible consequences. If the proportion covered falls 30%, then the proportion to cover in alternative B will grow from 29% to 50%. A similar effect, although quite smaller, would be observed in alternative C, since some spouses of those who do not reach coverage will be covered (a 20% fall is assumed). Consequently, the proportion of population 65 and over to be covered by this new program would grow from 19% to 35%. The effect is even smaller in the case of alternative D, since the reduction in coverage does not affect the proportion that stays employed. In summary, the combined effect of population aging and lower coverage would be important, since it would imply a significant growth in total social security expenses, measured in terms of the GDP.

Given the possible financial difficulties to implement this new program under the different alternatives discussed before, it is convenient to consider further choices. Instead of restricting the benefits to those who do not have other benefits or income from labor, the benefits of the new program could be restricted to the oldest among the elderly. Thus, it is possible to outline the same exercise assuming that benefits would be granted only to people aged 70 and more (i.e., excluding those between 65 and 69). Naturally, this would imply a reduction in the desired coverage, since by definition it excludes those who are usually considered in age of retiring. In this case, coverage figures fall significantly because of the combination of two effects. It is evident that the targeted population decreases (almost a third). Furthermore, coverage increases with age because of the largest incidence of widows who perceive survivorship pensions. Lastly, a smaller effect is noticed in alternative D since participation in labor markets and employment for this population group is low. The results of these new estimates are presented in Table 11.

By reducing the targeted population from the elderly 65 and more to 70 and more, the fiscal burden declines in alternative A (universal coverage) from 2.7% of GDP in year 2025 to 1.9%. More significantly, the burden decreases to near the half for the other alternatives in year 2000 and in 2025 as well, except for the scenario with a fall in coverage, where the reduction is smaller.

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[6] Population 65 and over grows 2% per year while the total population grows 1% per year.

Finally, it is important to briefly discuss financing issues related to this new proposed program.[7] On one hand, it is possible to allocate new fiscal resources (i.e., funds currently not allocated to social security expenses), through new taxes or reallocating resources from the national budget. Alternatively, resources currently used in social security programs could be reallocated. Two tentative sources are the PNC program and the PBU benefit paid by the SIJP.

Table 11
Alternative programs with benefits for elderly age 65 and more 1/

Year		Alternative A	Alternative B	Alternative C	Alternative D
		Universal minimum income	Targeted minimum income for the elderly without social security income	Targeted minimum income for the elderly without personal or spousal social security income	Targeted minimum income for the elderly without personal or spousal labor or social security income
2000	People aged 70 and more: 2.4 millions				
	- % aged 70 and more to be covered	100 %	21 %	13 %	10 %
	- % aged 65 and more to be covered	33 %	15 %	10 %	6 %
	- Population to be covered (thousands)	2400	504	312	240
	- Cost (million $ year 2000)	4320	907	562	432
	- % of GDP	1.44 %	0.30 %	0.19 %	0.14 %
2025	People aged 70 and more: 4.0 millions				
	- % aged 70 and more to be covered	100 %	21 %	13 %	10 %
	- % aged 65 and more to be covered	31 %	15 %	10 %	6 %
	- Population to be covered (thousands)	4000	840	520	400
	- Cost (million $ year 2000)	5653	1187	735	565
	- % of GDP	1.88 %	0.40 %	0.24 %	0.19 %

[7] A deeper discussion of these issues will be required but it goes beyond the objectives of this initial paper.

2025 2/	People aged 70 and more: 4.0 millions				
	- % aged 70 and more to be covered	100 %	44.7 %	30.4 %	27.4 %
	- % aged 65 and more to be covered	31 %	19 %	14 %	10 %
	- Population to be covered (thousands)	4000	1788	1216	1096
	- Cost (million $ year 2000)	5653	2527	1719	1549
	- % of GDP	1.88 %	0.84 %	0.57 %	0.52 %

1/ Benefit of $150 monthly, or $1800 yearly, growing at the same rate of GDP per capita. Alternatives B, C and D are based on the three definitions of coverage given in section 2.
2/ Assuming a 30% fall in coverage.
Source: Bertranou, Grushka and Rofman (2001).

Current annual expenditure of the non-contributory pension program is about $680 millions. These resources might progressively be reallocated to this new program, but it is important to point out that, a significant part of those who currently perceive the PNC would become potential beneficiaries, and funds availability would be eventually compensated with the demand of new beneficiaries.

The second outlined alternative, i.e. the financing of the new benefit through the reallocation of funds currently used to pay the universal basic benefit is a feasible option for the medium term given that there is a stock of beneficiaries who are entitled to this benefit. This means that the reduction or elimination of the PBU could only affect future beneficiaries. Considering that there are approximately 50,000 new retirees per year, a $50 monthly reduction per PBU beneficiary would allow to start a program that only in the medium or long term would become closer to the levels outlined for the alternative D, i.e. the most restrictive in terms of coverage.

In summary, it seems evident that, to increase coverage, the implementation of these alternatives requires the allocation of additional resources. This is possible but complex in the current context of the financial constraints. Nevertheless, it seems clear that, given the relevance of this social goal, it is worth to explore thoroughly different alternatives to finance and implement a program such as the outlined before to gradually expand coverage and completely eliminate indigence and poverty among the elderly.

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Appendix

Table A.1

Demographic indicators SIJP, Other Contributory Schemes and PNC, 1999

(Thousands)

Active Workers			
Scheme		Membership	Contributors
SIJP	PAYG Regime	2225	914
	Fully Funded Regime	7550	3550
	Not defined	290	107
	Total SIJP	10065	4571
Other contributory schemes			1150
TOTAL			5771

Retirees and Pensioners (*)		
Scheme		Beneficiaries
SIJP	Retirees	2000
	Pensioners	1334
PNC	Pensioners	336
TOTAL	Retirees and pensioners	3679

(*) Information on retirees and pensioners from other schemes is not available.

Source: Bertranou, Grushka and Rofman (2001)

Table A.2

Financial indicators Revenues and Expenditures SIJP, 1999

Revenues SIJP		
Scheme	% on wages	millions of $ or U$S
(1) Employees' contributions in FF Regime	11%	4387.1
(2) Employees' contributions in PAYG Regime	11%	626.7
(3) Total employees' contributions		5013.8
(4) Employers' contributions	9.5% (*)	4471.2
(5) Total PAYG (2) + (4)		5097.9
TOTAL (3) + (4)		9485.0

Expenditures SIJP + PNC	
Retirement benefits	9618.0
Pension benefits	4271.3
Other	792.4
PNC	680.0
Total	15361.7

(*) The Law 24.241 defines a rate of contribution for employers of 16%, however after different decrees establishing discretionary reductions for different economic sectors and geographical regions the rate effectively paid was 9.5% in 1999 and still lower in 2000.