



SITUATION OF THE ARGENTINE INTEGRATED PENSION SYSTEM (SIPA)

Data as of December 31, 2021

Director

Marcos Makón

Director of Studies, Analysis, and Evaluation

María Eugenia David Du Mutel de Pierrepont

Analysts

Andrés Kolesnik y María Josefina Baez

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Executive Summary

The National Social Security Administration (ANSES) is responsible for managing the Argentine Integrated Pension System (SIPA, for its acronym in Spanish), the main (but not the only) pension system in Argentina, whose purpose is to guarantee the maintenance of individual or family financial capacity when income decreases or when there is an inability to generate it because of old age, occupational disability or death, a premise to be fulfilled by any pension system.

The SIPA is characterized by being collective, pay-as-you-go (and solidarity-based), contributory, administered by the public sector and with mandatory participation. It integrates several pension schemes related to different labor categories, which are classified in three groups: general scheme, special schemes and provincial police and penitentiary schemes transferred to the national authority. Given these characteristics, assessing its efficiency and financing capacity requires considering both beneficiary and contributors as equally important, since the latter are the main (although not the only) component that finances the benefits to be paid. Thus, any variation observed in contributions (higher number of contributors, better salaries, changes in contributions) will have a direct impact on the financing of benefits.

As of December 2021, the SIPA had 9,905,314 contributors (48% of the active population in Argentina) representing 10,164,776 jobs. Of these, 93.2% contributed to the general scheme, 6% to the special schemes and the remaining 0.8% to the transferred provincial police and penitentiary schemes.

The rest of the active population is composed of workers who contribute to social security systems outside ANSES¹ (17%), the unemployed (6%) and informal workers (29%) who are not subject to any regulation and therefore do not make social security contributions so, if they continue in this situation, they will not be entitled to pension benefits.

The system reaches 5,420,234 beneficiaries (75.9% of the population of theoretical retirement age or with pension benefits) who receive 6,625,136 benefits, including pensions for retirees or for beneficiaries of deceased workers or pensioners. Of these benefits, 95.9% are under the general scheme, 3.4% under special schemes and 0.7% under the police and penitentiary schemes. More than 600,000 beneficiaries continue to work to supplement their pension benefits.

The remaining population of retirement age is composed of those who receive the Universal Pension for Older Adults (PUAM) (3.3%), those receiving benefits outside ANSES (12.2%) and those who do not have any coverage (8.6%). The latter can be classified into those who continue to work in the formal labor market (4%), those who continue to work in the informal labor market (1.6%) and those who are economically inactive (3%).

When comparing the contributions to the system with benefit payments, that is, when analyzing the self-financing capacity, the SIPA showed a deficit of AR\$144.016 billion in December 2021. In other words, the system covers 51.6% of the benefits it pays.

If the deficit were to be covered with contributions while keeping the rest of the variables unchanged, these contributions would have to be increased by an average of 26 percentage points on current salaries. On the other hand, if we were to focus on the active population/inactive population ratio, the active population would have to be double the current level to have a balanced financial outcome.

Finally, it should be noted that although there is not enough disaggregated data available to evaluate whether pension benefits are sufficient to maintain consumption levels when transitioning from working to retirement, it can be observed a priori that, in the general scheme, the average pension benefits would not be sufficient to sustain consumption, compared to average salaries and the

¹ Armed Forces, Federal Security Forces, National Parks, provincial and municipal government employees, and provincial pension funds for professionals.

equivalences derived from the basic basket calculated by the National Institute of Statistics and Censuses (INDEC).

Introduction

Both the International Labor Organization (ILO) and the International Social Security Association (ISSA) understand Social Security as "The protection provided by society to its members through a series of government measures against financial and social deprivations which, in their absence, would result in the disappearance or severe reduction of income due to sickness, maternity, occupational accident or disease, unemployment, disability, old age and death, and also protection in the form of medical care and assistance to families with children".

Therefore, Social Security is a type of insurance that seeks to guarantee that both individuals and families, in the event of certain contingencies, can count on a financial capacity that allows them either to sustain their income level prior to such contingency, or to have the necessary resources to avoid situations of poverty.

Under this premise, pensions, a component of Social Security that specifically addresses the support of individual or family financial capacity in the event of a reduction in income or the inability to generate it as a result of old age, occupational disability or death, are implemented through different schemes in different countries: either through collective (solidarity) or personal (individual) plans; with pay-as-you-go (intergenerational) or capitalization (intragenerational) systems; with contributory (personal and employer contributions), non-contributory (through general revenues) or mixed financing; with government, private or mixed administration; and with mandatory, voluntary or combined participation; among the most outstanding classifications.

But regardless of the schemes adopted (which imply various levels of universality and equity), the ultimate purpose of pensions is always to guarantee income support, and its organization and administration must strive to achieve it.

For several years now (and even decades), the debate on pension systems both in Argentina and in the world has focused on their financing and the deficit they tend to generate in the public coffers, often losing the focus on why and for what purpose they exist.

Thus, the main international organizations (UN, ILO, ECLAC) agree that social protection cannot rely exclusively on the capacity of contributory schemes associated with the labor market, and that there is a need to rethink solidarity mechanisms and consider alternative and complementary ways of financing pension systems.

Considering that the main pension system² in Argentina is collective, pay-as-you-go, contributory, of governmental administration and mandatory participation, the debate on its financing should consider the following efficiency criteria for an adequate approach:

- A pension system is efficient if there is a high degree of compliance with the main premise of pension systems, which is to guarantee an intergenerational redistribution of income that allows all people of retirement age to maintain similar standards of living to those they had in their working years, or not to be in a situation of poverty.
- In contributory systems, this premise is expected to be complemented by a high self-financing capacity of the system and, if possible, to require the least amount of exogenous financing.
- If the pension system is a pay-as-you-go system, the active population/inactive population ratio is expected to be sufficiently high so as not to require large deductions from the salaries of the active population to finance the inactive population.

This report is based on the comprehensive study of the SIPA published by the Argentine Congressional Budget Office (OPC) in July 2020 entitled "Demographic profile of the national social

² There are several provincial, municipal, and professional pension funds in the country in addition to the national system administered by ANSES.

security system"³ and, by updating its main quantitative variables, provides a series of indicators with data from within and outside the system that allow us to obtain a comprehensive overview of the situation of the pension system for the purpose of contributing to the legislative debate.

³<https://www.opc.gob.ar/evaluacion-politicas-de-gobierno/caracterizacion-del-sistema-poblacional-del-sistemaprevisional-nacional/>

Quantitative characterization of the population

The pension system administered by ANSES had 9,905,314 contributors as of December 2021, representing 48% of the active population in Argentina. The rest of the active population is composed of informal workers, who are not subject to any regulation (29%), followed by workers who contribute to pension systems outside ANSES (17%) and the unemployed (6%).

The system reaches 5,420,234 beneficiaries (75.9% of the population of theoretical retirement age). Eighty percent of them receive a single pension benefit (retirement pension or beneficiary of a deceased worker or pensioner). The rest of the population of retirement age is composed of pensioners from schemes outside ANSES (12.2%), those who receive the PUAM (3.3%) and those who do not have any type of coverage (8.6%). This last group includes people of retirement age who continue to work in the formal and informal markets, as well as those economically inactive with no income.

To analyze the current situation of the SIPA, it is first necessary to determine, in quantitative terms, the number of contributors and beneficiaries of the system, classified according to the pension scheme to which they belong.

Active population

The ANSES administers three major groupings of pension schemes: general, special and police and provincial penitentiary services transferred to the Nation.

For the **general scheme**, the calculation of benefits will be the same for everyone, at the time of retirement, in accordance with the provisions of Law No. 24,241, but contributors may be of different origin depending on the type of work they perform, the first classification of which consists of workers under employment relationship and those who are self-employed:

There are three classifications for workers under employment relationship:

- The ordinary scheme: to which most government employees (national and those of the provinces and municipalities that transferred their funds to the Nation), and private sector workers belong.
- The differential schemes: to which belong the workers who perform difficult activities and who therefore have lower requirements for access to benefits in terms of years of contributions and retirement age.
- The scheme for workers in private homes.

There are also three classifications for self-employed workers:

- Self-employed (*autónomos*): to which those under the general scheme for self-employed workers belong (Law No. 24,241).
- Simplified Regime for Small Contributors (*monotributistas*): who have a simplified regime for the payment of taxes and contributions.
- Subsidized Simplified Regime for Small Contributors (*monotributistas sociales*): who have a subsidized tax and contribution regime because they are a population in a situation of vulnerability.

On the other hand, each **special scheme** has its own regulations that determine both the requirements for access to benefits and the calculation of the benefits to be received. There are seven special schemes: non-university teachers, National university teachers, Scientific and technological researchers, Judiciary, Foreign Service of the Nation, *Luz y Fuerza* Labor Union, and personnel of *Yacimientos Carboníferos Río Turbio* (YCRT).

Finally, the **provincial police forces and penitentiary services schemes** transferred to the Nation have characteristics, requirements and pension benefits that are regulated by specific provincial regulations, and ANSES is responsible only for their management. Ten provinces have transferred their police or penitentiary pension schemes to the national government: Catamarca, Jujuy, La Rioja, Mendoza, Río Negro, Salta, San Juan, San Luis, Santiago del Estero, and Tucumán.

With a total of 9,905,314 contributors⁴, Table 1 shows each of the schemes and classifications described, specifying the regulations governing them and the number of workers' contributions as of December 2021 (10,164,776).

Table 1. Contributors to schemes administered by ANSES, by regulation

Number of contributors and percentage. As of December 2021.

Pension scheme	Regulation	Number of contributors	% Of total
Schemes for workers under employment relationship		7,500,086	73.8%
General		6,802,055	66.9%
<i>Ordinary</i>	<i>Law 24,241</i>	5,554,376	54.6%
<i>Differential</i>	<i>Specific regulations by sector</i>	820,729	8.1%
<i>Private Homes</i>	<i>Law 25,239 - TITLE XVIII</i>	426,950	4.2%
Special		611,947	6.0%
<i>Non-university teachers</i>	<i>Law 24,016</i>	401,741	4.0%
<i>National university teachers</i>	<i>Law 26,508</i>	111,063	1.1%
<i>Scientific and technological researchers</i>	<i>Law 22,929</i>	33,720	0.3%
<i>Judiciary</i>	<i>Law 24,018</i>	22,792	0.2%
<i>Foreign Service of the Nation</i>	<i>Law 22,731</i>	1,002	0.01%
<i>"Luz y Fuerza" Labor Union</i>	<i>Resolution 268/2009, Ministry of Labor, Employment and Social Security.</i>	39,526	0.4%
<i>YCRT</i>	<i>Executive Order 1,474/2007</i>	2,103	0.02%
Provincial Police and Penitentiary Services Schemes Transferred to the Nation	Provincial regulations	86,084	0.8%
Schemes for the self-employed		2,664,690	26.2%
General		2,664,690	26.2%
<i>Self-employed</i>	<i>Law 24,241</i>	494,936	4.9%
<i>Simplified Regime for Small Contributors</i>	<i>Law 24,977</i>	1,713,147	16.9%
<i>Subsidized Simplified Regime for Small Contributors</i>	<i>Law 25,865</i>	456,607	4.5%
Total		10,164,776	100.0%

SOURCE: OPC based on ANSES Social Security Statistical Bulletin.

As can be seen, 93.2% of the contributors will receive benefits under the general scheme (employment relationship excluding special schemes and self-employed), 6% will receive benefits through special schemes (most of them being non-university and university teachers), and less than 1% will receive benefits provided for in provincial regulations since they belong to police forces and penitentiaries in the ten transferred provinces.

Twenty-nine percent of workers are informal workers who are not included in any pension scheme

It is important to mention that there is a considerable number of workers who are not contributing to the schemes administered by ANSES. These workers belong to other contributory schemes outside ANSES⁵ and informal workers who are not covered by any legal

framework.

⁴ Considering those individuals who contribute to more than one scheme administered by ANSES only once.

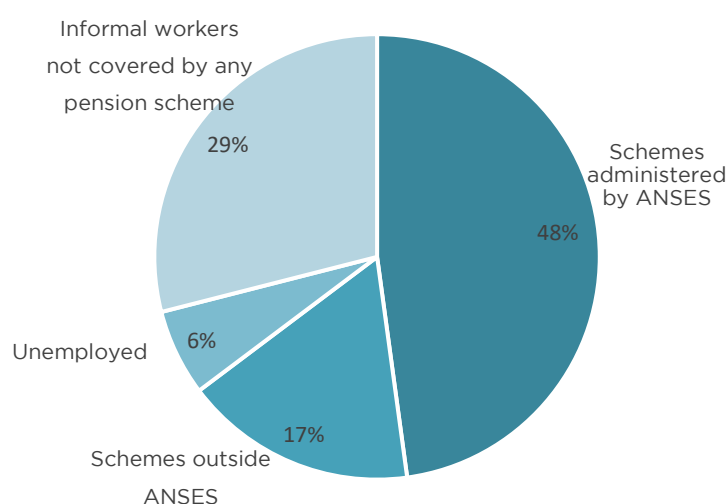
⁵ The following belong to these schemes: the personnel of the Armed and Security Forces, the personnel of National Parks, employees of provincial and municipal governments not transferred to the nation, the provincial schemes for independent professionals and complementary schemes.

Considering the population projections and the data provided by the Permanent Household Survey (EPH) conducted by INDEC, the total active population⁶ in the country can be divided according to the pension scheme that covers them:

- Of the working population, 48% contribute to schemes administered by ANSES (Table 1) (9,905,314 workers).
- About 17% of the working population belongs to contributory schemes outside ANSES (around 3,500,000).
- About 6% of the active population is unemployed and, therefore, they are not contributing to any pension scheme (approximately 1,300,000).
- The remaining 29% of the working population are informal workers (approximately 6,000,000).

Figure 1. Active population and pension scheme

As a percentage. As of December 2021.



SOURCE: OPC based on ANSES Social Security Statistical Bulletin, Permanent Household Survey and INDEC.

⁶ The active population consists of people who are employed or who, without having a job, are actively looking for one.

Inactive population

The benefits provided by the pension schemes administered by ANSES are of two types:

- Retirement pension: This includes old-age pensions paid upon reaching retirement age and the years of contributions required by each scheme, as well as disability pensions paid if a worker suffers a physical or intellectual disability that prevents him or her from working.
- Beneficiary of a deceased worker or retirement pensioner.

With a total of 5,420,234 beneficiaries⁷, the number of benefits (6,625,136) are shown in Table 2 according to pension scheme and grouping, including benefits under the general scheme provided prior to the enactment of Law No. 24,241.

Table 2. Benefits of schemes administered by ANSES, by scheme

Number of benefits by type and as a percentage. As of December 2021.

Pension scheme	Pension Benefits			% of total
	Retirement	Beneficiaries of deceased pensioners or workers	Total	
General *	4,847,614	1,504,114	6,351,728	95.9%
<i>Under legislation prior to Law 24,241</i>	208,256	256,725	464,981	7.0%
<i>Law 24,241 (without moratorium)</i>	1,327,625	152,639	1,480,264	22.3%
<i>Law 24,241 (with moratorium)</i>	3,311,733	1,094,750	4,406,483	66.5%
Special	189,840	36,731	226,571	3.4%
<i>Non-university teachers</i>	148,321	15,562	163,883	2.5%
<i>National university teachers</i>	7,445	1,094	8,539	0.1%
<i>Scientific and technological researchers</i>	7,478	1,063	8,541	0.1%
<i>Judiciary</i>	5,536	1,716	7,252	0.1%
<i>Foreign Service of the Nation</i>	428	265	693	0.01%
<i>"Luz y Fuerza" Labor Union</i>	20,042	16,956	36,998	0.6%
<i>YCRT</i>	590	75	665	0.01%
Provincial Police and Penitentiary Services Schemes Transferred to the Nation	35,312	11,525	46,837	0.7%
Total	5,072,766	1,552,370	6,625,136	100.0%

* Includes all beneficiaries of the scheme who in their working lives were workers under employment relationship or self-employed.

SOURCE: OPC based on ANSES Social Security Statistical Bulletin.

Of the benefits provided, 95.9% are under the general scheme, with those obtained through moratoriums being the most significant, accounting for two thirds of all benefits paid by ANSES.

Of the benefits provided, 95.9% are under the general scheme, with those obtained through moratoriums being the most significant, accounting for two thirds of all benefits paid by ANSES.

Special schemes account for 3.4% of the total, with non-university teachers being the most representative.

Benefits provided to the provincial police forces and penitentiaries represent only 0.7%.

In terms of the type of benefit, retirement pensions represent 75% and pensions for beneficiaries of deceased workers or pensioners account for 25%, although these percentages vary within each scheme. Likewise, 80% of the beneficiaries receive only one pension benefit, the remaining 20% receiving a retirement pension together with a pension for being a beneficiary of a deceased worker or pensioner.

⁷ Counting only once those beneficiaries who receive more than one pension benefit from ANSES.

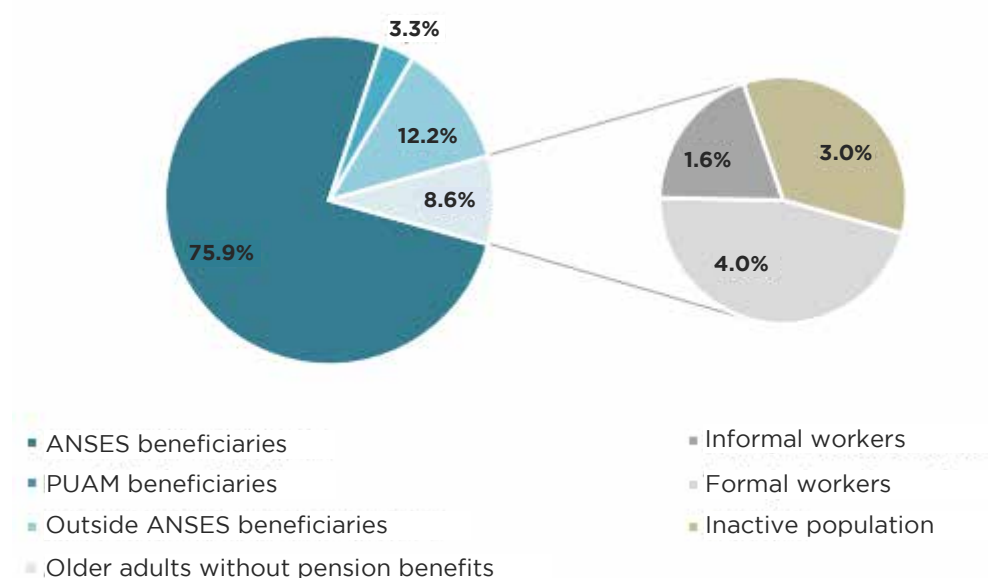
In terms of population representativeness, the beneficiaries of the contributory schemes administered by ANSES represent 75.9% (5,420,234 beneficiaries) of the population group that receives pension benefits or is at the theoretical age of retirement.

For the remaining population, the estimated distribution is:

- The Universal Pension for Older Adults (PUAM)⁸ is received by 3.3% (236,112 beneficiaries)
- Those covered by schemes outside ANSES (national, provincial, and municipal) represent 12.2% (873,5427 beneficiaries).
- The remaining 8.6% (615,621) do not receive pension benefits even though they are at the theoretical age of retirement. This percentage, in turn, can be broken down into the following groups:
 - Informal workers (119,928) account for 1.6 percentage points.
 - Formal workers (283,184 people) account for 4 percentage points.
 - Economically inactive population account for 3 percentage points (212,509 people).

Figure 2. Inactive Population and pension scheme

As a percentage. As of December 2021.



SOURCE: OPC based on ANSES Social Security Statistical Bulletin, Permanent Household Survey and INDEC.

Although the moratoriums (to a greater extent) and the PUAM (to a lesser extent) have provided coverage to a large part of the older adult population that otherwise would not have had protection, there are still people of theoretical retirement age who do not receive pension benefits, and most of them are still working.

It should also be noted that among those who receive pension benefits, there are approximately 660,465 people who continue to work (48% in the formal market and 52% in the informal market) to supplement the pension income they receive.

⁸ Although the PUAM is administered by ANSES, since it is a non-contributory benefit, it is accounted for separately.

Characterization of the population in terms of contributions and pensions

In terms of contributions received from each scheme, the contributory financing of the SIPA does not maintain the same proportions as the distribution of contributors. Simplified regime small contributors represent 16.9% of the population making contributions, but their contributions represent only 1.3% of the contributory financing of the system.

There are also differences between the number of beneficiaries and the benefits paid by each scheme. Thus, although 66% of the beneficiaries of the general scheme obtained their benefits after moratoriums, their share in financial terms is 36.3%, as in general they receive the minimum pension.

The situational analysis of the SIPA is complemented with the analysis, on the one hand of the salaries received by workers and the related contributions to the pension system and, on the other hand, with the pension benefits received by the beneficiaries of all the schemes of the system.

Active population

The active population, through personal contributions and employer contributions derived from their salaries, constitutes the contributory component of the financing of the pension system.

Therefore, it is important to analyze the contributions with which this population contributes to the financing of the entire system and of each scheme, as well as to evaluate the proportion of average salaries allocated to the pension system.

Table 3. Salaries and contributions to schemes administered by ANSES, by scheme

In ARS and as a %. As of December 2021.

Pension scheme	Income / Average taxable salary (monthly) (in ARS)	Average individual contribution		Total of contributions	
		In ARS	As a % (1)	In millions of ARS	% Of the total
Schemes for workers under employment relationship				ARS 148,390	96.6%
General	-	-	-	132,995	86.5%
<i>Ordinary</i>	92,966	20,452	22%	115,353	75.1%
<i>Differential</i>	88,250	21,180	24%	17,597	11.5%
<i>Private homes</i>	20,632	104	1%	44	0.03%
Special	-	-	-	13,525	8.8%
<i>Non-university teachers</i>	60,900	12,789	21%	5,350	3.5%
<i>National university teachers</i>	58,880	12,953	22%	1,506	1.0%
<i>Scientific and technological researchers</i>	156,992	39,248	25%	1,414	0.9%
<i>Judiciary</i>	441,854	141,393	32%	3,223	2.1%
<i>Foreign Service of the Nation</i>	646,676	219,870	34%	220	0.1%
<i>“Luz y Fuerza” Labor Union</i>	162,336	43,830	27%	1,732	1.1%
<i>YCRT</i>	160,701	36,961	23%	77	0.1%
Provincial Police and Penitentiary Services Schemes Transferred to the Nation	80,423	21,714	27%	1,869	1.2%
Schemes for the self-employed (2)				5,282	3.4%
General	-	-	-	5,282	3.4%
<i>Self-employed</i>	196,142	6,639	3%	3,286	2.1%
<i>Simplified Regime for Small Contributors</i>	48,348	1,165	2%	1,996	1.3%
<i>Subsidized Simplified Regime for Small Contributors</i>	23,537	0	0%	0	0.0%
Total				153,673	100.0%

(1) Note (1): The values expressed reflect the real situation and not the percentages established by law: the total payroll and the total amount of contributions are considered, the average values are estimated based on the number of workers and finally, the percentage represented by the contributions on the calculated average salaries estimated.

(2) Note (2): The average income of self-employed workers results from a weighting between income scales and number of contributors and does not necessarily reflect real levels of average monthly turnover.

SOURCE: OPC based on ANSES Social Security Statistical Bulletin, Permanent Household Survey and INDEC.

The contributory financing of the SIPA, in terms of the contributions received by each scheme, does not maintain the same proportions as the distribution of contributors.

Simplified regime taxpayers represent 16.9% of the active population, but their contributions are equivalent to only 1.3% of the system's contributory financing

More specifically, the simplified tax regime (*monotributo*) is the modality that shows the greatest difference between the number of contributors and the contributions paid, since these contributors represent 16.9% of the population that pays contributions, but they account for only 1.3% of the system's contributory financing.

This difference is also observed in the remaining self-employed regimes, including that for those employed at private homes, where the individual contribution is much lower than that of workers under employment relationship.

In terms of salaries and average contributions of workers under employment relationship (excluding employment at private homes, which has special characteristics), there is a certain link between salary level and the percentage that is deducted for the pension system: the higher the salary, the higher the contribution. Thus, the Judiciary and Foreign Service schemes, whose average salaries are the highest, have the highest contribution percentages among the schemes administered by

ANSES, while the schemes for teachers have the lowest average salaries together with the lowest contributions.

The exceptions to this relationship are observed in the differential schemes and in provincial police and penitentiary workers, whose contribution percentage is high but whose average salaries are not higher than the rest. This situation occurs because these workers have a lower retirement age given the type of work they do, which requires higher contributions in the working age to compensate for the missing years of contributions.

Inactive population

The payment of SIPA benefits includes, as shown in the previous chapter, pensions for old age and disability (1) and pensions due to the death of a worker or pensioner (2).

For each scheme, the total of monthly benefits paid, as well as their average amount can be analyzed.

Table 4. Pension benefits of the schemes administered by ANSES, by scheme

In ARS and as a %. As of December 2021

Pension scheme	Old age or disability		Death of worker or pensioner		Total	
	Total of gross benefits paid (in millions of ARS)	Average benefit (in ARS)	Total of gross benefits paid (in millions of ARS)	Average benefit (in ARS)	Total of gross benefits paid (in millions of ARS)	% Of the total
General *	203,263	41,930	61,582	40,508	264,845	89.0%
<i>Previous legislation</i>	12,894	61,914	9,722	42,721	22,616	7.6%
<i>Law 24,241 (without moratorium)</i>	88,429	66,607	45,848	41,954	134,278	45.1%
<i>Law 24,241 (with moratorium)</i>	101,939	30,781	6,011	30,082	107,951	36.3%
Special	25,657	107,240	3,474	80,461	29,132	9.8%
<i>Non-university teachers</i>	16,893	88,057	1,070	54,041	17,964	6.0%
<i>National university teachers</i>	1,241	163,121	124	108,624	1,366	0.5%
<i>Sci. Technol. researchers</i>	1,760	180,418	151	109,677	1,912	0.6%
<i>Judiciary</i>	3,024	410,276	690	304,220	3,715	1.2%
<i>Foreign Service</i>	277	524,993	97	317,133	374	0.1%
<i>"Luz y Fuerza" Labor Union</i>	2,362	110,372	1,330	73,233	3,693	1.2%
<i>YCRT</i>	96	133,526	9	93,326	105	0.0%
Provincial Police and Penitentiary Services Schemes Transferred to the Nation	3,080	89,692	631	55,928	3,711	1.2%
Total	232,001	45,301	65,688	41,112	297,690	100.0%

* Includes all beneficiaries of the scheme who in their working lives were workers under employment relationship or self-employed.

SOURCE: OPC based on ANSES Social Security Statistical Bulletin.

The general scheme accounts for 89% of the benefit payments made by the SIPA. Although, most of the beneficiaries obtained their benefits after moratoriums (66% of the total benefits), most of them receive the minimum pension, so this proportion is not maintained when analyzing their participation in financial terms (36.3% of the total benefits paid) (Table 2).

The special schemes represent 9.8% of the total benefits, 8.8% of the total contributions and only 3.4% of the beneficiaries

On the other hand, the special schemes represent close to 10% of the benefit payments made by ANSES. A comparison of this amount with the number of beneficiaries (Table 2) (3.4% of the total number of beneficiaries in the system) and with the contributions made by the contributors of these schemes (Table 3)

(8.8% of the total contributions) reveals that, although these schemes have higher contribution rates than others, the payment of their benefits has a greater relative weight within the SIPA.

As for the provincial police and penitentiary schemes, the participation proportions are stable within the system.

It should be noted that the analysis previously made only considers the internal distribution in terms of participation, where that pension solidarity does not only operate within a single scheme, but also between different schemes administered by ANSES.

To evaluate the extent of self-financing, it is necessary to consider the specific situation of each scheme.

Evaluation of the pension system

The SIPA covers a little more than 50% of its obligations. If the deficit were to be covered by contributions (keeping the rest of the variables constant), these would have to increase by an average of 26 percentage points on current salaries. On the other hand, if we were to focus on the active population/inactive population ratio, the active population would have to be double the current level to have a balanced financial outcome. A priori, it can be observed that, in the general scheme, the average pension benefit is not sufficient to maintain the standard of living of the working years.

Once the situation of the pension schemes administered by ANSES is understood in terms of quantities, salaries of the working population and benefits, a series of indicators can be developed to provide an overall financial picture of the SIPA, together with other indicators providing information on its efficiency.

Four indicators to be analyzed are presented here based on the information available as of December 2021: the current self-financing capacity of the system, the level of average individual contributions required to achieve it, the number of contributions needed to ensure self-financing, and the ratio between contributions and benefits to evaluate whether the scheme contributes to maintaining the level of income between both stages, which is the main premise of a pension system.

Contribution-benefit ratio: Coverage rate (self-financing)

To evaluate the self-sufficiency capacity of each scheme, it is useful to analyze the relationship between the total contributions received by each scheme and the total benefits they pay.

This capacity can be expressed both in terms of deficit or surplus and in terms of financial coverage, in other words, what percentage of benefits is covered by their own revenues.

Table 5. Deficit or surplus and capacity to cover outlays of the pension schemes administered by ANSES, by scheme

In millions of ARS and as %. As of December 2021.

Pension scheme	Total contributions	Total benefits	Deficit / Surplus	Coverage
General (employment relationship + self-employed)	138,278	264,845	- 126,567	52.2%
Special	13,525	29,132	- 15,606	46.4%
<i>Non-university teachers</i>	5,350	17,964	- 12,613	29.8%
<i>National university teachers</i>	1,506	1,366	139	110.2%
<i>Sci. Technol. researchers</i>	1,414	1,912	- 498	73.9%
<i>Judiciary</i>	3,223	3,715	- 491	86.8%
<i>Foreign Service</i>	220	374	- 154	58.8%
<i>"Luz y Fuerza" Labor Union</i>	1,732	3,693	- 1,960	46.9%
<i>YCRT</i>	77	105	- 28	73.4%
Provincial Police and Penitentiary Services Schemes Transferred to the Nation	1,869	3,711	- 1,842	50.4%
Total	153,673	297,690	-144,016	51.6%

SOURCE: OPC based on ANSES Social Security Statistical Bulletin.

Except for university teachers, the special schemes administered by ANSES are in deficit

Except for the scheme for university teachers (which shows a surplus of 10.2%), all the schemes administered by ANSES, analyzed individually, show a deficit, that is, benefit payments are greater than contributions.

In terms of financial coverage, SIPA revenues cover slightly more than 50% of the benefits to be paid, with the non-university teachers' scheme being

the most deficient in percentage terms, since revenues are only enough to cover about 30% of benefits.

As for the general scheme, which accounts for approximately 90% of the SIPA's revenues and outlays, contributions cover 52.2% of the benefits currently paid. Both factors result in the largest monetary difference between revenues and payments within the SIPA.

It should be noted that the percentage not covered by the contributory component of the SIPA is financed with other tax and non-tax resources, as provided for in the pension system regulations in force.

Individual contributions-benefit ratio: Individual contribution rate

The so-called "individual contribution rate" consists of an indicator that allows estimating the percentages of contributions necessary for each pension scheme to be self-financing at a given moment in time, keeping other variables constant.

This indicator divides the total of the benefits paid (calculated as the product of the number of beneficiaries and the average benefit of each scheme) by the total of salaries (calculated as the product of the number of contributors and the average salary of each scheme), resulting in the necessary percentage contribution that should be subtracted from each salary to pay the benefits currently paid and thus generate a balanced financial outcome.

This theoretical value is then compared with actual current contributions to determine the difference or distance between what is necessary and what exists.

Table 6. Necessary and actual contribution rate compared

In millions of ARS and as %. As of December 2021.

Pension scheme	Total payroll (millions of ARS)	Total benefits (millions of ARS)	Actual contribution rate	Necessary contribution rate	Shortage / Surplus
General (employment relationship + self-employed)	602,985	264,845	22.3%	43.9%	-21.6%
Special	-	-	-	-	-
Non-university teachers	25,479	17,964	21.0%	70.5%	-49.5%
National university teachers	6,846	1,366	22.0%	20.0%	2.0%
Sci. Technol. researchers	5,656	1,912	25.0%	33.8%	-8.8%
Judiciary	10,073	3,715	32.0%	36.9%	-4.9%
Foreign Service	647	374	34.0%	57.8%	-23.8%
"Luz y Fuerza" Labor Union	6,417	3,693	27.0%	57.6%	-30.6%
YCRT	337	105	23.0%	31.3%	-8.3%
Provincial Police and Penitentiary Services Schemes Transferred to the Nation	6,923	3,711	27.0%	53.6%	-26.6%

SOURCE: OPC based on ANSES Social Security Statistical Bulletin.

*Having a balanced financial outcome
would require deducting remarkably
high percentages from salaries*

As analyzed, except for the university teachers' scheme, the percentages of contributions deducted from salaries are insufficient to finance each pension scheme.

If only this variable were to be considered, it would be necessary to increase existing contributions to such an extent that it would imply an extremely high deduction from salaries.

Active population-pension beneficiaries' ratio: sustainability rate

Considering that a change in the contribution amount should not represent a large percentages of a salary, another indicator that may be of interest for the purpose of evaluating the pension system is the so-called "sustainability rate", which compares the number of workers for each pension beneficiary within each scheme with the necessary ratio that should exist to achieve a balanced financial outcome (keeping other variables constant such as, for example, and of great relevance in this case, the average contributions per scheme linked to the average salaries offered by the labor market).

Table 7. Necessary and actual sustainability rate compared

In millions of ARS and as %. As of December 2021.

Pension scheme	Workers	Pension beneficiaries	Actual sustainability rate	Necessary sustainability rate	Difference
General *	9,466,745	6,351,728	1.5	2.9	1.4
Special	611,947	226,571	2.7	7.4	4.7
Non-university teachers	401,741	163,883	2.5	8.6	6.1
National university teachers	111,063	8,539	13.0	12.4	-0.7
Sci. Technol. researchers	33,720	8,541	3.9	5.7	1.8
Judiciary	22,792	7,252	3.1	3.6	0.5
Foreign Service	1,002	693	1.4	2.5	1.0
"Luz y Fuerza" Labor Union	39,526	36,998	1.1	2.3	1.2
YCRT	2,103	665	3.2	4.3	1.1
Provincial Police and Penitentiary Services Schemes Transferred to the Nation	86,084	46,837	1.8	3.6	1.8
Total	10,776,723	6,625,136	1.6	3.3	1.7

* Includes workers under employment relationship and the self-employed as workers, and retired pensioners and beneficiaries of deceased worker or pensioner as pension beneficiaries.

SOURCE: OPC based on ANSES Social Security Statistical Bulletin.

The SIPA should have twice as many contributors to achieve a balanced financial outcome

It is necessary to have a larger number of contributors (on average, twice as many) to sustain the benefits paid by the SIPA if the current levels of salaries and pension benefits were to be maintained.

This situation is even more important if we consider that there is still part of the older adult population that is not covered by any pension scheme.

Furthermore, the non-university teachers' scheme, which currently has 2.5 contributors for each pension beneficiary, would require 8.6 contributors for each pension beneficiary to achieve self-financing.

The exception is again the scheme for university teachers. However, it is observed that the sustainability rate necessary for this scheme is the highest among the existing ones, requiring 12.4 contributors for each beneficiary to cover the benefits to be paid, which implies that, to the extent that the number of beneficiaries increases, this scheme could face a deficit situation in the future when the new contributors, who join the scheme with the emergence of new universities in the country, begin to retire.

Salaries-pension benefits ratio: replacement rate

Finally, having addressed the analysis of the SIPA in quantitative and financial terms, and having presented different indicators that show its situation through the system's intrinsic variables, it is pertinent to analyze whether each scheme complies with the main premise of the pension systems expressed at the beginning of this report, in other words, whether the pension benefits allow pensioners to sustain similar levels of income to those they had in their working lives.

For an effective analysis of this indicator, **it would be necessary to have disaggregated and historical data on** individuals to compare their income in their working years with respect to their pension benefits in their retired years. Since this information is not available, we proceed to perform an analysis in general terms, with the necessary caveats that this implies.

Based on the data available, the best method for estimating the replacement rate in general terms is to compare the average individual salaries by pension scheme with the average individual pension benefit of each scheme (pensions for beneficiaries of deceased worker or pensioner are excluded because they are derived benefits), thus comparing the salary of a worker with the benefit of a pensioner in each scheme. It should be noted that, when considering these values, all salaries of are considered, and not only the salaries of the last years of activity, which are the ones that should be compared to improve the indicator.

For the theoretical (or reference) comparison of this indicator, we use the methodology applied by INDEC to determine the consumption of individuals in the measurement of the Basic Food Basket⁹. Thus, the comparative table of consumer units (or equivalent adult) is used, which stipulates that the average consumption of a person in his or her retirement age is equivalent to a value between 74% and 83% of what is consumed by a male worker and between 83% and 88% of what is consumed by a female worker.

Therefore, for methodological purposes, the simple average of these values of the Basic Basket (82%) will be considered to estimate the consumption need of a person of retirement age with respect to the consumption need of a person of working age, expressing this consumption in monetary terms.

⁹ https://www.indec.gov.ar/ftp/cuadros/sociedad/preguntas_frecuentes_cba_cbt.pdf

Table 8. Technical and actual replacement rate compared

In millions of ARS and as %. As of December 2021.

Pension scheme	Average salary	Average pension benefit	Actual average replacement rate	Technical replacement rate (1)	Difference
General (2)	92,360	66,607	72.1%	82.0%	-9.9%
Special	-	-	-	-	-
<i>Non-university teachers</i>	60,900	88,057	144.6%	82.0%	62.6%
<i>National university teachers</i>	58,880	163,121	277.0%	82.0%	195.0%
<i>Sci. Technol. researchers</i>	156,992	180,418	114.9%	82.0%	32.9%
<i>Judiciary</i>	441,854	410,276	92.9%	82.0%	10.9%
<i>Foreign Service</i>	646,676	524,993	81.2%	82.0%	-0.8%
<i>"Luz y Fuerza" Labor Union</i>	162,336	110,372	68.0%	82.0%	-14.0%
<i>YCRT</i>	160,701	133,526	83.1%	82.0%	1.1%
Provincial Police and Penitentiary Services Schemes Transferred to the Nation	80,423	89,692	111.5%	82.0%	29.5%

(1) Average value of the equivalence of consumption according to the Basic Basket estimated by INDEC.

(2) For salaries: Only workers under employment relationship are considered, applying a weighted average between the ordinary and the differential schemes, excluding self-employed workers since the actual turnover is not known, and workers at private homes since their salaries are an approximation based on data from the EPH.

For pension benefit: Only the pension benefit of those who accessed to the system without moratorium is considered, since this value is the most representative to establish equivalence, since those who accessed through moratorium usually receive, with some exceptions, the minimum pension benefit.

SOURCE: OPC based on ANSES Social Security Statistical Bulletin.

It is clear a priori that, in the general scheme, average pension benefits are not sufficient to maintain the standard of living of the working life. A reduction in this rate from current levels would make it even more difficult to guarantee an intergenerational redistribution of income (the main premise to be met by a pension system).

In addition, it can be observed that in most of the special schemes (except for Luz y Fuerza Labor Union and the Foreign Service of the Nation), the replacement rates are higher than the technical rate, and even in some cases (university and non-university teachers and researchers) the salaries are higher than the average. This situation can be explained by the methodology applied, since the average salary considered includes all workers and not only those in their last years of activity, which are higher when including components linked to seniority and hierarchy. A comparable situation occurs with the police and penitentiary schemes.

Analysis of alternatives to improve the efficiency of the SIPA

The various indicators presented allow us to understand and know the internal dynamics and the links between individuals, salaries, and pension benefits of the SIPA in general and of its schemes, comparing the current situation of these variables with technical (or theoretical) reference values.

The analysis of the four internal indicators shows that, in terms of contributions, the system covers little more than 50% of its obligations (indicator 1) and that this situation can be explained in part by the insufficient contributions (indicator 2), which are too low to cover the deficit with the current number of contributors and beneficiaries, or by the low ratio between them (indicator 3), since this should be at least twice the contributors to achieve a balanced financial outcome if salaries of contributors and pension benefits were to remain constant. Likewise, and despite the existence of a contributory deficit, it is observed that, a priori, the system would not allow maintaining living standards when transitioning from working to retirement (indicator 4).

This analysis can be expanded by including several external factors which, although their modification is not under the control of the ANSES, the variations they may introduce will have a strong impact on the system, allowing a better analysis of the variables mentioned to improve the efficiency of the SIPA.

Therefore, and only for illustrative purposes, since their analysis exceeds the scope of this study, some of the external factors that may influence the indicators analyzed are:

- The increase in the number of contributing workers through the formalization of informal workers and the incorporation into the formal labor market of the unemployed.
- The harmonization of the contributions of self-employed workers with respect to those under employment relationship.
- The increase in the salaries of workers and, therefore, in the contributions paid into the system.
- The circumscription of the SIPA in contributory terms only for those who meet all the requirements of the original regulations, considering alternative sources of financing to provide coverage to those who, in their working life, were not able to meet these requirements because of the conditions of the labor market.

These alternatives are not exhaustive and other variables could be considered to improve the indicators evaluated, remembering that, in any case, issue or variable addressed, the ultimate objective should be to comply with the main premise of the pension systems, that is, to guarantee adequate income levels for pensioners.

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This report does not contain binding recommendations.

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Hipólito Yrigoyen 1628. Piso 10 (C1089aaf) CABA, Argentina.

T. 54 11 4381 0682 / contacto@opc.gob.ar