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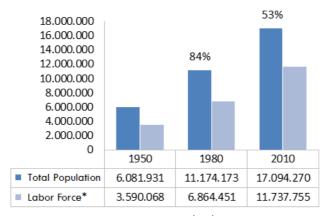
# The Pension System in Chile

## By Jorge Claude<sup>+</sup>

Chile's social security programme, founded in 1924, was based on a pay-as-you-go (PAYG) system that provided for wide-coverage pensions for old age, disability, disease, health and death. With this system, the social security expenses increased permanently, reaching a peak of 21.4 per cent of the national income<sup>1</sup> in 1971.

As is commonly known, the demographic transition has resulted in a sustained increase in the number of pensioners. In Chile, the total number of people rose by 84 per cent in the period 1950–1980, and by 53 per cent in the period 1980–2010. On the other hand, the labour force increased by 91 per cent and 71 per cent in the mentioned periods, respectively (Figure 1 and Table 1). During such periods, the labour force/total number of people ratio also increased, partly due to the increased participation of women in the labour force. At the same time, we have seen a sustained reduction in the fertility rate since the 80s, which partly explains the current demographic structure.

Figure 1. Total population and labour force in Chile



Based on census data from and the CEPAL-Instituto Nacional de Estadistica (INE).

Table 1. Chile in the 20th century

	1950'-1960'	2000'-2004'
Fertility rate (children/woman)	5.4	1.9
Life expectancies at birth time (years)	54.8	77.7
Retirement age (years)		
Men	~ 60	65
Women	55-60	60
Increase in the number of people (per 1,000)	21.3	11
Individuals older than 60 for every 100 individuals younger than 15	19	44

Source: Superintendence of Pension Fund Managers, CELADE 2002, and INE 2004.

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<sup>\*</sup>Labour force covers all people older than 14 and younger than 65 years.

President, Insurance Association of Chile.

<sup>&</sup>lt;sup>1</sup> Hermann Von Gersdorff. "El sistema previsional chileno durante los últimos 10 años" [The Social Security System in Chile in the past 10 years].



In addition, Table 2 shows that the working age/retired people ratio has decreased consistently since early in the past century.

Table 2. Ratio of working age people to retired people

Year	Working- age people	Retired people	Active individuals for every passive individual
1920	2,174,352	126,199	17.2
1930	2,479,952	147,627	16.8
1955	2,709,712	304,768	8.9
1980	4,420,332	619,832	7.1
2015	9,468,255	1,836,538	5.2
2045*	10,245,200	4,130,936	2.5

Based on data from 1920 and 1930 censuses, CEPAL and INE.

We note then that, assuming no migration to an individual capitalisation system occurs, each retired individual will have to be funded by 2.5 individuals in 2045<sup>2</sup>, whereas the same passive individual was funded with the work of 17.2 individuals in 1920. In our opinion, these numbers clearly show the current demographic phenomenon in Chile, which is not very different from that in other countries.

In view of the foregoing, Chile started in 1980 a deep pension system reform, where workers generate their own savings for old age, while funds are privately managed by pension fund managers ("administradoras de fondos de pensiones" or AFPs). This reform generated strong pressure on the public accounts in the country, since the state became responsible for the passive sector without having the social security contribution flows from active workers. Additionally, all workers migrating to the new system were provided with an old social security system contribution bond for their PAYG system contributions. This high expense has been almost completely paid by the country, which currently shows a highly sound macroeconomic situation and decreasing social security liabilities.

The system provides workers with a number of options: (1) At the time of entering the system, workers must select the manager (AFP) of which they will become a member and the type of to which they are to be allocated fund.<sup>3</sup> Upon completing one year in the system, workers can change to a new fund or a new pension fund manager (AFP). (2) It is possible to accelerate or delay the retirement age. (3) Upon meeting the requirements to become a member of a pension fund, members may choose from among four pension options:

- (1) Programmed Withdrawal: The pension amount is paid by AFP and charged to the member's individual account. The programmed withdrawals are estimated each year on the basis of the individual account balance, the fund return, the member's life expectancy or that of his beneficiaries, and the current applicable interest rate.
- (2) Immediate Annuity: Pension acquired by a member with a life insurance company (transferring his funds as a single premium). This company must pay the member a monthly real income for the rest of his life and, after death, to his pension beneficiaries. Under this modality, which is widely selected by

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<sup>\*</sup>INF forecast

<sup>&</sup>lt;sup>2</sup> As per INE and CEPAL forecasts in "CHILE: Proyecciones y Estimaciones de Población. Total País 1950-2050".

<sup>&</sup>lt;sup>3</sup> It is known as the Multi-Fund System, created in 2002 by Law 19,795. It refers to the management of five pension funds by each AFP, which differ from each other by the proportion of their portfolio invested in variable income securities (involving different risk levels).



- pensioners, life insurance companies accumulate large volumes of reserves for payment of annuities,<sup>4</sup> thus becoming important long-term fund providers for private and public companies.
- (3) Temporary Income with Deferred Annuity: The member hires the services of a life insurance company for the payment of a monthly annuity starting at a future date, leaving a balance in his individual account with the AFP for a temporary income until commencement of the deferred annuity payment.
- (4) Immediate Annuity with Programmed Withdrawal: The funds held by member in his individual account with the AFP are divided and simultaneously used to subscribe an immediate annuity and a programmed withdrawal pension.

The pension system is still evolving. The reform has been under way for 32 years, and the first pension fund members who only funded their old age benefits with the balances accumulated in their individual capitalisation accounts are just becoming pensioners. While the individual capitalisation system has important advantages for workers and the public finance, addressing the increasing problem of low pension amounts is critical, as they are not consistent with the salaries received by workers during the last stage of their active working life.

This phenomenon is the result of increased life expectancy, successive interest rate reductions, the contribution gaps during the member's active life, the contribution base limit, and the actual increase in workers' salaries, among others.

From the time the system was established to the present, the life expectancy of Chileans at the time of retirement has increased significantly, e.g., in 1981, a man needed to make pension contributions for 156 months to retire and a woman, 205 months (on average), while today, the contribution period has increased to 239 and 353 months respectively.

Table 3. Changes in life expectancy, expressed in years

	Life Expectancies	
Year	Man (aged 65)	Woman (aged 60)
1981	12.97	17.11
2013	19.9	29.4

Source: Author

On the other hand, the decrease in interest rates has two main effects: (1) A reduction in individual capitalisation account fund return and (2) possibly reduced pension amounts as a result of lower, expected investment returns.

Fund accumulation depends on the individual's average salary taking into account his/her entire working life, but it is customary that our expectations regarding our pension relate not to the first, but to the last salaries. Yet, the individual has contributed monthly to his individual account on the basis of his salary for each given period. Thus, we have a discrepancy between the actual savings and the expectations of the individual.

Considering the remuneration rate (Figure 2), it is noted that in the average remuneration in the past 20 years has multiplied by 4.2, which is very good for the country, but affects the social security savings, because the contributions at the beginning were scarce.

<sup>\*</sup>Based on Annuity table 1985

<sup>\*\*</sup> Based on Annuity table 2009

During 2012, 455,680 retired people received an annuity from life insurance companies. Annuities are classified into three categories, according to the type of benefit, namely old age (ordinary or anticipated), disability and survival. An amount of US\$2,610m was paid in annuities during 2012.

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Figure 2. Annual average remuneration index (April 1993=100)

Source: Central Bank of Chile

Another problem affecting the pension system is the low density of contributions or social security gaps. While this is a labour market problem, it actually affects the pension level. In Chile, the working life contribution ratio is nearly 55 per cent for men and lower for women.<sup>5</sup>

To supplement the lower pension amounts, the state pays a monthly base joint pension amount of nearly US\$156, plus a supplemental amount (the joint pension contribution) for individual savings, so as to fund a minimum pension amount up to US\$495/month.

#### System benefits

SURA Asset Management Group's studies<sup>6</sup> regarding the impact on the GDP of the transition from a distribution social security system to an individual capitalisation social security system established that such a transition would have a positive macroeconomic effect on GDP in four main aspects<sup>7</sup>:

- the level and structure of employment and its formality
- savings and investment
- capital market development and efficiency
- the evolution of total factor productivity (capital and work).

The study estimates that the pension fund's development, in addition to affecting the GDP level and growth, may also have contributed to decreased volatility in economic cycles, due to the increased stability derived from the mandatory social security savings flow investment in the fund offering to the financial system and companies. In Chile, for example, the mandatory social security savings flow reached an average of 4.86 per cent of GDP between 1981 and 2012, and the reform involved a total savings increase of 13.2 percent points of GDP.

In general, it is estimated that the pension system reform during the period under study contributed to an increased annual GDP growth.

<sup>&</sup>lt;sup>5</sup> Mario Marcel, Assistant Director of Governance and Territorial Development, OECD.

<sup>6</sup> http://www.sura.cl/PdfNoticias/librointeractivo.pdf.

For Chile, a number of reforms took place during the same period as the social security reform, most of which—but not all—are isolated in the study. There are also other effects and consequences that are not covered by the study, such as the income distribution analysis.



#### The dilemma

While the individual capitalisation system has contributed to economic development, that is not the purpose of a pension system; the purpose of a pension system is to smooth consumption during the lifecycle and prevent poverty in old age.

However, while the explanations given are easily understandable from the technical viewpoint, from the political viewpoint, the solutions are very difficult to address.

Clearly, the upgrading of pensions in Chile (while maintaining the individual capitalisation system and conditions in place) will probably involve a combination of several solutions, namely:

- (1) Progressively raising the reference retirement ages for men and women (today, 65 and 60, respectively). The current system does not establish a given age, but minimum self-funded pension requirements. However, other aspects of our social security plan pose problems, such as the disability and survival benefits paid out.
- (2) Increasing the mandatory contribution rate. We know that for every contribution increase percent point, ceteris paribus, the final pension amount shall increase by 10 per cent. Of course, this measure, which affects the worker's net salary, is highly effective, but very unpopular.
- (3) Strengthening the voluntary social security savings ("ahorro previsional voluntario" or APV) and the collective voluntary social security savings (APVC). At present, there are some voluntary savings mechanisms in Chile, with tax incentives for higher-income people and direct state grants and benefits for lower-income people. This mechanism, which involves diverse stakeholders, including life insurance companies, has shown to be highly aggressive, but it has a long road ahead.
- (4) Offering social security gap insurance. We have also stated that the insurance industry may provide a global unemployment insurance option, under which the member's social security contributions are only paid when the member becomes unemployed for a given period. While this option is just a proposal, it might also contribute to resolving the addressed problem.

### Conclusion

The individual capitalisation system for pensions in Chile has proven highly convenient from diverse viewpoints, reinforcing the soundness of public finances—no longer part of the distribution system—and the increased domestic savings rate that has, in turn, contributed significantly to economic development.

Nevertheless, for the aforementioned reasons, the pension amounts currently provided by the system are not consistent with the expectancy of workers.

The diagnosis and technical solutions are clear and at a hand; however, they all have a political component that is more difficult to manage.

The new government has stated that a state-owned AFP system will be created as a first step, for further competition. While this solution may contribute to stabilising the situation, it will not really resolve the problem.

In the medium run, the recently elected President of the Republic has announced the creation of a commission made up of Chilean and foreign experts to assess the system and propose amendments that will certainly be a combination of those already described in this article.

In our opinion, if that commission receives sufficient political support, it is likely that the necessary changes and corrections are introduced, so that pension amounts may be increased without affecting the individual capitalisation system that has been so beneficial for Chile.