Bachelor's Final Project

THE CHILEAN PENSION REFORM: RESULTS 36 YEARS LATER

SOFÍA B. SIERRA VÁSQUEZ

TUTOR: M. SOLEDAD RODRÍGUEZ MARTíNEZ
BACHELOR'S DEGREE IN ECONOMICS (EUS GROUP)
UNIVERSITY OF BARCELONA
JUNE 2017

To Isaac.

Thanks for being the best and most supportive grandfather.

ABSTRACT

In 1981, Chile pioneered in transforming its pay-as-you-go (PAYG) pension system into the first private and funded pension system. The following paper presents the effects the structural reform had on the economy and assesses whether the reform achieved its objectives. To do so, it starts by presenting the pension system prior the reform, to proceed introducing the general structure of the current system. The paper continues presenting the macroeconomic, microeconomic and social results of the reform. The analysis finishes presenting the current social discontent and challenges the system is facing towards the future. The conclusion is that further reforms, mainly targeting competition in the AFPs market and the consolidation of the unfunded first pillar, must be implemented to achieve both, the results policymakers pursued in 1981 and the objectives modern pension systems should comply.

Key words: AFP, Chile, Funded pension system, Individual capitalization, PAYG, Pensions, Pension Reform, Second Pillar, Structural Reform

En 1981, Chile fue pionero en transformar su sistema de pensiones de reparto en un sistema privado de capitalización individual. Este trabajo presenta los efectos que la reforma estructural tuvo en la economía y evalúa el cumplimiento de sus objetivos. Para esto, comienza presentando el sistema de pensiones previo a la reforma, para continuar exponiendo la estructura general del sistema actual. El trabajo continúa explicando los efectos macroeconómicos, microeconómicos y sociales de la reforma. El análisis finaliza presentando el actual descontento social con el sistema previsional y los desafíos que este enfrenta de cara al futuro. La conclusión es que es necesario implementar nuevas reformas, principalmente promoviendo la competencia en el mercado de AFPs y en la consolidación del segundo pilar solidario, para conseguir tanto los resultados que las autoridades buscaban en 1981, como los objetivos que los sistemas previsionales modernos debiesen cumplir.

Palabras clave: AFP, Chile, Sistema de capitalización, Capitalización individual, Sistema de reparto, Pensiones, Reforma previsional, Segundo pilar, Reforma estructural

TABLE OF CONTENTS

I. INTRODUCTION

As the United Nations states on its 2015 *World Population Ageing Report*, the world population is ageing. This increase in the proportion of older people in the composition of the population is already implying, and will continue to do so, various social and economic challenges with direct consequences on policy making. How to ensure adequate standards of living for the elderly, easing not only consumption smoothing across lifetime, but also poverty and inequality levels within the senior population, is now at the centre of the discussion. Thereby, Pension Systems seem to be a key issue on the current and future social and economic context.

However, having a pension system that is able to achieve those main objectives -reducing elderlies' poverty and enabling consumption smoothing- while being economically sustainable, is not a trivial issue. Proof of this is our closest example: the Spanish pension system. Its pay-as-you-go (PAYG) pension system has turned to be inadequate for this new composition of population as the life expectancy and the rate of dependency of the system –the ratio between those who should receive a pension and the active population- have increased. The 2011 and 2013 reforms undertaken may have help balance the Social Security's budget, but have failed to ensure population that the adequate standards of living while retired will be safeguarded in the future. In this context, how current and future pension will be paid is today an important concern not only to Spanish policymakers, but to the Spanish society in as whole: Spain needs to find an alternative and sustainable pension system.

Another example on how difficult is to develop a sustainable pension system, capable of achieving the objectives mentioned before, can be found on the other side of the Atlantic Ocean, in Chile. The Chilean case is one of the most iconic examples on structural reforms on the pension system. In 1981, the South American country pioneered in transforming its PAYG system to a fully private funded system with Defined Contributions (DC). Even if within an ageing population context this model is not as likely to have sustainability problems as the Spanish system, it is a pension system that is far from perfection. Thirty-six years after its implementation the model has been highly questioned by the Chilean society due to the precariousness of its benefits and its lack of redistributive effects. Throughout the *vox populi*, the idea that the model has failed to achieve both objectives –the reduction of old-age poverty and consumption smoothing- has increased sharply during the last decade. This social discomfort has given rise to several social movements that ended up materializing in the creation of the Presidential Commission on the Pension System on 2014.

Those two examples can give us an idea about how complex implementing an effective and sustainable pension system turns to be, providing us more than enough reasons on how important it is to perform a deep and comprehensive analysis on empirical cases to find answers to the challenges pensions are facing towards the future. This paper is intended to assess the results of the Chilean pension reform of 1981, as it is the oldest case of a structural reform, thus, allowing us to perform a more comprehensive and long-run analysis.

The first section of this essay, *Context and theoretical framework*, will start providing an insight on what economic theory says about pension systems and the differences between a PAYG and a funded pension system. It continues giving a quick overview on the Chilean pension system prior the 1981 reform by analysing the traits and the evolution of the system as well as the problems it presented. Finally, the reform process and the new Chilean pension system will be explained.

The second section, *Results,* is intended to present the effects the Chilean reform had on the economy. It will start presenting the macroeconomic effects of the reform in terms of the fiscal costs imposed and in terms of the effects the reform had on national savings and economic growth. Then, the microeconomic effects will be presented, analysing the both the newly created AFPs market and the capital market. The section continues presenting the social effects of the reform, which mainly include the coverage, pensioner poverty and equity issues of the pension system. The section ends by presenting some statistics on the perception and knowledge of the system the Chilean society has.

The third section, *Discussion,* will contrast the results presented with the general and specific objectives the reform pursued. It will also give a quick overview on the future challenges the system is facing and on the recommendations the Presidential Commission has made to solve them.

The paper finishes presenting the main conclusions regarding the Chilean pension reform of 1981 and the problems it is facing towards the future.

II. HYPOTHESIS AND OBJECTIVES

Hypothesis

After thirty-six years since its implementation, the Chilean pension system has turned to be a mature and sustainable system. However, it still has numerous deficiencies that need to be addressed by the Chilean authorities in order to accomplish the objectives proposed in 1981.

Objectives

This essay seeks to perform a comprehensive analysis on the Chilean pension system, analysing it from 3 different dimension: (a) the context in which it was implemented; (b) the macroeconomic, microeconomic and social effects the 1981 reform had on the Chilean economy; (c) and the challenges the system is facing towards the future.

After getting a deeper understanding on the results the Chilean pension system reform had, an assessment on the accomplishment of the objectives set by the Chilean authorities, as well as the general objectives any pension system should pursue, will be performed.

The novelty of the Chilean pension system when it was implemented, but also the long time that has passed since them, make it an interesting case-study as it allows us to analyse it from a long-term perspective.

What effects had the reform on the Chilean economy? How successful was the structural reform in solving the problems the Chilean pension system was facing before the reform? Who have been the winners and losers of the Chilean pension reform? What are the system's challenges facing the future? How can the system be improved? These are some of the questions that this paper pursues to answer.

III. METHODOLOGY

To answer the questions presented above and to elaborate of this paper, secondary sources of information will be used along three different phases.

First, a bibliographic review will be performed on the theory about pension systems, mainly based on the works by Nicholas Barr and David Blake. This revision will include theory on the main objectives a pensions system should pursue, the different types of pensions system and the differences and advantages of those models. The bibliographic review will proceed with an analysis on the Chilean pension system before 1981, studying its history, structure, peculiarities and the causes and context that surrounded the structural reform. This part of the bibliographic review will be mainly based on the studies performed by José Pablo Arellano during the 1980s and by Carmelo Mesa-Lago during the 1970s. Finally, the 1981 reform will be studied and described using information from the Chilean *Decreto-Ley N. 3500 of 1980,* the Chilean *Law Nº 20.255 of 2008*, the Chilean Superintendence of Pensions and the paper "*The Structural Pension Reform in Chile: Effects, Comparisons with other Latin American Reforms, and Lessons*" by Alberto Arenas de Mesa.

The second phase will consist of a systematic collection of historic and current data on the Chilean pension system and on some macroeconomic indicators. This data that will be used to study the results the reform had from a dynamic perspective analysing their evolution over time (1981-2016, when possible). In order to study some dimensions from a comparative perspective, data on other OECD and Latin American countries' pension systems will also be collected. The main databases that will be used are: data and statistics from the Chilean *Superintendence of Pensions*, the *Central Bank* and the *Budget Direction*; the World Bank and the OECD databases; and, in some particular cases, the papers and books used as bibliography.

Finally, with the purpose of discussing the hypothesis presented and driving some conclusions, the results obtained will be contrasted with the theoretical framework presented in the first sections of this study.

IV. CONTEXT AND THEORETICAL FRAMEWORK

4.1. Theoretical framework

Before starting to analyse the specifics of the Chilean case, it is important to review briefly the basic features of pension systems and what does literature says about the differences between a funded and a PAYG pension scheme.

4.1.1. Pension systems

As Blake (2006) explains, a pension can be understood as a series of payments between a person's retirement and his death. The main objective these payments pursue are: (a) *consumption smoothing* –to provide an income to retired workers that do no longer receive labour income, in exchange for their contributions made to the pension system while they were active; (b) *insurance* on the uncertainty related to a person's life length. Further, pensions may also pursue two extra public policy objectives: (c) *poverty relief,* providing a minimum living standard for their elderly; and (d) *distributional objective*, giving more resources to specific groups of people.

There are two main financial schemes that can be used to pay those pensions. Within a *funded scheme,* pensions are private and financed through a fund that accumulates as workers save a part of their wages. These savings are invested in financial assets to obtain returns which are also part of the fund. The other scheme –the *PAYG scheme-* works as a contract based on promises, as pensions are paid by the State with the contributions made by current workers to the pension system, which in turn, pay them trusting that they will get their pensions when time comes.

Modern pension schemes are said to be based on *three pillars*, which may or may not be present in a country's pension system. The *first pillar* includes the pensions paid by the Welfare State of the country. It is essentially an unfunded system with a defined benefit (DB) scheme, where pensions or annuities received are normally calculated as a fraction of the person's salary while working[1]. The Spanish pension system would be a good example of a system with great predominance of this first pillar.

The *second pillar* is a mandatory private system financed through a funded scheme. This pillar is the most significant component of the Chilean pension system. Although some countries, like Germany and the USA, have a DB schemes within their second pillar, there is an increasing trend on replacing them with defined contribution (DC) scheme. The combination of funded DC schemes is also known as the Individual Account (IA) model. Within this model, no level of pensions is promised as it depends on the final value of the fund –contributions and returns- accumulated during the working life. In the IA model, pensions also depend on the payment scheme used: pensions can be paid as *Annuities*, hiring an Insurance Company to pay a lifetime constant pension (in real terms); as a *Programmed Withdraw*, keeping the individual account and recalculating the pension amount each year taking into account the fund balance, life expectancy and future expected returns; or as a combination of both.

Finally, pension systems may also include a *third pillar* composed by any voluntary additional savings that the individual may keep for retirement, either as self managed deposit accounts or mutual funds, or through a formal pension scheme.

4.1.2. PAYG or funded?

As explained in the introduction, there is an increasing concern on reforming pension systems in order to make them less vulnerable to demographic pressures while meeting their main objectives. In this context, reforms towards private funded pensions have been presented not only as desirable but also as necessary and urgent (Barr, 2002). But, where do these ideas come from? What changes in an economy when the pension scheme is changed from a PAYG to a funded scheme?

The desirability of shifting pension systems towards a funded scheme may find its roots in the conception that funding resolves problems related to adverse demographics. By definition, funded DC pensions do not have sustainability problems: pensions are calculated and paid based on the fund that has been already accumulated or, in other words, the available

[1] It can be based just on the salary earned on the last years of the working life, introducing distortions on wages and labour mobility, or on the average salary over an extended period. (Barr, 2002)

resources. However, having a sustainable system does not imply that the pensions will be high enough to ensure the living standards of the elderly.

Since pensions are so complex, the pros and cons of each pension scheme should be analysed carefully before implementing a reform. Barr & Diamond (2010) explain several lessons and conclusions offered by economic theory that should be considered while framing policy design of pension systems.

First of all, it is important to notice that every pension system shares the associated risks differently. These differences arise mainly from the underlying philosophy behind them and depend both on the benefits scheme –DC or DB- and on the funding scheme –PAYG or funded. While within a PAYG DB, risks are shared between workers and pensioners, within a fully funded DC plan the risk may be bear by the insurance company, if the pensions are paid through annuities, or by the worker, if pensions are paid through a programmed withdraw.

Second, the fact that governments deal with a series of different constraints while designing their pension system implies that no pension system will ever be the single best. This is due both to the multiplicity of objectives a pension system may pursue –and that cannot be completely achieved at the same time-, and to the diversity of constraints a government may face regarding its fiscal and institutional capacity and the economy's behavioural parameters and initial income distribution.

Consequently, moving towards a funded scheme may not always be the right policy. Even when this conclusion may sound obvious, some of the advantages that have been attributed to funded schemes, and that have boost this idea of funded pension systems as the most desirable scheme, are not always completely true.

A widespread belief is that funded pension systems increase national savings, boosting investment and, therefore, economic growth. Although this may sound very appealing, many issues arise from this sole premise. First of all, it may be the case that savings do not increase with the implementation of a funded system as households saving may just shift from being voluntary to mandatory, keeping the savings rate rather unchanged. Furthermore, even when the increase in saving might happen, it may not be desirable if the country has a savings rate that is already high –like China. Second, the idea that an increase in saving does imply an automatic increase in investment is not only quite a naïf, but a very strong assumption. Finally, this premise has intergenerational redistributive effects that should be also considered: if funded schemes do increase savings, then consumption must decline, imposing a burden on current generations to benefit future generations which may or may not be a desirable outcome.

Another advantage that has been attributed to funded systems is that they can help on the development of formal capital markets, improving the efficiency of transforming savings into productive investment. However, this will depend on how effective the regulation and administration of those capital markets is, as they may not have enough incentives to allocate the funds into the most productive investments.

Finally, from the fiscal point of view, funded pension systems have also been pointed out as a way of reducing public pension spending. Though this can be true in the very long run when the system has already reached maturity, it is not a valid argument in the medium-short run. As it will be studied more in-depth with the Chilean case, transition costs can increase sharply the short-term budgetary pressures.

Therefore, the assessment of reforming a PAYG system into a partial or fully funded scheme should be done very cautiously: it is important not to overstate the advantages of shifting into a funded system, taking into consideration that some assumptions that are often made may not hold in reality and that the empirical outcome of the reform may not meet the expected one.

4.2. The Chilean situation before the 1981's Reform

4.2.1. Pre-1981 Chilean Pension system

The history of the Chilean Social Security dates back to 1924, when the president Arturo Alessandri Palma pioneered in implementing a social security pension system. During the last years of the XIX and the first years of the XX century the massive migrations to cities caused an important deterioration in the living conditions of workers. This situation turned into popular discontent not only among workers, but also among an influential fraction of the military, which pressured Congress to approve a social security law on health coverage and retirement pensions in 1924. This first social security system introduced a compulsory social insurance that covered health care as well as disability and retirement pensions for blue-collar (industrial) workers. During 1925, the system generalised and other similar compulsory insurances were created for white-collar (administrative) workers, civil servants and journalists. By 1965, more than 70 per cent of the labour force was affiliated to the system in different institutions.

Between the 1920s and 1981, Chilean pensions were organized under a PAYG[2] scheme with defined benefits (DB), where several semi-public institutions (*Cajas de Previsión*) administrated the contributions paid by workers, employers and by the government in its role of civil servants' employer. These institutions were independent from each other and were normally intended to a specific segment of the labour force, following the basic scheme created during the 1920s. Thereby, workers received different benefits and had different retirement ages and prerequisites depending on which type of jobs they performed. This segregated situation was always a cause of concern for the authorities who presented several, but non-successful, projects to reform the Social Security system trying to homogenize the benefits provided and their financing as well as to simplify the administrative procedures. It wasn't until 1981, with the dictatorship of Augusto Pinochet, when the social security system was reformed and unified.

It is important to highlight some changes suffered by the system during the years prior the reform, as they may help us understand better the general context in which it was implemented.

During the first years of the dictatorship, which started in 1973, the coverage of the system was extended and the contribution rates were increased, accounting for more than 50 per cent of the workers' labour income[3] (Bustamante, 1996). Nonetheless, during this same period workers suffered a sharp reduction in the benefits received due to the absence or non-proper readjustment of the transfers given, despite of the high inflation rates registered. This traduced into a sharp reduction on the pensioners' purchasing power, which dropped by 26% between 1973 and 1982 compared to 1969-70. (Arellano, 1988)

---

[2] During the first years, the system worked as a partially collectively funded scheme as resources needed to pay the retirement benefits were less than those collected. The difference was saved and capitalized as a reserve that ended up disappearing when the system reached maturity.

[3] Since the revenues were used indistinctly, this 50% global contribution rate includes contributions paid (and used) for pensions, health care, work accidents, early retirement and eviction, among others.

Moreover, during the last years prior to the reform the employers' contributions were reduced, attempting to decrease labour costs and, consequently, the high unemployment rates. This caused a further reduction on pension benefits and a higher pension deficit on the administrative institutions that had to be covered with revenues from the government's general budget. The combination of high unemployment rates and high informal work (mainly cause by the excessive contributions), made the coverage of the labour force drop from 79 to 62 per cent between 1974 and 1980.

Summing up, before 1981 Chile had an uncoordinated social security that rested on more than 10,000 uncompelled laws and regulations. Within this system, more than 160 independent semi-public institutions were in charge of paying pension benefits (among others) that were financed through a non-funded scheme. This implied that the system had different regimes, retirement requisites, contribution rates and benefits for each type of worker, that combined into 31 systems of old-age retirement, 30 of seniority retirement, 30 of disability and near a hundred of other systems related to health-maternity, unemployment compensations and social welfare. To make it worse, there was no single state agency supervising the planning, policy-making or coordination of the whole social security system (Mesa-Lago, 1978).

4.2.2. Problems with the previous pension system

Ever since the early 1960s, the problems of the Chilean social security system were acknowledged. As Mesa-Lago (1978) explains, studies at the time showed that it was one of the most discriminatory systems in the world. Its extreme complexity caused deep inequality problems that needed to be solved through the standardization of the prerequisites to acquire benefits, the elimination of privileges and the expansion of coverage to the entire labour force. However, neither these key reforms nor those related to the legal, administrative and financial unification of the system were ever passed. By 1980, the system did not only have problems regarding the unequal access to benefits among workers, but also issues related to a financial mismatch within the institutions and deep administrative inefficiencies.

Regarding the financial mismatch, the semi-public institutions that administrated the funds were not financially sustainable as they showed persistent deficits with respect to the resources collected from workers and employers' contributions. These deficits were covered with direct transfers from the State's general budget, which accounted for more than 30 per cent of the system's revenues between 1950 and 1980. However, about 60 per cent of those transfers were intended to cover an accounting mismatch on the civil servants' social security institution (the *Caja Nacional de Empleados Públicos y Periodistas*). The reason for the existence of this gap was that the government, as the civil servants' employer, paid lower contributions than the private sector even when the pensions for public sector workers were higher. Taking that accounting problem out of the structural deficit, the State's direct transfers would still have accounted about 10 per cent of the total social security revenues. Nonetheless, as Arellano (1988) explains, these extra revenues were mainly used to cover the pensions for the lower income affiliates, introducing a redistributive component to the social security system that should not be considered a *problem* by itself.

The real deficiencies of the system were related to its administrative and equity problems. Even when the system was progressive and respected the principle of vertical equity, it was widely seen as an unfair system. The reason for this social perception was that the system did not respect the horizontal equity principle: depending on whether the worker was a civil servant or a white or blue collar worker, the benefits received varied widely. For instance, in 1981 the pension benefits for civil servants were twice those received by other civilian workers with the same labour income, even when the total contribution rates were higher for private workers. (Arellano, 1988)

Finally, one of the main reasons used to justify the 1981 reform in terms of decentralization and privatization were the important administrative inefficiencies and the very high administrative costs of the system. In this respect, it was thought that the introduction of competition between private institutions would help reduce those costs, as prices would be used as a mechanism to gain competitiveness. This perspective, however, ignored two important issues: on one side, insurance markets have higher sales costs that do not allow this expected cost reduction and, on the other side, there could be economies of scale that rather justified a centralized system. As Arellano (1988) explains, even when a structural reform was needed, the convenience of replacing the existing system with a private funded system could not be inferred from the analysis of the system's defects.

4.3. The Chilean Pension System

In May 1981, Chile's public social security system was radically reformed, transforming it form a public PAYG DB system into a private, but mandatory, fully funded DC system. During 27 years, the Chilean pension system remained almost unchanged, until 2008 when a new Pension Reform was implemented. It introduced several changes in the system mainly intended to promote competition, reduce the administration costs of the system and reduce gender and income inequality among the elderly. This new reform formalised the first pillar of the system, turning it into a *mixed system*, having the presence of the three pillars. This section reviews the current Chilean pension system, including the changes introduced by both reforms. Figure 1 provides a simplified scheme on the Chilean pension system.

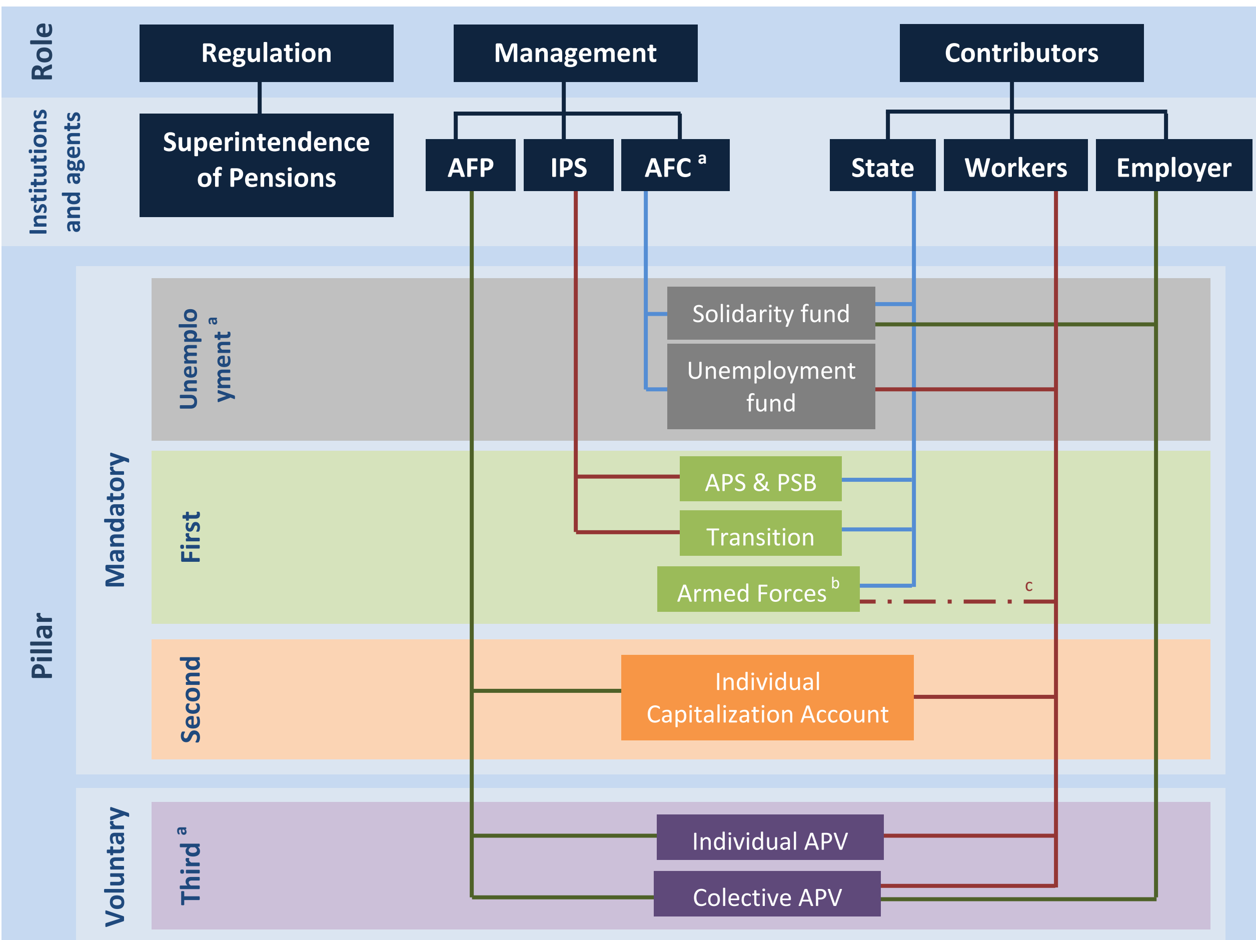


Figure 1: Pension system scheme after the 2008 reform
(a) Not covered within the scope of this paper; (b) Managed by 2 specific institutions: CAPREDENA and DIPRECA; (c) Military workers
Sources: Elaborated using the scheme proposed by Fundación Sol (2013) and bibliography used in this paper.

Since its origins, the administration of the Chilean pension system has been composed by two main entities: First, we have the newly created private insurance corporations named Pension Fund Managers, or AFP (*Administradoras de Fondos de Pensiones)*, replacing the former *Cajas de Previsión.* These pension managers are for-profit companies, completely independent and unrelated to the workers' employer[4], whose sole purpose is to invest in the most profitable way, but attending to some risk limitations, the pension fund of their affiliates. Second, there is a public regulatory agency, named the Superintendence of Pensions[5], which supervises and regulates the functioning of the three pillars of the system.

As mentioned above, the current Chilean pension system follows a mixed scheme, where the three pillars are present. We will start revising the second (funded) pillar as it was the one that was first created.

The affiliation to an AFP and, therefore, to the second pillar of the system, is automatic and mandatory to every new worker and, since 2008, goes to the AFP with the lowest commissions. Affiliates are allowed to change from one AFP to another, but they are obliged to remain in the same AFP it for at least 2 years[6].

Once affiliated, every worker pays, through his employer, a percentage of his labour income to his AFP. This percentage varies depending on the AFP, but it always includes a 10 per cent contribution rate that goes to the worker's individual capitalization account and a commission charged by the AFP for its managerial duties[7]. Today, this commission is just a fix percentage of the workers' salary, equal for every worker belonging to the same AFP, but before the 2008 reform it also included a fix price, in Chilean pesos, that constituted a regressive component of the system.

As mentioned above, the managerial duties of the AFPs only include the investment of the fund to get the highest returns possible, attending to some risk limitations. Although some of those limitations are set by the Superintendence of Pensions, workers can also make decisions on the risk taken with their savings as each AFP follows a *multi-fund* scheme. Thereby, each AFP has 5

[4] As opposed to the case of the USA, where companies sponsor the funded pension plans for their workers.
[5] Substituting the Superintendence of AFP since the reform of 2008.
[6] Since 1998. Further explanations are provided in section 5.2.1.
[7] Commissions have varied widely over time, being 0.41% the minimum and 3.97% the maximum registered.

types of funds that go from *A*, the riskier fund, to *E*, the most conservative fund, among which their affiliates can freely change at any time.

As previously explained, workers entering the labour market after 1981 must enter to the funded system. However, those workers that were already insured by the public system when the 1981 reform was implemented, had a short period to choose between remaining in the old system or changing to this new private system. To encourage the latter option, the government promised to recognise all the contributions paid to the public system through a fiscally funded[8] bond (*Recognition bond*) issued at the value that the worker's pension would have represented if the reform had not been implemented. Nevertheless, for those workers that decided to remain in the old system, the government promised to administrate and finance their pensions until the end. The administration of the pensions of those workers was left in hands of a new institution named National Institute of Pensions (INP), which was replaced in 2008 by the Social Pensions Institute (IPS).

The IPS is a public institution in charge of administrating the transition pensions as well as the rest of the first pillar of the system. Besides the transitional component, this first pillar includes some unfunded pension benefits for the civilian population. Although the 1981 did include some unfunded benefits[9] aimed at accomplishing the poverty relief objective, it wasn't until 2008 when the first pillar was formally introduced and its scope enlarged. First, the *Solidarity Pension Contribution* (APS for its Spanish acronym) was created. This State-financed benefit targets those retirees that have contributed at least once to the funded system but do not meet certain minimum pension level and comply the requisites of with being older than 65, having lived for at least 20 years in Chile and being part of the 60th poorer percentile[10]. Another benefit created in 2008 was the *Solidarity Basic Pension* (PBS for its Spanish acronym), targeting those people that do comply the requisites to get the APS but do not have the right to any other pension benefit, either private or public. Additionally, the 2008 reform introduced pension benefits for disabled workers and a pension bond for women with children.

The third pillar of the system is mainly composed by the APV: an additional voluntary pension account, managed by the same AFP, for workers who are willing to pay a higher contribution in order to achieve a higher level of pensions while retired.

---

[8] The bonds were capitalized at a 4% real interest rate.

[9] A Minimum pension guarantee and a Welfare Pension.

[10] It increased gradually from the 40th percentile in 2008, to the 60th percentile in 2011.

When the worker retires –at age 60 for women and at age 65 for men– pensions are financed by the fund accumulated in the insured's individual account[11] and can be paid as an annuity, programmed withdrawal, or a combination of both. This implies that the benefits the retiree receives will depend on the amount of contributions paid during the working life, the capital returns gained, the life expectancy and gender of the pensioner and the modality of payment the retiree chooses. If the pension received does not meet a certain minimum, the retiree can apply to the APS benefit.

Finally, three particular features of the 1981 Reform should be highlighted. First, the system was only made mandatory for workers employed under a dependency relation, making the affiliation of the self-employed workers voluntary. This situation changed in 2008, when the gradual introduction of mandatory contributions to the self-employed workers was implemented as a direct consequence of the enlargement of the first pillar beneficiaries. Second, the armed forces' social security system was not included in the 1981 Reform, remaining as a public PAYG system that has not been modified to the date. Additionally, the government committed to finance the future deficits the system could (and does) have. Third, the employer's premium was eliminated, reducing total contributions just to the worker's premium. After the 2008 reform, employers are obliged to pay a risk and death insurance to their workers and can create and contribute to a collective APV in benefit of their workers.

[11] And in the APV, if the worker has one.

V. RESULTS

After thirty-six years under a funded pension system, the Chilean economy has experienced several effects caused directly or indirectly by the pension reform. The following section reviews the effects of the reform from three different scopes: macroeconomic, microeconomic and social.

5.1. Macroeconomic effects

5.1.1. Fiscal costs

One of the first questions that arise while thinking on reforming a PAYG system into a funded pension scheme is how to finance the transition. The reason for this concern is quite straightforward: if we were paying pensions with the current contributions and now those contributions will go to a savings fund, how can we keep paying the current pensions?

The Chilean government's approach to that issue was committing to ensure that all pensioners, current and future, would keep receiving a pension. Furthermore, Chilean policymakers committed not to finance them through public deficit or the emission of new public debt, but through a strong fiscal discipline. Thereby, an important burden was imposed on the Chilean fiscal budget, which managed to operate with a surplus during a great part of the 1990s and 2000s, mainly by increasing taxes and reducing public spending (Uthoff, 2001).

	Avg. Surplus of the Central Government's Budget	**Average transitional costs**	
Period	**% GDP**	**% GDP**	**% Government expenditure**
1981-89	-	3.2	25.6
1990-99	1.5	3.8	35.1
2000-09	2.0	3.3	29.6
2010-16	-0.5 [1]	2.3	18.7
1981-2016	**1.2 [2]**	**3.2**	**28.2**

Table 1. Average Fiscal Surplus & Transitional Costs

[1] Avg. 2010-15; [2] Avg. 1990-2015

Sources: Uthoff (2001), Central Bank of Chile and Superintendence of Pensions

While analysing the fiscal costs of the reform, it is important to distinguish between those costs that are *structural* and will remain as time goes by, and those costs that have a *transitional* nature and, thus, will tend to disappear as the system matures.

The transition costs of the Chilean reform are related to the issuing of recognition bonds and to the pensions paid by the IPS. These costs have been fully financed with direct charge to the Central Government's fiscal budget. As it can be observed in figure 2, the transitional deficit has been quite significant during the whole period, representing an average of 3.2 per cent of the GDP between 1981 and 2016. Although their composition has changed over time and that they show a clear decreasing trend since 2003, transitional costs still accounted for 1.9 per cent of the GDP on 2016, with 1.4 percentage points of it representing IPS pension payments. When expressed as a fraction of the total government expenditure, transitional costs accounted for more than a quarter of the spending between 1981 and 2016 (table 1), reaching a maximum of 38.1 per cent of the total government expenditure in 1991.

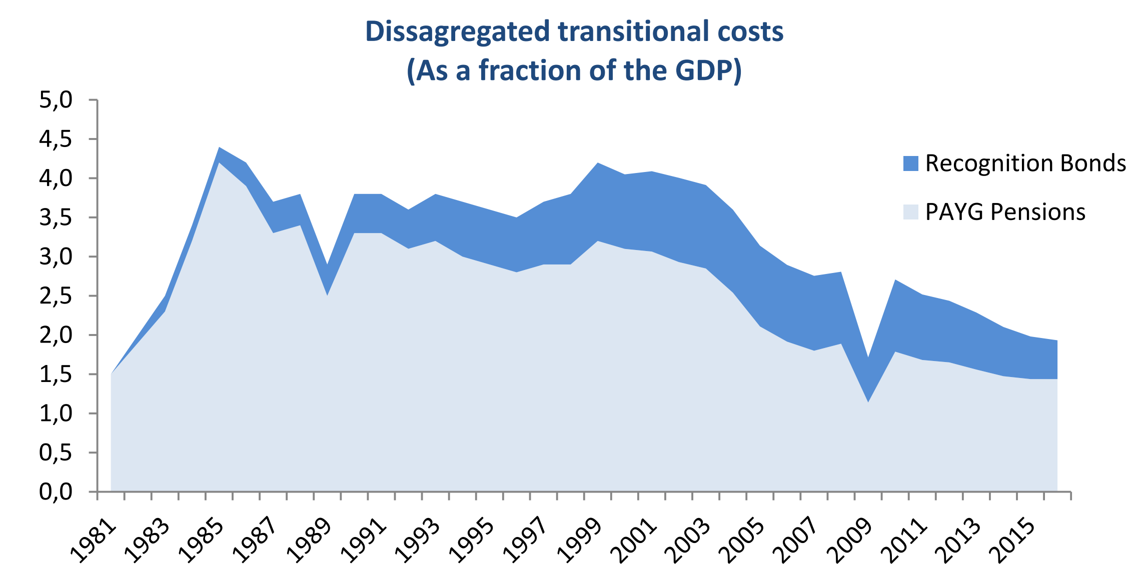


Figure 2 Sources: Elaborated using data form Uthoff (2001) and Superintendence of Pensions

Although the transitional costs show a decreasing trend and are expected to disappear in the future, this will not happen before 2050. Data from the Superintendence of Pensions shows that in December 2016 a 10.5 per cent of the workers contributing to the IPS had between 51 and 56 years old. This means that the PAYG system will have contributors until 2036, but will still be paying pensions until 2053 approximately[12]. Furthermore, assuming the youngest affiliates to the PAYG system were 16 years old at the time the reform took place, costs associated to the recognition bonds will still endure until 2030.

Besides these transitional costs, the 1981 reform imposed some other structural costs to the fiscal budget, arising from two very different sources. The first is directly related to the poverty relief objective. As mentioned before, the 1981 pension system did include some unfunded benefits to lower-income retirees and since 2008 it includes the APS and PBS as part of its first pillar. It is interesting to notice that neither the 1981 nor the 2008 reform considered any specific contribution or related tax to finance this first pillar thus, those expenses are immediately considered to be part of the pension deficit.

The other source of structural deficit appears as a direct consequence of the context in which the reform was implemented. Since during 1981 Chile was governed by a military dictatorship, the reform did not include the armed forces and the police social security systems which remain as two specific programmes that depend on the Ministry of Labour and Social Prevision. The evolution of the structural costs is presented in figure 3.

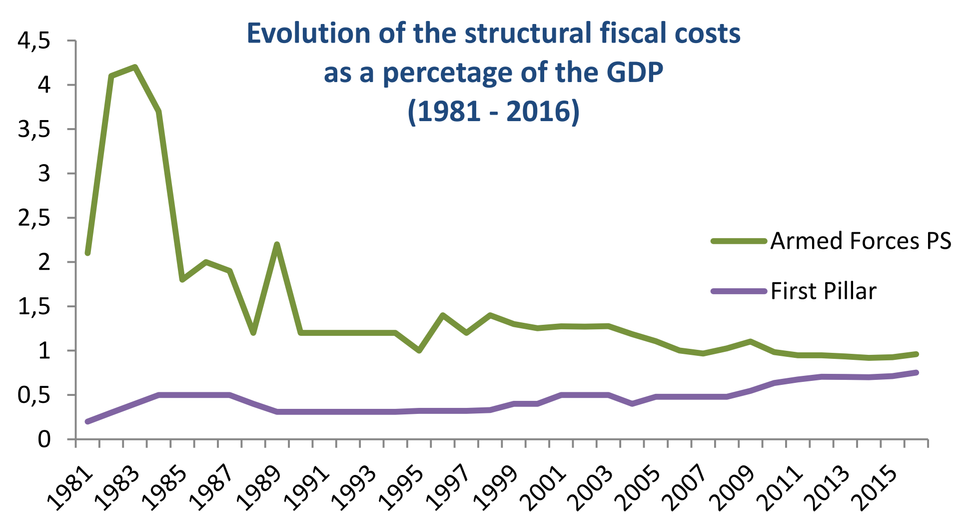


Figure 3 Sources: Elaborated using data form Uthoff (2001), Superintendence of Pensions and the Dpt. of Budget Management

[12] Assuming the younger worker is still 56 years old and using the Chilean life expectancy of 81.5 (2017)

The structural costs have had a very dissimilar evolution. The costs related to the first pillar[13] have accounted for an average of 0.5% of the GDP during the whole period and show an increasing trend over time, especially after the 2008 reform, accounting a 0.8 per cent of the GDP on 2016. While the transitional fiscal costs will tend to disappear over time, the opposite behaviour may be expected from poverty relief spending. As it can be observed in table 3, the number of beneficiaries of the APS programme has grown steadily since its implementation in 2008, reaching more than 700 thousand people in 2015. Moreover, this behaviour is consistent with the fact that since 2011, the average pension received by the Chilean retirees from the private capitalization system is lower than the guaranteed minimum pension.

	Average monthly beneficiaries		**Guaranteed min pension for APS**	**PBS**	**Average pension (in thousands of Chilean Pesos)**	
Year	**APS**	**PBS**	**In thousands of Chilean Pesos**		**Civil (before APS)**	**Military and Police** (a)
2005	-	-	-	-	160,0	-
2006	-	-	-	-	167,1	-
2007	-	-	70,0	-	185,6	-
2008	-	-	120,0	-	202,4	-
2009	64.003	582.317	150,0	75,0	196,9	-
2010	327.307	619.800	200,0	76,1	201,5	547,3
2011	423.189	620.644	255,0	78,6	204,1	571,1
2012	517.338	610.388	261,8	81,0	210,7	602,4
2013	612.521	595.450	266,7	82,4	217,6	625,4
2014	673.041	582.572	279,8	86,0	235,1	653,2
2015	729.471	578.993	291,8	89,8	244,6	-

Table 2. Evolution of the components of the structural deficit
(a) Estimated from the total pension expenditure and the number of retirees
Sources: Superintendence of Pensions and Dpt. of Budget Management

On the other side, we have the expenditures associated to the military pension system. While this spending increased substantially during the first years of the reform, it suffered a sharp decline during the late 90s, coinciding with the end of Augusto Pinochet's dictatorship. Since 2005, these expenditures have stabilized around a 1 per cent of the GDP. It is important to notice that although the military workers do pay social security contributions, those contributions only covered a 19.7 per cent of the pension spending in 2003 and an 18.5 per cent in 2016. Thus, their pension expenditures should not be entirely considered part of the pension deficit even when it more than an 80 per cent is financed by the state's general budget.

[13] Not including the disability pensions for contributors under 65 that are also financed through public spending.

This special treatment to the armed forces has further feed the social discontent with the system, not only because of how they are financed, but also because the average military pension is 2.8 times higher and has increased at a faster rate than the average civilian pension: 19.3 per cent against 16.7 per cent between 2010 and 2014.

Summing the four components described above the average pension deficit has accounted for a 5.1 per cent of the GDP between 1981 and 2016 and a 3.9 per cent between 2006 and 2016 (table 3). This decline has been mainly driven by the reduction in the transitional components of the deficit, which represented the 70 per cent of the pension deficit during the 90s and early 2000s. During the most recent years the structural deficit has increased its weight and today the two deficits have almost the same weight on the total. Therefore, how the Chilean pension deficit evolves in the future will not only depend on how fast the transitional costs disappear, but also on whether the likely increase in the structural deficit offsets that reduction.

Year	Transitional PD	Structural PD	Total PD	Transitional/Total
1981	1,5	2,3	3,8	39,5
1985	4,4	2,3	6,7	65,7
1990	3,8	1,5	5,3	71,6
1995	3,6	1,3	4,9	73,2
2000	4,0	1,7	5,7	71,0
2005	3,1	1,6	4,7	66,4
2010	2,7	1,6	4,3	62,6
2015	2,0	1,6	3,6	54,7
2016	1,9	1,7	3,6	53,0
Averages				
1981-89	3,2	3,0	6,1	51,5
1990-99	3,8	1,6	5,3	70,7
2000-09	3,3	1,6	4,9	66,3
2010-16	2,3	1,6	3,9	57,9
1981-2016	3,2	1,9	5,1	62,2

Table 3. Composition of the Pension Deficit (as percentage of the GDP)

Sources: Uthoff (2001) and Sp. Of Pensions

5.1.2. National Savings and Economic Growth

One of the arguments used by Chilean authorities as a further justification for shifting from a PAYG pension system towards a funded one was that it would help increase national savings and, thus, boost the country’s economic growth. However, as explained in section 4.1.2. the mechanisms how this could happen are not as straightforward as it could be initially thought.

As it can be observed in figure 4, national savings did show a sharp increase after the reform was implemented, as well as a reduction in its volatility. However, measuring the direct effects the pension reform had on Chile's national savings is extremely challenging: first, because of the lack of consistent and disaggregated data prior 1981; second, because the pension reform took place in a framework of many other structural reforms that liberalised capital markets and promoted savings through fiscal incentives.

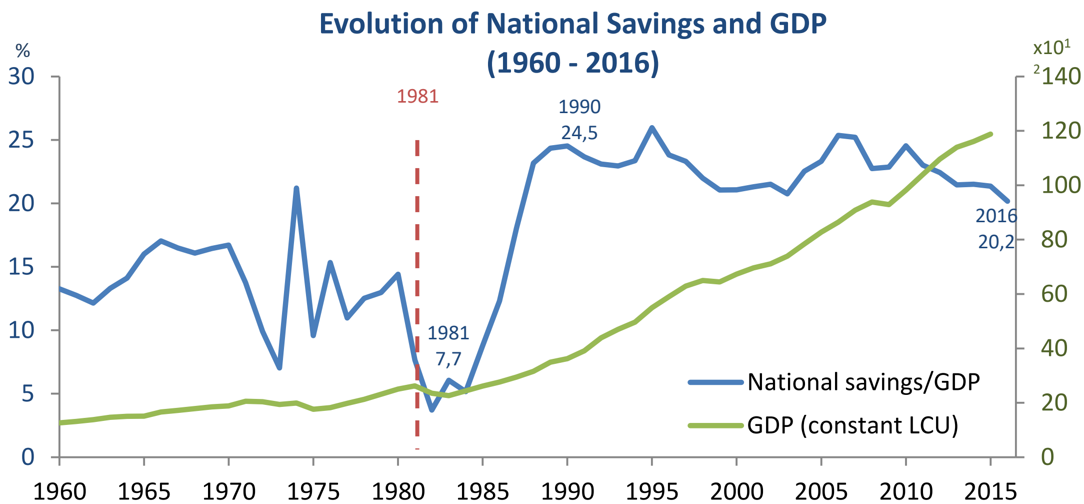


Figure 4 Sources: Elaborated based on historic data on macroeconomic aggregates of the Central Bank of Chile and World Bank data on GDP

In this respect, some studies[14] have shown that a part of the increase in national savings can be attributed to the pension reform, not only as direct boosts on private savings but also through the development of capital markets and a higher productivity growth. However, the main part of this rise in national savings should be attributed to the fiscal incentives and tax reform that managed to sharply increase corporate savings rate and to the increase in public savings, derived from the fiscal pressure caused by the pension reform (Gill et al. 2005, p. 119). The latter has been considered one of the most important components of the increase in national savings, as the Chilean government carried out a severe fiscal discipline in order to finance the pension deficit.

[14] Schmidt-Hebbel, K. 1997. Pension Reform, Informal Markets and Long Term Income and Welfare, Working Paper 04, Central Bank of Santiago, Chile.

Therefore, as explained by several scholars[15], when the average annual fiscal costs of the reform are subtracted from the capital accumulation generated by the pension funds, both as percentage of the GDP, the overall result is a net savings deficit. Considering the period between 1981 and 2004, this net deficit accounted for 3 per cent of the GDP, as the capital accumulation represented the 2.5 per cent of the GDP, while the fiscal costs accounted for a 5.5 per cent. Although this net deficit could be considered just a transitional effect, as explained before, the length of the transition –estimated to last more than 60 years- imposes a significant burden that should not be ignored on the long-run effects the reform could have on national savings.

Likewise, it is extremely challenging to assess to which extent the pension reform contributed to the change in trend that can be observed in economic growth after the 1981 reform (figure 4), as it took place, as previously highlighted, in a framework of many other structural market-oriented reforms. However, as explained by Barr (2002), if we assume that the surplus used to pay the pensions' deficit would have rather been used for consumption instead of investment and taking into consideration the effect the reform had on the development of capital markets (explained in the following sections), it could be considered that the 1981 reform did had a positive effect on economic growth. Yet, even when some studies claim to have found how much the pension reform contributed to the good Chilean economic performance since the 1980s, these results should be analysed with extreme carefulness, as performing these type of estimations is inherently difficult.

Consequently, although the 1981 pension reform may have had some boosting effect on economic growth and private national savings, this increase should not be overstated and should be assessed taking into consideration the burden the reform imposed in public saving. Furthermore, it is important to reassert that, although desirable, the increase in national savings and greater economic growth should not be objectives pursued by a structural pension reform.

[15] Arenas de Mesa (2006), Barr (2006) and Uthoff (2001), among others.

5.2. Microeconomic effects

5.2.1. The AFPs Market: Competition and Administrative Costs

One of the main objectives of the 1981 reform was to increase the efficiency of the pension system by introducing competition in its management. Using an extremely simple model with very strong assumptions, policymakers thought that a greater and idealised competition would exert a downward pressure on prices and, therefore, would lower managerial costs for workers.

Table 4 shows the evolution on the number of AFPs, commissions charged and the concentration of the market. As it can be observed, the AFPs market has always been concentrated: when the reform was implemented, 12 AFPs appeared in the market but only the 3 biggest AFPs concentrated more than the 60 per cent of the contributors, with half of them concentrated in which, to the date, is the biggest AFP in terms of affiliates and contributors.

The 36 years of the AFPs market could be divided into 4 periods. First, a period of concentration during the 1980s, characterized by an almost inexistent entrance of new firms to the market and by an increasing trend on the commissions charged. Second, a period of strong competition during the 1990s, with a massive entrance of new AFPs and a reduction on the commissions changed. During this period, there was a high affiliate transfer between AFPs, mainly driven by the direct monetary incentives given to the sales agents, which increased marketing costs, reducing the AFPs' rates of profit. To avoid this inefficient behaviour, a new regulation was implemented in 1998 regarding the affiliate transfer and the incentives given to the sales agents (Berstein, 2011). By the end of this second period, the market was further concentrated, with only 8 AFPs left and the 3 biggest AFPs[16] sharing more than three quarters of the contributors.

The third period, which starts in 1999 and finishes in 2008, could be described as a period of stagnation in every sense: the market seemed to fluctuate around 6 AFPs, a commission of 2.4 per cent of the labour income and the concentration of 77 per cent of the contributors in the 3 biggest AFPs. What did change during this period was the rate of profits gained by the AFPs, which increased sharply, giving the biggest AFPs huge economic power. This situation encouraged the changes in regulation introduced by the 2008 reform.

[16] Provida, Habitat and Santa María

	Annual average		Market share (% of contributors)	
Year	**# AFPs**	**Commission**	**Biggest AFP [(a)]**	**3 biggest AFPs**
1981	12	2,52		63,06
1982	12	2,56	32,10	63,64
1983	12	3,38	30,38	60,22
1984	12	3,58	29,70	62,01
1985	13	3,56	29,97	62,76
1986	12	3,47	30,39	63,98
1987	12	3,42	29,95	66,23
1988	13	3,58	29,53	66,36
1989	13	3,48	30,13	67,71
1990	14	3,33	34,48	71,85
1991	14	3,26	31,46	68,66
1992	19	3,23	30,67	68,90
1993	22	3,24	31,83	68,34
1994	22	3,20	31,44	67,52
1995	21	3,22	31,82	67,12
1996	17	3,10	31,97	66,39
1997	13	3,00	31,34	67,22
1998	15	2,84	34,99	72,13
1999	8	2,63	40,17	77,42
2000	8	2,52	40,94	76,50
2001	8	2,49	42,38	78,05
2002	7	2,36	41,09	78,05
2003	7	2,36	41,49	79,18
2004	7	2,37	40,63	77,51
2005	7	2,38	39,10	77,72
2006	6	2,40	37,63	77,95
2007	6	2,46	40,17	77,46
2008	7	2,67	40,06	87,23
2009	5	2,24	39,83	86,55
2010	6	1,55	38,11	85,27
2011	6	1,55	35,99	81,90
2012	6	1,52	34,04	78,32
2013	6	1,48	33,02	76,00
2014	6	1,35	32,03	73,40
2015	6	1,16	30,82	71,10
2016	6	1,16	28,65	67,74

Table 4. Evolution of the AFPs' Market

(a) AFP Provida has always been the biggest

Source: Superintendence of Pensions

Since the implementation of the 2008 reform, and even when the number of firms has not increased significantly, the system has shown some positive changes: the market is less concentrated and the commissions changed have declined sharply. Both results could be mainly attributed to the new bidding of the new affiliates, which now goes to the AFP with lower prices.

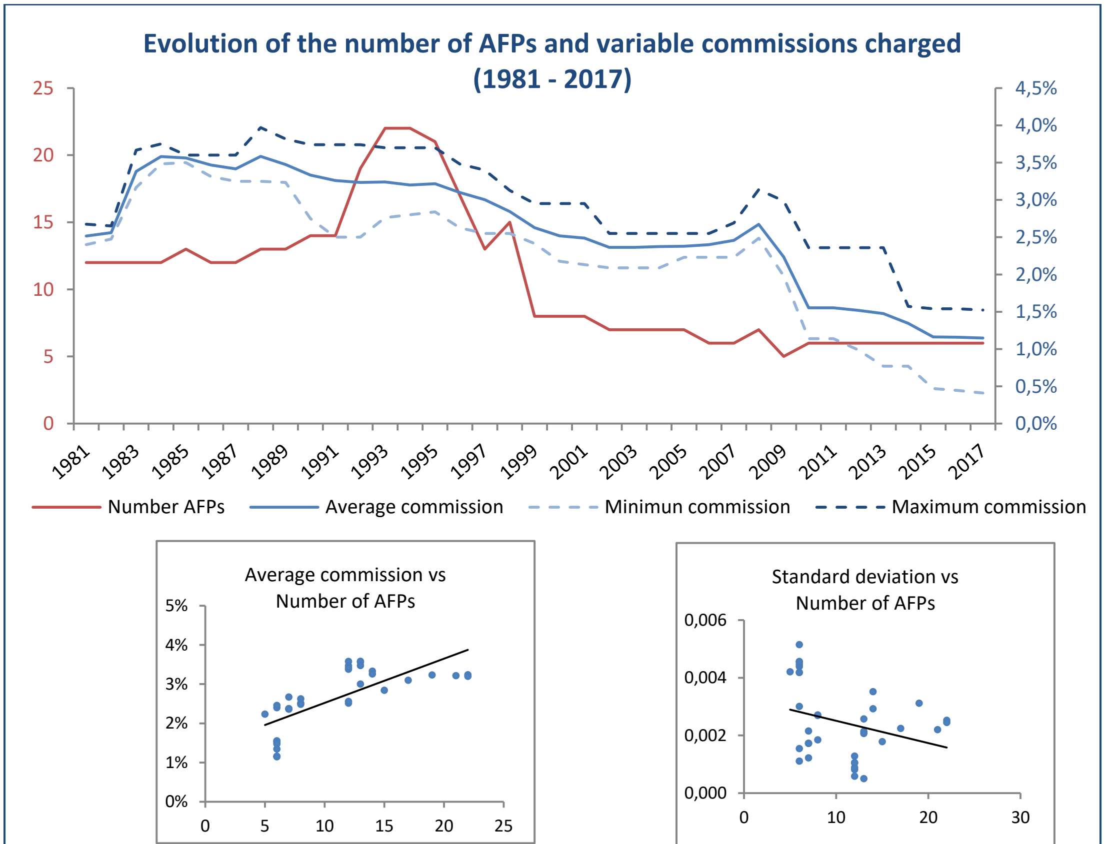


Figure 5 Source: Superintendence of Pensions

It is interesting to notice that when comparing the evolution of prices with the evolution of the number of AFPs, there isn't either the negative correlation as it could be expected. As it can be observed in figure 5, the higher the number of AFPs, the higher the prices and the lower the dispersion between the commissions charged. This shows that, as mentioned before, commissions charged have not been sensitive to competition, but they are rather sensitive to regulations and the incentives given to increase their market share.

Figure 6 shows an estimation made with Gretl using historic data[17] on the average performance showed by every AFP that has existed in the system during their years of presence in the market. Model 1 shows that historically, there has been a negative correlation between the commissions charged (Avg_Com) and the market share of the AFP (Avg_Mkt), which is consistent with the idea that insurance markets (such as the AFPs market) present economies of scale. The average rate of return (Avg_ret) also shows to be significant while explaining the average commissions charged, reflecting that they may not be as arbitrary as it could be initially thought. Finally, the variable PI_ratio, tries to approximate the replacement rate (the pension received as a fraction of the workers' pre-retirement income) of each AFP, by taking the average of the yearly ratio between the average pension and the average taxable income. This ratio does not show to be significant at any significance level, which is probably be due to the lack of real data on the variable.

```
Model 1: OLS, using observations 1-22 (n = 16)
Missing or incomplete observations dropped: 6
Dependent variable: Avg_Com

             coefficient    std. error    t-ratio    p-value
  -----------------------------------------------------------
  const        2.56104      0.543439       4.713     0.0005   ***
  Avg_Mkt     -0.0687446    0.0181025     -3.798     0.0025   ***
  Avg_ret      0.0715166    0.0318020      2.249     0.0441   **
  PI_Ratio    -0.00185630   0.00540315    -0.3436    0.7371

Mean dependent var   2.826603   S.D. dependent var   0.689651
Sum squared resid    2.498655   S.E. of regression   0.456313
R-squared            0.649767   Adjusted R-squared   0.562209
F(3, 12)             7.420977   P-value(F)           0.004526
Log-likelihood      -7.848328   Akaike criterion     23.69666
Schwarz criterion    26.78701   Hannan-Quinn         23.85491

Excluding the constant, p-value was highest for variable 9 (PI_Ratio)
```

Figure 6. Gretl estimation Source: Sp. of Pensions

Summing up, the commissions charged by the AFPs seem to be related to the performance of the AFP in terms of the returns obtained and to the market share it holds. In terms of the concentration and competition in the market, recent data shows that a proper and good regulation may be the solution to the efficiency problems presented by the system during its first thirty years of existence.

[17] The detailed data can be found in Appendix 1.

5.2.2. Capital Accumulation and Development of the Capital Market

One of the many benefits that have been attributed to funded pension systems, is that as individual accounts increase –both in terms of quantity and size- the capital accumulation of the country increases, providing resources to the country that will help in the development of capital markets.

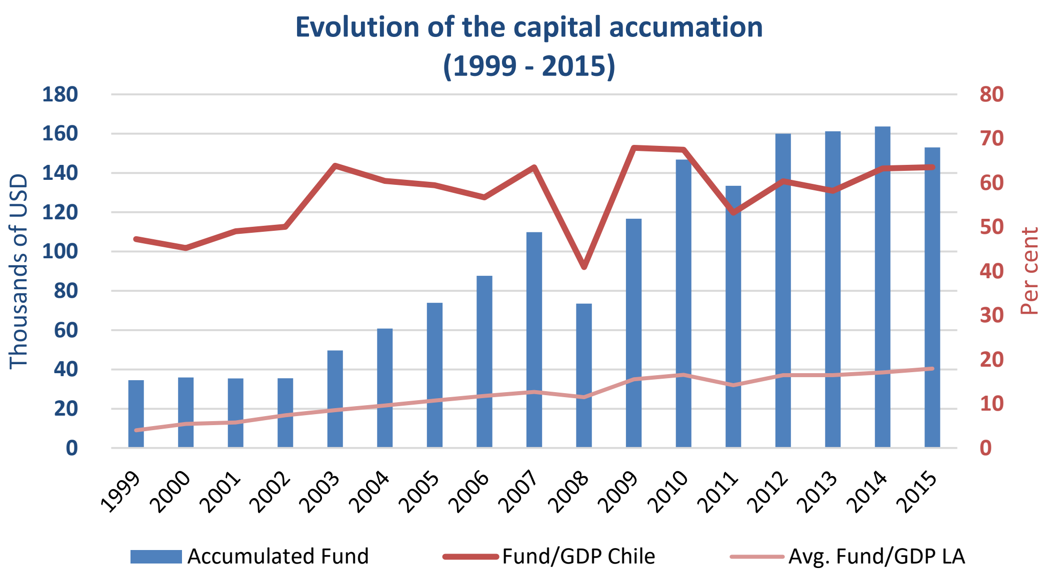


Figure 7 Sources: AIOS and World Bank

Figure 7 shows the evolution of the capital funds in Chile, both in absolute and in relative terms. As it can be observed, the capital accumulation related to the pension funds increased substantially during the early 2000s. However, this phenomenon is mainly explained by the rapid economic growth that Chile experienced during that period, which boosted salaries and employment, thus increasing the pension funds. This is consistent with the behaviour of the fund/GDP ratio, which shows to increase at a much moderate rate than the absolute accumulated fund. This ratio shows an increasing trend until the 2008 economic crisis, going from a 45 per cent in 1999 to a 63 per cent in 2007. The volatility of the fund during the years of the Great Recession (2008-2011) and the fact that in 2016 the ratio fund/GDP is just at the 2007 level, demonstrates how sensitive the pension system is to the global financial situation.

While comparing the Chilean performance with the rest of Latin American[18] countries that have implemented similar structural reforms, the results seem to be outstanding, as the Chilean capital accumulation has been about 3 times greater than the average of the region (figure 7). However, it is important to recall that the Chilean pension system has been implemented for a significantly longer period as the first country to follow the Chilean structural reform was Peru in 1993 –twelve years later.

Besides the large capital accumulation Chile managed to accomplish, it is also important to analyse where has this capital been invested, since only a diversified portfolio that can share risks among various instrument will be sign of developed capital and financial markets. The Chilean portfolio composition of 2016 is presented in figure 8. One of the features that is most interesting to highlight is the significant percentage that is currently invested in foreign assets showing: (1) the persistence in the vulnerability of the Chilean pension system to the international financial situation; (2) that the Chilean stock market has not been able to provide enough investment opportunities for the pension fund, as only 8 per cent of it is invested in domestic assets in contrast to the 39 per cent invested in foreign emissions; and (3) that most of the resources accumulated through pension funds are not being used in national productive investment. Moreover, 83 per cent of the capital is being invested in instruments –foreign assets, government debt (mainly bonds issued by the Central Bank) and financial institutions' assets- that have an uncertain and indirect effect on domestic real investment.

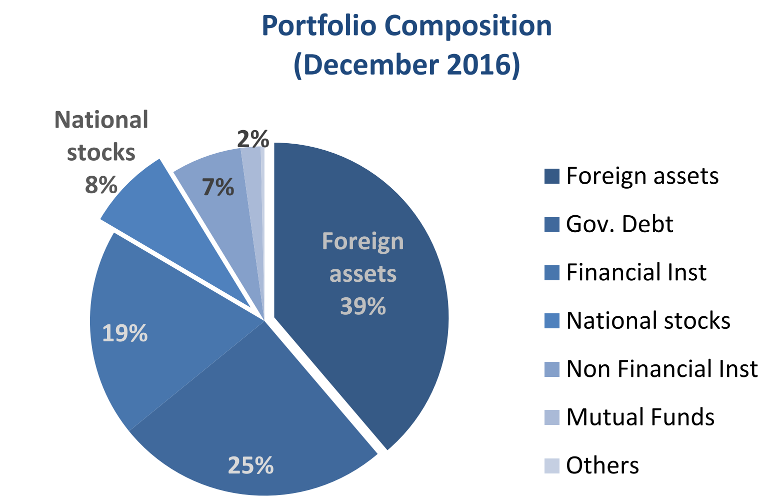


Figure 8

Source: AIOS

Despite of the problems with the portfolio composition described above, several scholars agree that the 1981 reform did help in the development of a well regulated and secure capital market, which has promoted foreign and domestic investors' confidence in the Chilean stock market.

[18] Argentina, Bolivia, Colombia, Costa Rica, Dominican Rep., El Salvador, Mexico, Peru and Uruguay

5.3. Social Effects

Perhaps one of the most important aspects that should be considered while analysing a pension system would be the social effects it has. Having a pension system that achieves great results in microeconomic and macroeconomic terms may be worthless if it does not fulfil the social needs. This section will review these effects in terms of its coverage, pensioner poverty and income and gender inequalities.

5.3.1. Workers' coverage

In the Chilean pension system, the coverage does not only refer to how many people affiliates to the system, but also to its capacity to keep those affiliates contributing. Since the coverage is mandatory for every person that enters the labour market, the number of affiliates of the system does not give much relevant information about the system's coverage over the labour force, as it can be observed in table 5. The fact that those affiliated to the system have been greater than the Economically Active Population (EAP) since the 2000s can be explained because every person who has had a formal salaried job is considered to be "affiliated" to the system, regardless of whether it remains in the labour force or not. For this reason, a better concept to analyse while studying the real capacity of the system to cover workers is the number of contributors.

Year	Affiliates /EAP	Contributors /EAP	Contributors /Occupied		Pensioners/Pop over 65		
			Total	Self-employed	Old age Pension	PBS Pension	Total
1981-89	67,6	38,0	43,4				
1990-99	92,1	44,8	49,3	3,8			
2000-07	113,4	58,1	63,7	3,7			
2008	116,2	63,5	68,8	3,7	15,8	25,0	40,8
2009	117,3	60,7	67,2	4,1	17,6	26,8	44,4
2010	112,7	61,5	66,9	4,8	20,2	26,4	46,6
2011	111,1	62,1	66,9	4,8	26,6	25,3	51,9
2012	113,7	64,2	68,7	5,6	28,6	24,4	53,1
2013	115,1	64,5	68,6	5,9	29,2	23,2	52,4
2014	115,4	64,9	69,3	6,2	29,9	22,4	52,3
2015	116,4	65,2	69,6	6,8			
2016	117,3	65,6	70,1	6,6			

Table 5. Disaggregated system coverage Sources: Sp. of Pensions, World Bank, OECD, AIOS

The results of the system in terms of coverage are hard to analyse, as they can either be successful or a complete failure depending on which aspect is analysed or which reference is being used. Table 5 presents the average evolution of several coverage indicators before the 2008 reform and their yearly evolution after that reform.

The first thing that is worth noticing is the positive effect in the affiliation of the self-employed workers the changes introduced by the 2008 reform had. The percentage of contributors among this group remained quite stable during the 1990s and the early 2000s, accounting for only 3.7 per cent of the self-employed. The main explanation of this behaviour was that the pension fund could only be used in case of disability, retirement or death (for those who depended on the deceased), making the system less appealing to the self-employed workers who need to keep their savings in a more liquid fund to face the more unstable nature of their work. However, since 2008 the coverage has increased in almost 3 percentage points. While these numbers are still extremely precarious, they represent an important change in an historic trend. Furthermore, if we take into account that 26.5 per cent of the Chilean civil employees are self-employed[19], we could justify almost the totality of the 29.9 per cent of uncovered occupied population. Summing these two facts, it could be expected that in the future the system will be able to cover almost the whole occupied population.

Nevertheless, we must not forget that the *occupied* population is not the *whole* population and that, as a consequence, the system leaves aside the coverage of informal workers and other vulnerable groups of the population that have an unstable working situation. If we contrast the Chilean coverage as a fraction of the EAP in 2004 (57.6 per cent), with the Latin American average coverage during the same year (26 per cent[20]), the results may seem successful. However, if we compare this coverage ratio with the coverage the system had before the 1981 reform -64 per cent[21], the results turn to be not as positive as it could have initially been thought, as that it took more than 30 years to the private funded system to achieve the coverage levels the public system had.

[19] OECD data 2016
[20] Data from Mesa-Lago (2008, page 38)
[21] Ibid.

Another way of evaluating the coverage results of the system would be by assessing the elderlies' coverage. Figure 9 shows the proportion of the Chilean population over 65 receiving any type of pension between 1990 and 2013.

Evolution of the fraction of elderly population (+65) receiving a pension

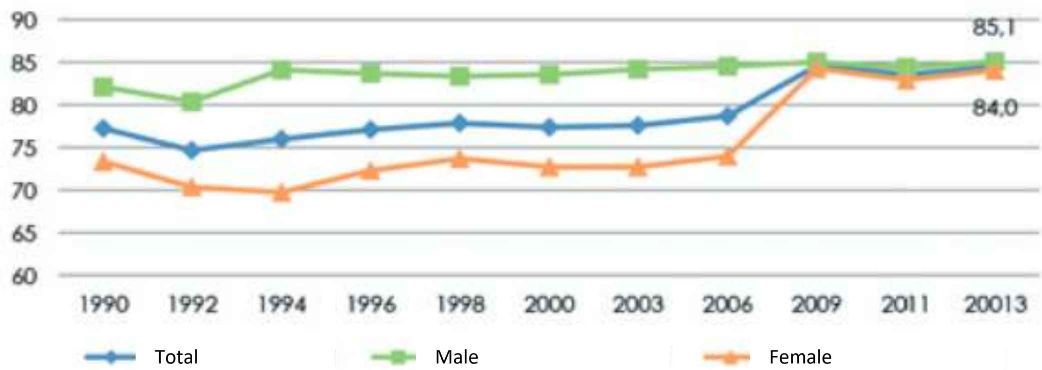


Figure 9 Source: Elaborate by Comisión (2015) based on the Chilean National Socioeconomic Characterization Survey 1992-2013

According to the previous graph, during the whole period around 80 and 85 per cent of the elderly population received some kind of pension. However, this statistics include not only the old-age pensions paid by the funded system, but also pensions that are still paid by the PAYG system, pensions paid by the first pillar and other widow's, survival and disability pensions. Table 5 provides more in detail information on the disaggregated source of those pensions. As it can be observed, in 2014 only 29.9 per cent of the population over age 65 received pension from the funded system and 22.4 per cent benefited from the PBS as they were not entailed to receive any other pension payment.

The low coverage of the second pillar could be explained by several reasons[22]: (1) there is still a significant part of the population still receiving PAYG pensions; (2) it is the consequence of the low coverage the system showed during the first years of implementation; or (3) that the system is not yet mature enough, therefore its proportion of retirees is still too low. Notwithstanding and regardless of the justification, the low numbers and their rapid increase since 2008 may reflect that studying the benefits' coverage among the elderly may still be too premature.

[22] The reasons provided are only conjectures within the framework of this paper as disaggregated data on the other types of pensions was not publicly available.

5.3.2. Replacement Rates and Pensioner poverty

The OECD defines the *(Net) pension replacement rate* of a system as the fraction the individual pension entitlement represents with respect to the pre-retirement earnings, net of personal income taxes social security contributions paid by the individual, measuring how effectively a pension system provides a retirement income to replace the labour income before retirement.

		Chile			OECD -Average		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**
Net pension replacement rate	**0.50 AW[1]**	48,7	45,3		74,1	73,7	
	1.00 AW	37,7	33,1		63,2	62,7	
	1.50 AW	38,0	33,4		58,5	58,0	
Old age income poverty[2]	**65+**			18,4			12,4
	76+			19,3			14,7
Income poverty (whole population)				16,3			11,3

Table 6. Replacement rates and pensioner poverty Source: OECD (2015)
[1] AW: Average Wage; [2] Fraction of the population in relative income poverty

Table 6 presents data from 2014 for Chile and the average for the OECD countries. The information provided shows that Chilean retirees receive pensions that are less than 50 per cent of their pre-retirement income, regardless of their previous income level[23]. This situation is especially critical for those living on the average wage, whose incomes are cut by a 65 per cent approximately at the time of their retirement. The result of this low replacement is higher poverty levels among the elderly, with almost 1 out of 5 people over 76 living with half of the median national household income (less than 10 USD per day[24]).

The results do not seem to be any less precarious if they are compared with the average OECD situation. To put this in perspective, Figure 10 provides more in detail information for the men's net pension replacement rate for the OECD countries[25]. For comparison purposes, the three Latin American countries have been outlined in red and the four other DC private pension systems have been highlighted in green.

[23] Details on the differences between male and female retirees will be provided in section 4.3.4.
[24] OECD 2014 data.
[25] General results do not change if the women's replacement rates are analysed instead.

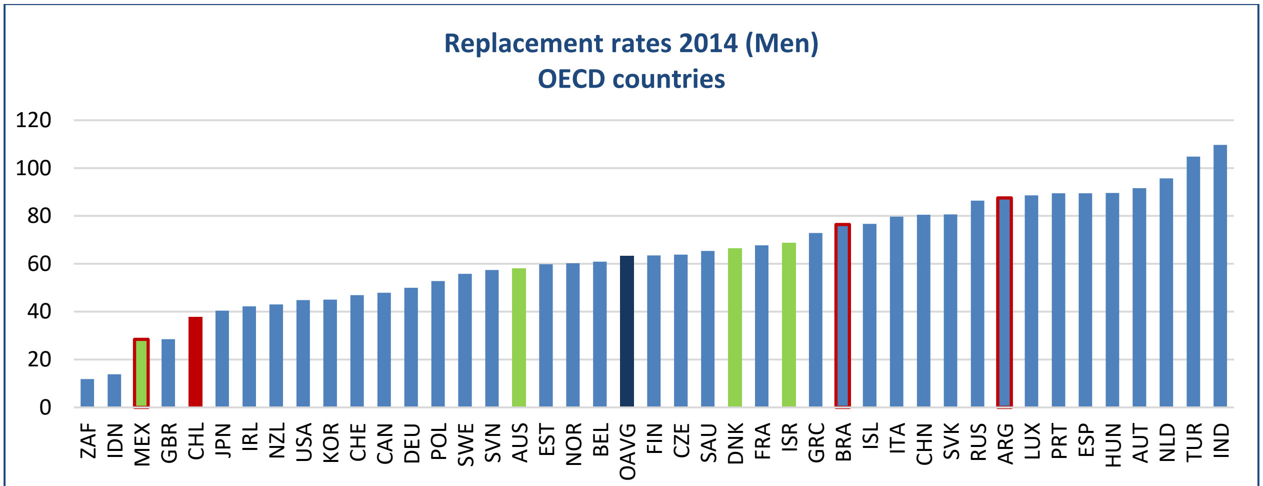


Figure 10 Source: OECD (2015)

As it can be observed, the non-Latin American countries that have DC private pension systems (Australia, Denmark and Israel) have replacement rates closer to the OECD average. However, within the Latin American context, it seems that the public systems (Argentina and Brazil) have had significantly better results than the DC private system (Chile and Mexico) in term of their replacement rates, which are approximately half of the ones obtained by the public systems of the region.

Finally, in order to compare old-age poverty between OECD countries, figure 11 presents the greater or lower likelihood of being poor while old as a way to compare countries with different general poverty levels. In this figure, we can observe that, although elderly are more likely to be poor than the rest of the population, Chile is not in the worst position in comparative terms. However, in terms of the performance of DC private models in general, it seems clear that the system is weaker than public systems while trying to avoid poverty among the retirees.

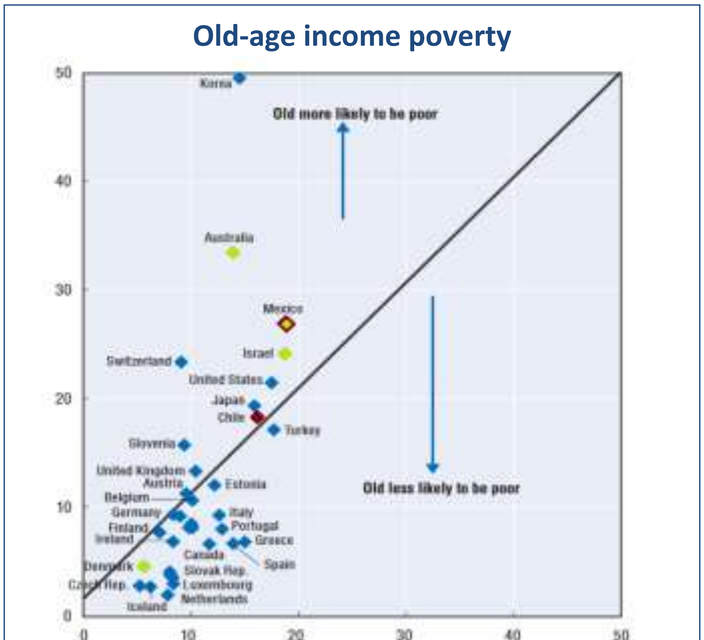


Figure 11. Source: Elaborated by OECD

5.3.3. Income Inequality

With a 0.465 Gini index and with the top 20% richest earning 10.6 times the average income of the bottom 20%, Chile is the most unequal OECD country[26]. Furthermore, the pension system pre-1981 was highly criticized for its segregation between different types of workers. For these two reasons, analysing whether the funded pension system reproduces the inequality and segregation levels seems quite relevant.

Figure 12 presents household's income information disaggregated by average age and decile of the household for year 1996. During that year, households with an average age between 25 and 59 belonging to the tenth decile had an income that was 45.5 times the one of the first decile. Although this numbers are already very concerning, the situation is worse among household with a mean age higher than 60, where the tenth decile multiplied the first decile's income by 76.8.

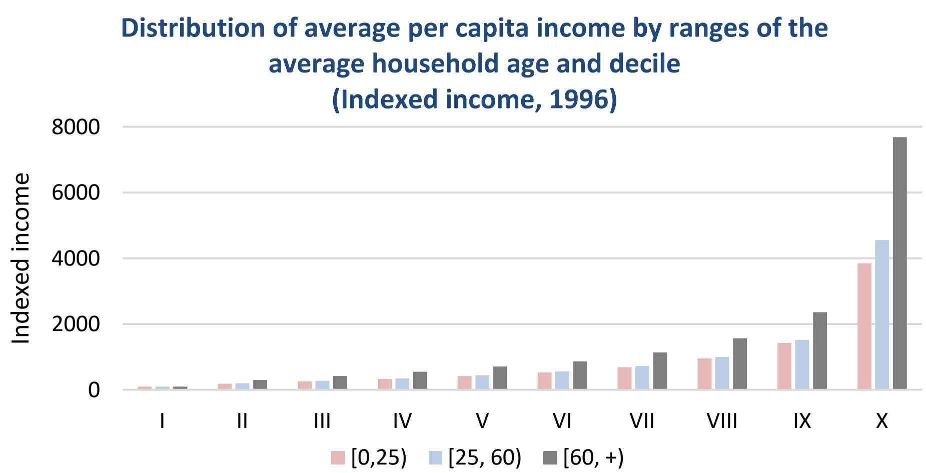


Figure 12. Source: Chart 12 in Schatan (2005)

Although the previous figure presents information regarding any type of income and not only the retirement pensions, it reflects a situation that complements what was presented in the previous section: the Chilean pension system has not only failed in reducing elderlies' poverty, but also in avoiding the reproduction of inequalities among the old-aged.

Table 7 presents some features of the existing AFPs: the average taxable income of each AFP's workers, as well as the average pensions received by their retirees and the average annual real

[26] 2014, OECD data

rate of return and the variable commission charged between 2002 and 2017. It has been coloured to highlight some interesting characteristics of the market: dark green represents the best performance; light green, the second best; yellow, intermediate; orange, medium-low performance; pinkish-red, low performance; and red, the worst performance.

	Average in thousands of CLP		Average Annual Rate of Return [1] (%)	Commission [1] (%)
AFP	Income	Pension		
CAPITAL	756	117	5,94	1,62
CUPRUM	1336	337	6,20	1,97
HABITAT	821	158	6,22	1,74
MODELO	606	35		0,89
PLANVITAL	519	100	5,75	2,12
PROVIDA	594	108	5,77	1,92
AVERAGE	722	126	6,02	1,71

Table 7. Features of the existing AFPs in March 2017

(1) 2002-2017 Average Source: SP. of Pensions

The first thing that draws attention is that *Planvital* is the AFP which contributors have the lowest average taxable income and gets the lowest returns, yet it is the one that changes the highest commissions for their managerial services. It is also interesting to notice that *Cuprum's* average taxable income more than doubles the average of *Planvital* and that it is among the ones with the highest rate of returns. Although a more in detail analysis would be necessary to corroborate it, from this brief and superficial analysis, it seems that the Chilean AFPs market still shows to be quite segregated, just like the previous system, having different AFPs for the different income groups of the society.

Similar conclusions may be obtained from analysing the system's coverage disaggregated by income quintiles (table 8). Only an average of 51.8 per cent of the employed workers belonging to the first quintile were covered by the pension system in 2002, with this percentage increasing with income quintiles, both for men and women. Similarly, the percentage of coverage tend to increase with the level of education achieved by the worker, going from less than one fourth of the none educated women to more than 90 per cent of women that have completed their university education[27].

[27] Differences in the coverage between men and women will be analysed in the next section.

Variables	Women	Men	Average
Income quintile			
I	49,8	53,8	51,8
II	65,5	65,5	65,5
III	72,9	74,8	73,9
IV	79,6	75,2	77,4
V	84,4	77,1	80,8
Educational level			
None	23,6	49,8	36,7
Elementary Incomplete	59,3	57,0	58,2
Elementary Complete	58,9	67,6	63,3
Intermediate Incomplete	64,6	69,8	67,2
Intermediate Complete	78,2	77,9	78,1
Higher technical	82,9	80,6	81,8
University Incomplete	77,5	70,0	73,8
University Complete	90,3	84,4	87,4
Total	74,6	71,4	73

Table 8. Coverage of the Employed Labour Force by gender and selected variables, 2002 (%) Source: Table 8, Arenas de Mesa (2006)

Notwithstanding the above, it is also important to take into consideration the redistributive effects the changes in the first pillar introduced by the 2008 reform may have had. Figure 13 presents the distribution of pensions for retired women belonging to the 1960 cohort. As it can be observed, before the reform the highest pension density was on pensions between zero and 200 thousand Chilean pesos (about 350 US dollars). However, the introduction of the APS and PBS by the 2008 reform has shifted the distribution, concentrating the density of distribution between 100 and 300 thousand Chilean pesos (about 500 US dollars). Although these changes in pension's distribution may not be the ultimate solution to the system's inequality problems, it they may be a first step towards a more equitable and supportive model.

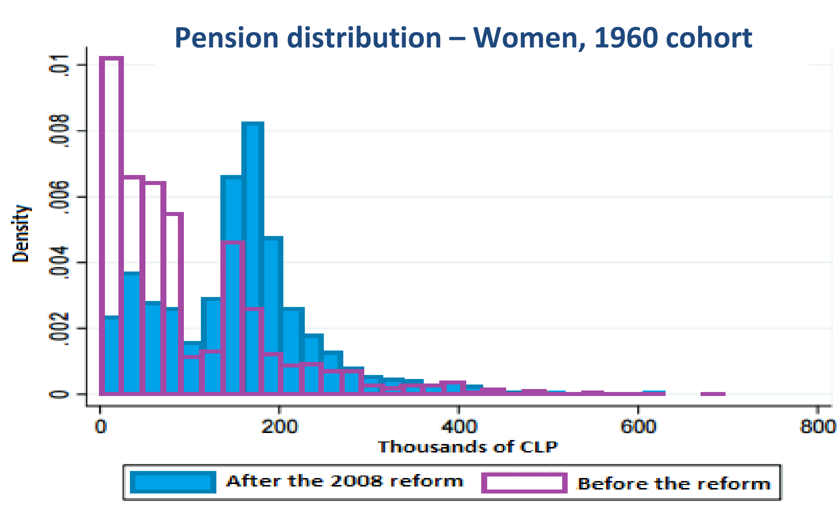


Figure 13. Source: Attanasio (2011), page 42

5.3.4. Gender inequality

Although gender inequality is not a particular problem of the Chilean pension system, as women in all pensions systems tend to have lower pensions, it is a dimension that is worth assessing at this point. Table 9 summarizes some indicators of the Chilean pension system by gender.

As data shows, the proportion of employed women that contribute to the system is higher than men's. However, when the population is disaggregated by educational level and occupational category, significant gender inequalities appear among the most vulnerable groups: coverage among women with no education or that perform domestic services is more than 20 percentage points lower than the one of men under the same conditions. Nonetheless, these inequalities are not present among employers and salaried workers and tend to disappear progressively as the educational level increases.

While studying the behaviour of the pensions received, women show lower values for all the indicators analysed: even after summing the APS, average retirement pensions are 33 per cent lower than those received by men and the net pension replacement rate is 4.6 points lower for women earning the average wage than for men. However, these results are not very surprising if we analysed in detail the determinants of the Chilean pensions. First, pensions are determined by the rates of return of the pension fund, which do not show gender inequality issues. Second, the contribution density, which is lower for women due to factors like: (1) a lower average taxable income caused by labour market discrimination and a larger share of unskilled jobs; and (2) less average contribution years, explained by higher unemployment rates and time out for raising children. Finally, the expected years in retirement, which are larger for women because women's life expectancy is higher, but also because the Chilean legal age of retirement is 5 years earlier for female workers. Nevertheless, it is interesting to notice that even though women are allowed to retire at age 60, the effective age of retirement is 67, almost as high as the effective age of retirement for male (68.4). These seven extra years of working life are probably aimed at compensating the low level of pensions women receive.

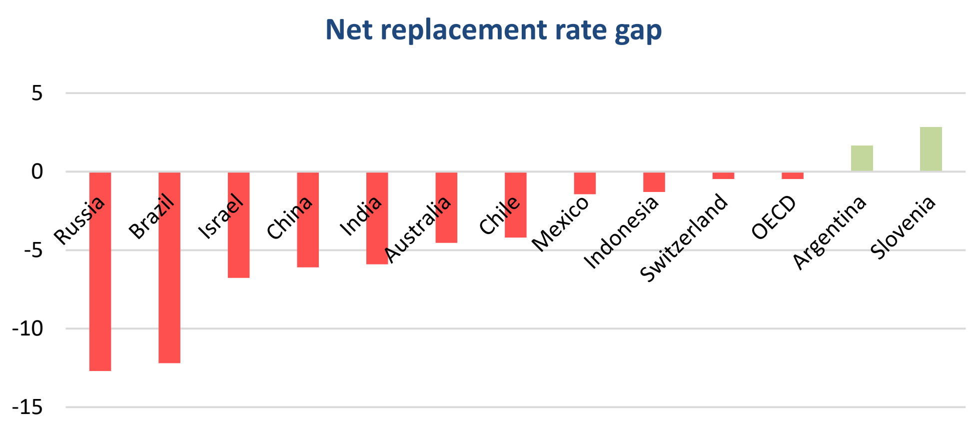
		Women	Men	W-M gap (%)
Coverage				
Contributors[1]/ Occupied[2] (%)	1986	44,5	38,0	6,5
	1996	53,4	47,2	6,2
	2006	59,3	53,3	6,1
	2016	65,4	63,0	2,4
Coverage by last education level completed[3] (%)	None	23,6	49,8	-26,2
	Elementary	58,9	67,6	-8,7
	Intermediate	78,2	77,9	0,3
	Higher technical	82,9	80,6	2,3
	University	90,3	84,4	5,9
Coverage by occupational category[3] (%)	Employer	55,7	48,1	7,6
	Self-employed	21,2	23,3	-2,1
	Salaried	87,8	86,1	1,7
	Domestic service	59,7	82,3	-22,6
	Unpaid family worker	11,8	24,8	-13,0
	Head of home	71,0	71,5	-0,5
Pensions				
Average pension[1] (USD)	Retirement	234.7	352.7	-33,4*
	Early retirement	373.3	484.7	-23,0*
	Retirement + APS	256.9	385.4	-33,3*
	Early retirement + APS	389.3	510.0	-23,7*
Net pension replacement rate[4] (%)	0.50 AW	45,3	48,7	-3,4
	1.00 AW	33,1	37,7	-4,6
	1.50 AW	33,4	38,0	-4,6
Demographic and economic context				
Participation rate[2]		48.2	71.5	-23.3
Unemployment rate[2]		7.0	6.1	0.9
Life expectancy at birth[2]		81.6	76.4	5.2
Retirement age[4]	Legal	60	65	-5.0
	Effective	67.0	68.4	-1.4
Expected years in retirement[4]		19.1	15.1	4.0
Contribution density (%)[3]		43.8	59.8	-16.0*
Average contributed years[1]		16.7	18.7	-1.94
Average taxable income (USD)[1]		961.8	1121.4	-14.23
First pillar				
PBS[1]	Number (Thousands)	291	108	169,4*
	Average amount (USD)	138.7	138.9	-0.1*
APS[1]	Number (Thousands)	421	305	38.0*
	Average amount (USD)	89.4	88.2	1.4*

Table 9. Gender data

Sources: [1] Superintendence of Pensions (2016 data); [2] OECD (2016 data); [3] Arenas de Mesa (2006); [4] OECD, Pensions at a glance (2015)

* Computed as (W–M)/M

The pension reform of 2008 introduced measures specifically aimed at reducing this gender inequality, such as changes in the regulation of the disability and survival insurance and in the division of the capitalization fund in case of divorce, and the creation a *Born child bond*, which is transferred by the state to the woman's individual account at the time of retirement. Additionally, the reform introduced other measures which target the whole population –such as the introduction of the PBS and the APS- that have actually helped a greater number of women than men (169.4 and 38 per cent more, respectively). However, even when women have made a larger use of the benefits introduced, the gap existing between the average pensions received does not seem to decline, staying at a 33 per cent regardless of whether the APS is considered or not.



* Countries with zero gap: Austria, Belgium, Canada, Czech Republic, Denmark, Estonia, Finland, France, Germany,Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Netherlands, New Zealand, Norway, Poland, Portugal, Saudi Arabia, Slovak Republic, South Africa, Spain, Sweden, Turkey, UK, USA

Figure 15 Source: OECD (2015)

From a more international perspective, we can observe in figure 15 that gender inequalities in terms of the net replacement rate are not very common, as the vast majority of OECD countries (30) do not show any differences between men and women in this indicator. However, it is important to highlight that this does not mean that in those countries women have the exact same pension than men, but that they receive the same proportion of their pre-retirement earnings. In other words, those countries with zero gap reproduce the exact same gender inequalities their labour markets may exhibit, while those countries with a negative gap in the net replacement rate –such as Chile- not only reproduce, but exacerbate those pre-existing inequalities. Thus, although Chile is not among the worst performers in this respect, it still has a long way to go in terms of equating men and women's retirement benefits.

5.4. Social knowledge and perception of the system[28]

The Chilean pension reform was devised as the free-market version of a pension system, where the AFPs model would work as a perfectly competitive market. By doing so, policymakers not only assumed that there would be many *buyers* and *sellers*, but also that there would be perfect information. For this reason, a key ingredient to a well-functioning funded pension system would be that Chilean workers *know* their pension system. Figure 16 shows the level knowledge Chileans have about several elements of the system. It also collects some indicators on the perception of the system's well-functioning.

On one side, in terms of the knowledge about the general structure of the system, only 16 percent of the respondents know the contribution rate –the percentage increases significantly as labour income increases- and 72 per cent of the population knows that each individual owns its pension fund. With respect to the latter, it is interesting to highlight that among the lower income population only 3 per cent of the population knows who owns of the pension fund and that 67 per cent thinks it belongs to the AFP.

On the other side, while considering the information provided by the AFPs, 45 per cent of the population declares having received an AFP's Account Status[29] during the last 12 months and only 38 per cent of them think that the account status was clear enough to get information about their fund. Referring to the knowledge on the rates of return and commissions charged by the AFPs –probably the key elements to promote competition between AFPs- only 26 per cent of respondents considers having *some* information about the returns obtained by their pension fund and just an 11 per cent affirms to know which the commission charged by their AFP is. At this point, it is worth noticing that not every AFP provides the same information as this aspect is not regulated by law. This lack of information is reflected in the low percentage of people that has changed either from AFP –21 per cent- or that has changed between the five multi-funds the AFPs have –8 per cent.

[28] This section is mainly based on a survey executed by the Chilean Presidential Commission on the Pension System during 2014.

[29] Two examples of AFPs' account status and an information bulletin are provided in appendix 2 (In Spanish). Affiliates to the other 3 AFPs declared not having received any information from their AFP during the last months.

Regarding the perception Chileans have on the benefits the system provides, the results are not hopeful at all: only a 5 per cent thinks the pensions are enough to maintain a living standard, 14 per cent think pensions received will meet their expectations, and 70 percent of the respondents (both working and retired) think the pensions are not enough to cover their spending. Surprisingly, and besides the generalized perception of a precarious pension system, 41 per cent of the Chileans declares to be satisfied with the system.

		Knows the contribution rate	Knows who is the pension fund owner	Has recieved an AFP's cart	Considers the AFP's cart to be suficiently clear	Has some information about his/her fund rate of return	Knows the commission charged by his/her AFP	Has ever changed from AFP	Has ever changed fund	Thinks the pensions provided by the system are enough to finance an adequate life standard	Thinks the pension that will recieve when retired will meet expectations	Thinks the pensions provided by the system are NOT enough to finance an adequate life standard	Thinks the pension recieved is NOT enough to cover his/her spendings (Pensioneers only)	Is satisfied with the system
Total		16	72	45	38	26	11	21	8	5	14	70	71	41
Labour income range	i	3	3	32			4				9		85	
	ii	11	72	28			5				18		76	
	iii	10	69	36			9				13		87	
	iv	19	73	52			12				19		69	
	v	26	67	63			16				15		66	
	vi	36	70	60			22				24		0	
	vii	30	87	71			10				19		0	
	viii	37	85	77			10				26		100	
	ix	52	100	68			26				60		-	
Educational level	I	8		30		12	5	13		7	12	66		
	II	6		26		10	5	15		7	14	70		
	III	12		42		22	5	24		4	13	73		
	IV	15		45		22	8	20		5	15	69		
	V	27		48		40	16	27		4	23	66		

Table 10. Knowledge and perception of the Pension System (% of the sample)

Labour income range (thousands CLP) i: <120; ii: [120, 180]; iii: [180, 250]; iv: [250, 400]; v: [400, 800]; vi: [800, 1000]; vii: [1000, 1500]; viii: [1500, 2000]; ix: > 2000

Educational level I: Primary incomplete; II: Primary complete; III: Secondary incomplete; IV: Secondary complete; V: Higher

Source: Elaborated using data from Comisión (2015)

One of the reforms recently proposed by the Chilean government to solve the problems perceived by the Chilean population was the creation of a public AFP. As Figure 16 shows, a 79 per cent of the population thinks there should be a public AFP and a 69 per cent declares the intention of changing to it. This high percentage may be probably explained by the fact that only an 8 per cent thinks the AFPs have been efficient in administrating pension funds and only a 14 per cent considers AFP's to be trustworthy. Further, a 42 per cent believes that the State could be efficient in the administration of the pension funds.

Level of agreement with certain aspects of the pension system (%)

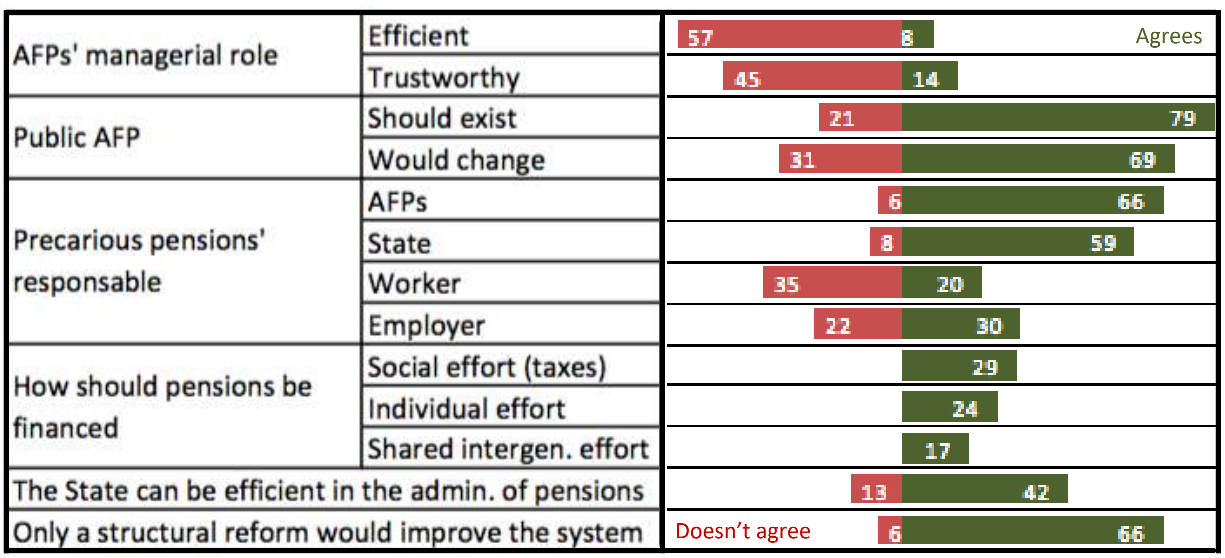


Figure 16 Source: Comisión (2015)

However, when asked about the possible reforms that could be implemented to improve the system, 66 per cent declares that only a structural reform would help solve the system's problems. This is consistent with the other answers provided and with the fact that 29 of the respondents considers that pensions should be financed through social effort. It further reflects the level of general discomfort the Chilean society has with their funded pension system.

VI. DISCUSSION

6.1. Assessment of the results: Did the reform accomplish its objectives?

From a macroeconomic perspective, the results of the 1981 reform could be assessed as not very successful. The length and size of the fiscal burden imposed –higher than expected, offset the positive effects the reform may have had on national savings and economic growth – assuming the pension reform did had any effect on those magnitudes. As explained in section 5.1.2. after 1981 there was indeed an increase in national savings, however, isolating the pension reform from the other reforms that took place during those years can be extremely challenging if not impossible, making the estimation of the effects extremely complex. Moreover, we must emphasize that although desirable, the pursuit of these macroeconomic effects should not constitute a core objective of a pension reform.

Additionally, the Chilean case evidences that a structural reform may not be the answer to reduce the fiscal pressures in the short and medium-run. Although funded DC pensions do not have sustainability problems by definition, the issuing of recognition bonds[30] makes explicit the former implicit pension debt, forcing the government to finance the pension debt with other sources of the fiscal budget (Uthoff, 2001). Thereby, the implementation of a scheme similar to the Chilean system imposes transitional fiscal costs that countries trying to solve fiscal sustainability problems derived from adverse demographics –like Spain- may not be able to afford. Yet, as Barr (2009) highlights, *"These high fiscal costs are not in themselves a defect, but they serve as a reminder to other countries that pensions systems inescapably involve public spending and that the time horizon of transition cost is likely to be long".*

From a microeconomic perspective, results have not either been the desired. As Berstein (2011) explains, the success of a private system with individual capitalisation accounts depends, to a great extent, on having a competitive industry, that manages to be highly efficient at the lowest possible cost and administrating the in a secure and profitable way. However, the AFPs market is far from being a competitive industry, as it has always been quite concentrated. Yet, we must

[30] Chilean fiscal costs are the highest among 8 of the Latin American countries that implemented similar structural reforms to their pension systems. According to studies made by Mesa-Lago (2005, 2006), Chilean fiscal costs are 2.4 the average of the other countries' costs and can be mainly explained by the generosity of the recognition bonds which, although fair, have not been the most common policy.

also assert that recent reforms seem to have broken that trend, reducing the market share of the biggest AFPs as well as reducing the average commission from a 2.67 per cent of the labour income in 2008 to a 1.16 in 2016.

In this regard, it is also important to highlight that although the 2008 reform broke a trend, these changes should not be overstated: the bidding of the new affiliates provides little to no incentives to the AFPs which already have a large number of affiliates, as they have a better chance of making profits by increasing commissions to their clients (Comisión, 2015b). Thus, this change in trend will not be long lasting if it is not accompanied by a more informed society. As shown in section 5.4. Chileans do not consider AFPs to be efficient in the administration of the pension funds, however just a minority of the population declares to have some information on commissions and returns. As an ECLAC report of 1999 explained, consumers of the AFPs market exhibit low price elasticity, however better information and a greater consciousness that individual choices may have an effect on the AFPs' incentives to improve their efficiency, could change that situation. Thereby, introducing a stricter regulation on the information AFPs provide to their affiliates could be a key element to reduce transaction costs, promoting a movement of affiliates to the most efficient AFPs, thus, encouraging a more competitive and efficient behaviour of the market. Perhaps the creation of a public AFP -as suggested by the current government- could have a similar effect, but I think that the mere introduction of better regulation could help the market's competition.

With regard to the capital accumulation, the Chilean pension fund has indeed provided an important amount of resources to the capital markets: Chile has the biggest capital accumulation among private systems, accounting around a 60 per cent of the GDP. This capital accumulation along with the introduction of several regulations on capital markets, have helped constitute a secure and mature capital market. However, as Arenas de Mesa (2006, page 166) highlights, *"Chile's pension reform has contributed to the development of a previously existing capital market, but the assertion that a matured capital market is not needed as a precondition of pension reform is negated by both the experience of Chile and several other private systems, particularly in small countries."*

Yet, both the collapse of the capital fund in 2008 and the high percentage of funds invested in foreign assets –thirty-nine per cent in 2016- emboss the vulnerability of the Chilean pension system to the fluctuations in international capital markets. Thereby, pensions received by

Chilean retirees are not only determined by individual effort and the efficient performance of the AFPs, as the system preaches, but are also determined by external factors, that are out the reach of the system's control, making pension benefits plagued by uncertainty.

In terms of its social effects, as explained in section 4.2.2., the Chilean Pension system prior 1981 had several equity problems, not respecting the principle of horizontal equity: different types of workers paid different rates of contribution and received different benefits that did not had any relation with the payments made. In this respect, the standardization the system required was partially accomplished by the reform: all workers pay the same 10% contribution rate and get a pension that is calculated following the same principles, regardless of their income level. However, it wasn't until the 2008 reform that self-employed workers were gradually obliged to affiliate to the system and that the fix and regressive component of the commissions charged was eliminated. Furthermore, as explained in section 5.3.3., the system shows several inequality problems mainly derived from the lower coverage of vulnerable groups of the population, but probably also derived from the significantly lower information that workers with a lower income have about the functioning of the system (section 5.4.). The system's inequality problems are further fed by gender disparities reflected in a net pension replacement rate that is 4.6 percentage points lower for women than for men. Therefore, although the current Chilean pension system does not have the privileged groups that existed before 1981[31] and it has the highest coverage among the Latin American context, it still has many challenges to face in terms of ensuring a homogeneous pension treatment for all its citizens.

It is also interesting to highlight, that funded systems tend to reproduce the problems existing in the labour market in which they operate as a consequence of their lack of redistributive objectives. Also, they are supposed to reward individual saving's efforts, however, this should not put in disadvantage those workers who *cannot make* further efforts. Perhaps, the problem with the Chilean pensions system is not the system itself, but the labour market which is reproducing, as Chile is the OECD country with highest income inequality. Hereafter, a purely funded system may not the best alternative for the country.

[31] Except for the Armed Forces.

Finally, if we assess the reform in terms of what economic theory says about the objectives a pension system should achieve –consumption smoothing, insurance, poverty relief and distributional objectives-, the results are not much brighter. Even when the objective of a DC system is mainly consumption smoothing, the low net replacement rates of the Chilean pension system do not seem to confirm its compliance (Barr, 2008). This is further confirmed by the perception Chileans have on their system, as only 5 per cent thinks the pensions paid by the funded system are enough to finance an adequate life standard.

In terms of the achievement of the insurance objective, the results will depend on the payment method chosen by the retiree: if the pension benefits are paid through the annuities method, then the pension system does work as an insurance for the worker's life length; however, if they are paid as programmed withdrawn, them the worker will keep bearing the risk of the uncertainty.

Finally, the poverty relief and distributional objectives are not by themselves objectives of an individual capitalisation system as the Chilean, however, the strengthening of the first pillar introduced by the 2008 reform has had an important impact on those two objectives improving the life quality of the Chilean elderlies.

6.2. Future challenges

Although the Chilean pension system shows several deficiencies, there is an agreement among scholars that its ultimate problem is the precariousness of the pensions it provides. As the final objective of a pension should be to provide a sufficient income to retirees, increasing current pensions and creating the adequate conditions to ensure better future pensions is, nowadays, one of the main concerns of Chilean policymakers. In this respect, the Presidential Commission on the Pension system has identified and provided some guides to address ten issues that should be solved in order to improve the system's efficiency and sufficiency.

1) Strengthening and enlarging the extent of the first pillar, specifically by: (1) increasing the amounts paid by the APS and PBS as they have been set at a rate that is too close to the poverty lines; (2) increasing the coverage of the population to the 80 per cent with lower

income instead of the 60 per cent that currently covers; and (3) improving the administrative procedures related to obtaining those benefits.

2) Strengthening the second pillar by enlarging its coverage and the contribution density, especially among the self-employed workers and the lower-income workers. This could be achieved by changing the administrative procedures and requisites of the first pillar, as they currently create disincentives to contribute or to contribute declaring a lower taxable income[32].

3) Increasing the savings for the second pillar as the accumulated fund constitutes one of the key determinants of the final amount of the benefits received. In this respect, the Presidential Commission suggests increasing the contribution rate, since the 10% rate is far from the 19.6% average of the OECD countries, mainly by introducing a 4% contribution in charge of the employer.

4) Readjusting the legal retirement age to face the ageing trend of the Chilean demography as well as reducing the gender disparities explained in section 5.3.4.

5) Reducing the risks bared by affiliates to avoid drops in the accumulated fund like the experienced during 2008 –which was almost entirely borne by contributors-, but also to ensure the highest returns as possible.

6) Promoting price competition among AFPs by widening the affiliates included in the bidding, as the results of this policy have not been the expected. Additionally, the Commission recommends the creation of a Public AFP and allowing the entrance and creation of non-profit AFPs.

7) Reducing gender disparities by homogenizing the legal retirement age and the life expectancy calculations, as well as creating a marital shared fund.

8) Promoting education on the pension system. Although this issue was addressed in the 2008 reform, the results have not been sufficient as a great part of the population does not have the adequate knowledge to take rational and informed decisions on their pension fund.

9) Reducing the uncertainty on the pension benefits by eliminating the Programmed Withdrawn as a method of payment.

[32] Some benefits are still subjected to declaring a low or non-existing labour income.

10) Ensure and homogenize pension rights by eliminating some incompatibilities of the first pillar with other public transfers, and by implanting and structural reform on the Armed Forces social security.

The Chilean Minister of Finance estimated the costs of implementing all these recommendations at only a 0.4 per cent of the GDP. Yet, the recommendations rested in congress for more than 2 years until April 2017, while this paper was being drafted.

6.3. Recent proposal

During a national chain speech[33], the President of Chile announced a pension reform bill that will be presented to congress addressing some of the recommendations made by the Commission. The bill specifically proposes:

1) The introduction of a 5% contribution in charge of the employer. The management of this additional contribution will be in charge of a new public institution.

2) Three per cent of this extra contrition will go to an individual capitalization account. The other two per cent will be used to create a *collective savings' insurance* that will have redistribution purposes.

3) Greater participation of the affiliates in the decision-making of the AFPs.

4) Incentives to link commissions charged by the AFPs to the returns obtained.

We will have to wait and see if these proposals turn to be a law or if they get lost in congress, as a new presidential election approaches. In any case, and although they only address *some* of the problems the current system has, they are going in the right direction in strengthening the system's first and second pillar.

[33] Appendix 3 contains the full transcript of the speech (In Spanish)

VII. CONCLUSSIONS

Almost four decades have passed since the Chilean pension reform was implemented and although the system is financially adequate in the context of an ageing population, it still has a long way to go before reaching its objectives. The reform did had a positive effect on the development of capital markets, however, this should not be, by any means, the main purpose of a pension reform, as most basic goal of any pension system should be to provide a sufficient income to its retirees. The Chilean funded system has not been able to meet this goal.

As mentioned before, purely funded systems tend to reproduce the problems existing in the labour market, thus, this pension scheme may not the best alternative for the Chile. In this respect, the 2008 reform was a big step forward, as it transformed the Chilean pension system partially into a *mixed scheme*, adding a first solidarity pillar to the two that already existed. It also managed to break the concentration trend in the AFPs markets, promoting a more competitive and efficient behaviour and increased the coverage among self-employed.

Nonetheless, the vast majority of problems continues to persist: low coverage among the most vulnerable groups, the exacerbation of gender inequalities, extremely low replacement rate that result in an average pension that is lower than the minimum pensions guaranteed by the APS, high levels of risk and uncertainty bared by workers and retirees and an AFPs market that remains inefficient as great part of the population does not even have basic (not to talk about *perfect*) information, are just some of the issues the system continues to have. Thereby, further reforms aimed at strengthening and balancing the three pillars must be implemented in order to achieve a system that manages to be not only financially, but also *socially* sustainable.

The policy recommendations made by the Presidential Commission in 2015 went in this direction, as they not only tried to solve the financial and efficiency issues of the system, but also tried to address the social demands arisen during the last decade. The Presidential announcement made some months ago partially addresses these issues too. If these reforms are implemented, they will help easing the problems the pension system is facing and move forward to improve it. Only by doing so, the Chilean pensions system will be able to approach the current social security principles as well as fulfilling the promises made back in 1981.

VIII. REFERENCES

8.1. Bibliography

Arellano, J. P. (1988). *Políticas sociales y desarrollo: Chile 1924-1984.* Santiago de Chile: Alfabeta.

Arenas de Mesa, A., & Mesa-Lago, C. (2006). The structural pension reform in Chile: Effects, comparisons with other Latin American reforms, and lessons. *Oxford Review of Economic Policy*, *22*(1), 149-167.

Attanasio, O., Meghir, C., & Otero, A. (2011). Pensiones, trabajo e informalidad: impacto de la reforma previsional de Chile de 2008. Cambios, 5, 5.

Bachelet, M. (2017). Pension reform bill. *Presidential announcement*. Available at https://youtu.be/3DaEwtrfwrI. Transcript provided in Appendix 3.

Barr, N. (2002). Reforming pensions: myths, truths, and policy choices. *International Social Security Review*, *55*(2), 3-36.

Barr, N., & Diamond, P. (2006). The economics of pensions. *Oxford review of economic policy*, *22*(1), 15-39.

Barr, N., & Diamond, P. (2008). *Reforming pensions: Principles and policy choices*. Oxford University Press.

Barr, N., & Diamond, P. (2010). Reforming pensions: Lessons from economic theory and some policy directions. *Economía*, *11*(1), 1-14.

Berstein, S. (2011). *Implementación de la reforma previsional en Chile* (No. 45). DOI: https://www.spensiones.cl/portal/informes/581/articles-8563_pdf.pdf. Consulted on May 27th 2017.

Blake, D. (2006). *Pension Economics,* Chichester: John Wiley & Sons.

Bustamante, J. et al. (1996). *Reformas a los Sistemas de Pensiones, Argentina, Chile, Perú.* Santiago: Superintendencia de AFP.

Cerda, R. A. (2008). The Chilean pension reform: A model to follow?. *Journal of Policy Modeling*, *30*(3), 541-558.

Comisión Asesora Presidencial sobre el Sistema de Pensiones (2015). La opinión y percepción del sistema de pensiones en Chile. *Antecedentes del Informe Final: Capítulo 6*. Comisión Presidencial Pensiones. Chile.

Comisión Asesora Presidencial sobre el Sistema de Pensiones (2015b). Informe Final. Comisión Presidencial Pensiones. Chile.

Corbo, V., & Schmidt-Hebbel, K. (2003). Efectos macroeconómicos de la reforma de pensiones en Chile. *Resultados y desafíos de las reformas a las pensiones*, 259-351.

Decreto-Ley Nº 3500. Diario Oficial de la República de Chile, Santiago, Chile, 13 de noviembre de 1980.

Gill, I., Packard, T., and Yermo, J. (2005), *Keeping the Promise of Social Security in Latin America*. Stanford University Press.

Holzmann, R. (2012). *Global Pension Systems and Their Reform: Worldwide Drivers, Trends*. and Challenges. Discussion Paper, 1213. Washington, DC: Social Protection & Labour.

Ley Nº 20255. Diario Oficial de la República de Chile, Santiago, Chile, 17 de marzo de 2008.

Mesa-Lago, C. (1978). *Social security in Latin America: pressure groups, stratification, and inequality.* Pitt Latin American. Pittsburgh: University of Pittsburgh Press.

Mesa-Lago, C. (2008). Reassembling social security. *A survey of Pensions and Health Care Reforms in Latin America. New York*.

Mesa-Lago, C., & Bertranou, F. (2016). Pension reforms in Chile and social security principles, 1981–2015. *International Social Security Review*, *69*(1), 25-45.

OECD (2015), *Pensions at a Glance 2015: OECD and G20 indicators*, OECD Publishing, Paris. DOI: http://dx.doi.org/10.1787/pension_glance-2015-en . Consulted on May 1st, 2017.

Pérez, J. I. A. (2009). *Ensayos sobre seguridad social y desigualdad*. Consejo Económico y Social de España.

Prado, A., & Sojo, A. (2010). *Envejecimiento en América Latina: sistemas de pensiones y protección social integral*. CEPAL.

Schatan, J. (2005). Distribución del ingreso y pobreza en Chile. Polis: Revista Latinoamericana, (11), 19.

Uthoff, A. (2001). *La reforma del sistema de pensiones en Chile: desafíos pendientes*. CEPAL.

8.2. Databases

Asociación Internacional de Organismos de Supervisión de Fondos de Pensiones. http://www.aiosfp.org/estadisticas/boletin-estadistico-aios/

Base de Datos Estadísticos, Banco Central de Chile. http://si3.bcentral.cl/Siete/secure/cuadros/home.aspx

DataBank, The World Bank. http://databank.worldbank.org/data/home.aspx

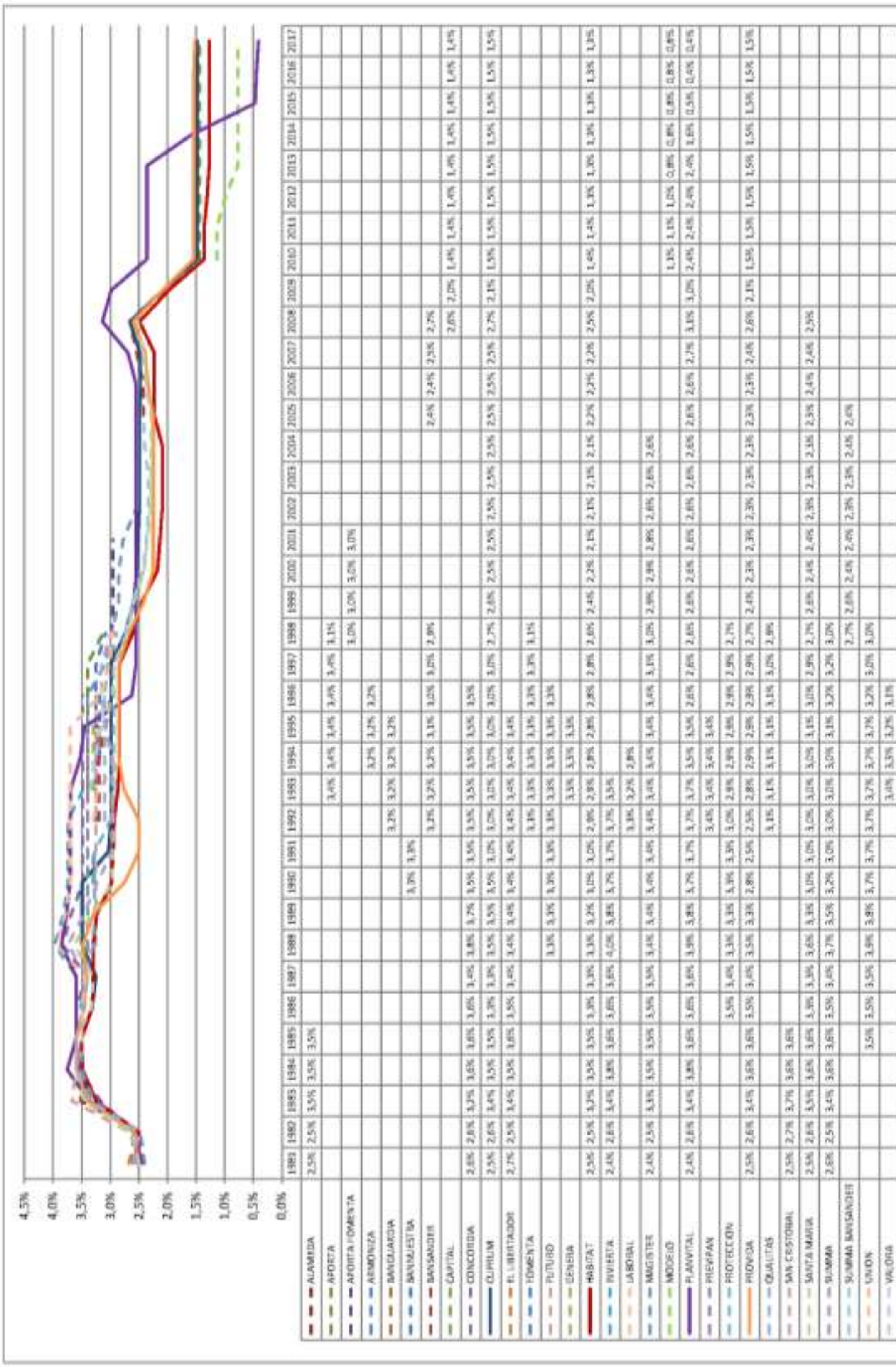
Dirección de Presupuestos, Gobierno de Chile. http://www.dipres.gob.cl/

OECD Statistics, Organisation for Economic Co-Operation and Developement. http://stats.oecd.org/

Subsecretaría de Previsión Social, Gobierno de Chile. https://www.previsionsocial.gob.cl/sps/biblioteca/

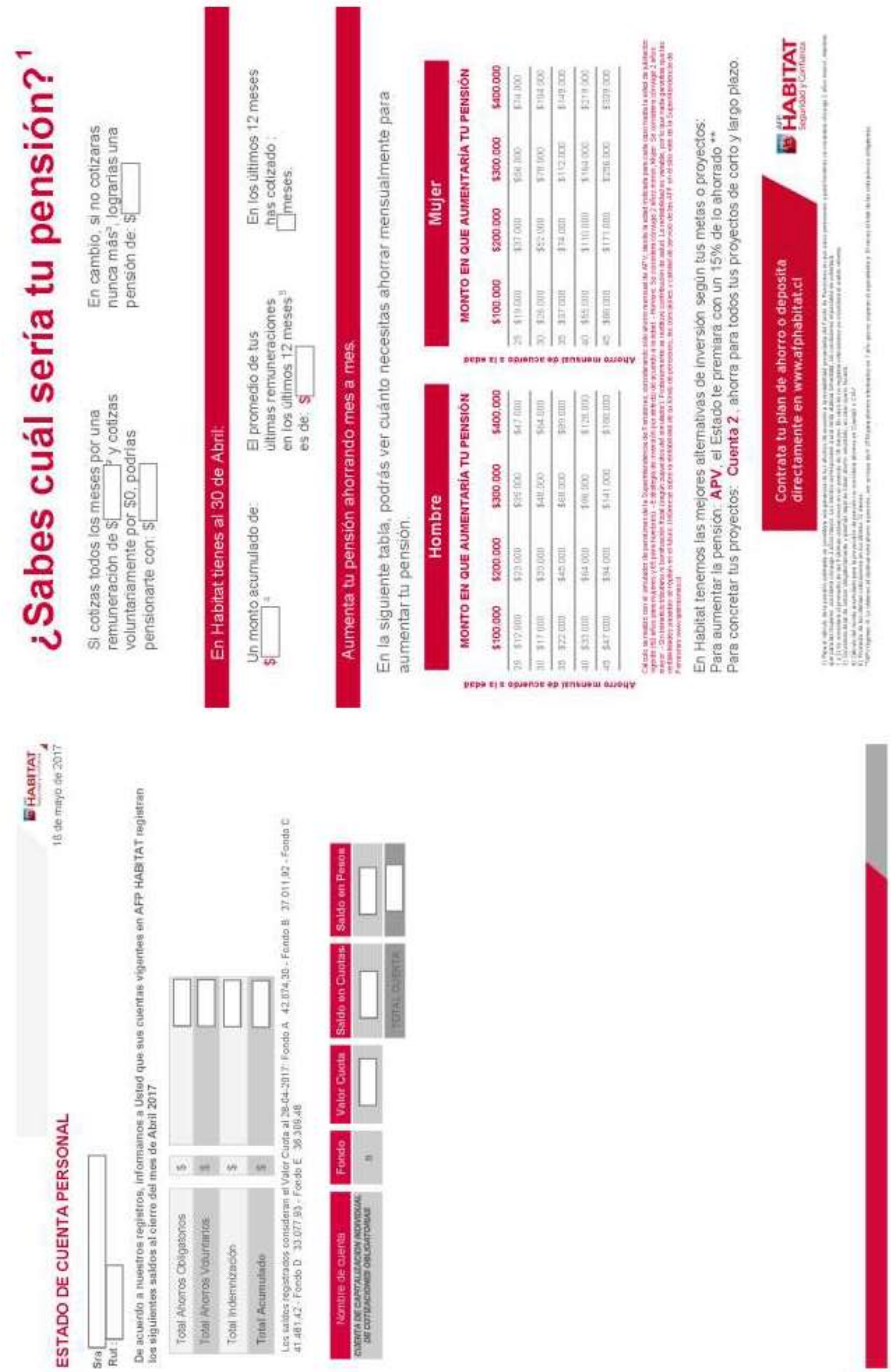
Superintendencia de Pensiones, Gobierno de Chile. http://www.spensiones.cl/safpstats/stats/

Appendix 1. Historic evolution of variable commissions



Source: Superintendence of Pensions

Appendix 2.1. AFP's Account Status– Habitat



ESTADO DE CUENTA PERSONAL

18 de mayo de 2017

Sra:
Rut:

De acuerdo a nuestros registros, informamos a Usted que sus cuentas vigentes en AFP HABITAT registran los siguientes saldos al cierre del mes de Abril 2017

Total Ahorros Obligatorios	$
Total Ahorros Voluntarios	$
Total Indemnización	$
Total Acumulado	$

Los saldos registrados consideran el Valor Cuota al 28-04-2017: Fondo A 42.874,38 - Fondo B 37.011,92 - Fondo C 41.481,42 - Fondo D 33.077,93 - Fondo E 36.309,48

Nombre de cuenta	Fondo	Valor Cuota	Saldo en Cuotas	Saldo en Pesos
CUENTA DE CAPITALIZACIÓN INDIVIDUAL DE COTIZACIONES OBLIGATORIAS	B			
			TOTAL CUENTA	

¿Sabes cuál sería tu pensión? [1]

Si cotizas todos los meses por una remuneración de $ [2] y cotizas voluntariamente por $0, podrías pensionarte con: $

En cambio, si no cotizaras nunca más [3], lograrías una pensión de: $

En Habitat tienes al 30 de Abril:

Un monto acumulado de: $ [4]

El promedio de tus últimas remuneraciones en los últimos 12 meses [5] es de: $

En los últimos 12 meses has cotizado: meses.

Aumenta tu pensión ahorrando mes a mes.

En la siguiente tabla, podrás ver cuánto necesitas ahorrar mensualmente para aumentar tu pensión.

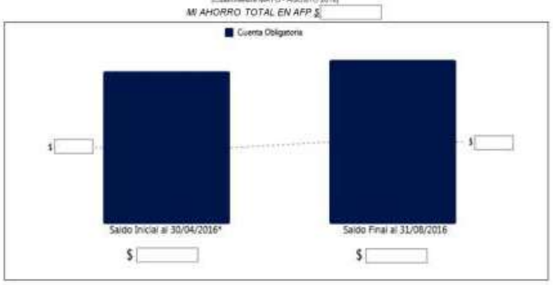
Contrata tu plan de ahorro o deposita directamente en www.afphabitat.cl

AFP HABITAT Seguridad y Confianza

Appendix 2.2. AFP's Account Status – Cuprum

CuprumAFP
Miembro de Principal Financial Group

RESUMEN
(Cuatrimestre MAYO - AGOSTO 2016)
MI AHORRO TOTAL EN AFP $



¿CÓMO VARIÓ MI AHORRO EN EL PERÍODO MAYO - AGOSTO 2016?

	Cuenta Obligatoria
¿Cuánto ahorro tenía al 30/04/16?	$
¿Cuánto aporté?	$
¿Cuánto pagué en comisiones a la AFP?	$
¿Tuve otros Ingresos?[1]	$
¿Tuve otros Egresos?[1]	$
¿Cuál fue mi ganancia o pérdida del cuatrimestre?	$
¿Cuánto ahorro tengo al 31/08/2016?	$
¿En qué Fondo de Pensiones tengo mis ahorros?[2]	C

[1] Estos ítemes pueden corresponder a conceptos tales como pago de comisiones, prima de seguro de invalidez y sobrevivencia o cotizaciones de períodos o meses anteriores.

[2] Usted puede elegir en qué multifondos invierte o coloca sus ahorros. Si no elige, por ley serán asignados según su edad. Infórmese en su AFP.

(*) Si el saldo inicial que se registra en esta Cartola es igual a cero, se debe a que usted se incorporó a esta AFP durante el cuatrimestre informado. Para mayor información revise la sección "Detalle de Cuentas en AFP".

CuprumAFP
Miembro de Principal Financial Group

Estimado afiliado: la decisión del tipo de Fondo de Pensiones en el cual usted mantiene sus fondos previsionales afectará el monto de su futura pensión. Usted está en el(los) fondo(s): Fondo C Intermedio. De acuerdo a su edad, si no hubiese elegido Fondo, la Ley lo asignaría al Fondo: D Conservador. Infórmese.

DETALLE DE CUENTAS EN AFP
MOVIMIENTOS DEL PERÍODO: 05/2016 - 08/2016

1. Cuenta Obligatoria

		Fondo C Intermedio	Total
Ahorro en Cuenta Obligatoria al 30/04/2016			
INGRESOS	Cotizaciones 05/2016	$	$
	Cotizaciones 06/2016	$	$
	Cotizaciones 07/2016	$	$
	Cotizaciones 08/2016	$	$
	Otros Ingresos del cuatrimestre[1]	$	$
TOTAL INGRESOS			
EGRESOS	Comisiones del período	$	$
	Otros Egresos del cuatrimestre[1]	$	$
TOTAL EGRESOS			
GANANCIAS O PÉRDIDAS DEL CUATRIMESTRE (31-08-2016)		$	$
Ahorro en Cuenta Obligatoria al 31/08/2016[2]			

[1] Para detalles consulte en su AFP.
[2] El saldo en el Fondo C equivale a 572,53 cuotas por un valor cuota de [illegible] al día 31/08/2016.

SP Superintendencia de Pensiones

CuprumAFP
Miembro de Principal Financial Group

INFORMACIÓN DE RENTABILIDAD[1] ANUAL DE LOS FONDOS DE PENSIONES (AJUSTADA POR VARIACIÓN EN LA U.F.)

La rentabilidad de un Fondo de Pensiones es el porcentaje de ganancia (valores positivos) o pérdida (valores negativos) de sus ahorros, como resultado de las inversiones que la AFP realiza con los recursos de sus Fondos.

Rentabilidad de los últimos 12 meses
(Septiembre 2015 - Agosto 2016)

A.F.P.	Fondo A Más Riesgoso	Fondo B Riesgoso	Fondo C Intermedio	Fondo D Conservador	Fondo E Más Conservador
CAPITAL	1,27%	2,05%	1,98%	2,05%	2,77%
CUPRUM	1,64%	2,24%	2,15%	2,20%	2,42%
HABITAT	2,10%	2,80%	2,80%	2,49%	2,69%
MODELO	2,38%	2,76%	2,46%	2,32%	2,39%
PLANVITAL	1,02%	1,38%	1,56%	1,87%	2,18%
PROVIDA	1,50%	2,02%	1,83%	1,79%	2,12%

Rentabilidad Promedio Anual últimos 5 años
(Septiembre 2011 - Agosto 2016)

A.F.P.	Fondo A Más Riesgoso	Fondo B Riesgoso	Fondo C Intermedio	Fondo D Conservador	Fondo E Más Conservador
CAPITAL	4,63%	3,93%	4,16%	3,95%	3,64%
CUPRUM	5,05%	4,38%	4,64%	4,49%	3,88%
HABITAT	5,13%	4,46%	4,76%	4,51%	3,93%
MODELO	5,08%	4,38%	4,45%	4,47%	3,71%
PLANVITAL	4,69%	3,98%	4,14%	4,16%	3,45%
PROVIDA	4,63%	3,96%	4,16%	4,13%	3,71%

COMISIÓN PAGADA A LAS AFP(*)
La comisión total anual (1,48% de remuneración imponible) en su AFP CUPRUM[1]: $ 253.733

A.F.P.	Comisión pagada a la AFP en un año: % remuneración	Comisión pagada a la AFP en un año: pesos	Diferencia anual respecto al pago de comisiones en su actual AFP
PLANVITAL	0,41%		AFP PLANVITAL sería $ más barata que CUPRUM
MODELO	0,77%		AFP MODELO sería $ más barata que CUPRUM
HABITAT	1,27%		AFP HABITAT sería $ más barata que CUPRUM
CAPITAL	1,44%		AFP CAPITAL sería $ más barata que CUPRUM
PROVIDA	1,54%		AFP PROVIDA sería $ más cara que CUPRUM

[1] La rentabilidad es variable, por lo que no se garantiza que la rentabilidad pasada se repita en el futuro. Información elaborada con valores cuotas disponibles hasta el 07.09.2016.

Nota: Le informamos que en el caso que tenga su cuenta de cotizaciones obligatorias o de afiliado voluntario en el Fondo A, tiene la obligación de traspasarla a cualquiera de los restantes Fondos de Pensiones (B, C, D, E), exceptuando el monto que exceda al valor necesario para financiar una pensión que sea un 70% del promedio de remuneraciones imponibles y 100% de la PMAS. En el caso que tenga su cuenta cotizaciones obligatorias o de afiliado voluntario en otros Fondos de Pensiones (B, C, D, E), puede optar a que el excedente antes mencionado se traspase al Fondo A. Para esto, le recomendamos acercarse a cualquiera de nuestras sucursales para aportar los antecedentes necesarios que permitan efectuar el cálculo de este excedente.

(*) Adicionalmente, las AFP cobran la prima del seguro de invalidez y sobrevivencia que corresponde al porcentaje vigente de acuerdo al resultado de la licitación de dicho seguro, 1,41% desde el 01 de julio de 2016 hasta el 30 de junio de 2018. Esta prima es de cargo del empleador, a excepción del caso de los afiliados dependientes que se encuentren percibiendo el subsidio previsional a los trabajadores jóvenes establecido en la Ley N° 20.255. En este período, para las mujeres, la diferencia que se origine por concepto de prima se entera en la cuenta individual de la afiliada. Estos cálculos suponen que las comisiones no cambian en los 12 meses considerados.

[1] Calculada asumiendo que usted cotizará mensualmente por un sueldo de $ durante todo el año.

Appendix 2.3. AFP's Account Status – Modelo, Informative bulletin

Appendix 3: Transcript of the Presidential announcement (April 2017)

"Amigas y amigos,

Todos sabemos desde hace tiempo que en Chile las pensiones son insuficientes. Que muchos sufren una disminución enorme de sus ingresos cuando jubilan, particularmente en el caso de las mujeres y la clase media. Este no es un fenómeno nuevo ni en el que podamos dar respuestas mágicas. De hecho es un debate que está presente en muchos países desarrollados. Tenemos que asumir que los cambios deben ser graduales y viables. Las razones y explicaciones pueden ser variadas, pero lo que no cambia es la potencia del mensaje que ha hecho oír la ciudadanía. Quieren que afrontemos este problema con voluntad y con seriedad. Los chilenos quieren y necesitan mejores pensiones. Sabemos que para ellos el esfuerzo individual es clave y debe ser reconocido, pero que en muchísimos casos no bastará para llegar con tranquilidad a la vejez. Por eso debemos avanzar hacia un sistema previsional realmente mixto: donde todos pongan su parte, donde la solidaridad vaya de la mano del esfuerzo personal, donde el Estado y los empleadores hagan la parte que les corresponde. Ese principio de protección y solidaridad ha inspirado desde siempre mis políticas, por eso como Presidenta lideré el año 2008 la reforma previsional que permitió la creación del Pilar Solidario y gracias a lo cual hay miles de compatriotas que hoy reciben una pensión. Con ello comenzamos a cambiar gradualmente el paradigma de nuestras pensiones y devolverle un rol al Estado y no nos hemos detenido. En Enero de este año, pese al difícil momento económico, entregamos un reajuste del 10% a la Pensión Básica Solidaria. ¿Es suficiente? ¡Claro que no! Pero vamos avanzando con decisión en la medida de nuestras posibilidades y convencidos que lo hacemos en la dirección correcta.

En Agosto del año pasado, por cadena nacional, convoqué a la construcción de un acuerdo nacional para mejorar las pensiones en Chile. Todos los sectores políticos de sumaron generosamente a este esfuerzo nacional y quiero agradecerlo públicamente. A pesar de no alcanzarse un acuerdo total, hubo propuestas constructivas. Se levantó información muy valiosa y que sirve de base para cualquier iniciativa y se identificaron con más claridad los aspectos comunes. No podemos seguir esperando. Hoy debemos dar un paso más. Quiero dar a conocer una propuesta que recoge gran parte de este proceso de diálogo y que presentaremos como proyecto de ley.

Se trata de una propuesta que primero permitirá subir en promedio en 20% los montos de las actuales pensiones de vejez entregadas por las AFP. Segundo, permitirá proyectar un aumento promedio cercano a 50% en las pensiones que tendrán los actuales cotizantes al momento de su jubilación cuando el sistema esté en pleno funcionamiento. ¿Cuáles son los mecanismos que proponemos concretamente?

Vamos establecer una nueva cotización de 5% para crear un nuevo sistema de ahorro colectivo. Se hará con cargo al empleador y en un periodo de 6 años, para garantizar una mejor transición. La administración recaerá en una entidad pública y autónoma. Con reglas estrictas y altas exigencias profesionales, para que nadie pueda poner en duda su eficiencia, transparencia e independencia. Ese 5% se dividirá en dos. Un 3% irá directamente a una cuenta personal de cada trabajador. Este incremento será heredable y de plena propiedad. El restante 2%, irá a un seguro de ahorro colectivo. Estos recursos serán administrados con un fuerte carácter redistributivo, para que además de la solidaridad intergeneracional, exista apoyo hacia los que logran un menor ahorro y pensiones más bajas. De este modo, junto al Pilar Solidario, el pilar contributivo tendrá un sistema de capitalización individual y un sistema de ahorro colectivo con seguro.

Para responder a la legítima demanda por transparencia del sistema, proponemos que los afiliados tengan participación en la definición de las políticas de inversión, así como en las políticas de solución de conflictos de interés. Además, las administradoras dejarán de tener exclusividad para nombrar directores en las empresas en las que invierten los fondos de pensiones, porque también tendrán un rol los propios afiliados, a través de su Comisión de Usuarios. Por otra parte, se crearán mecanismos o incentivos para que el cobro de las comisiones esté relacionado con los beneficios reportados a los afiliados. No es posible que cuando a un administrador le vaya mal, el único que asuma el costo sea el afiliado.

Amigas y amigos, no hemos renunciado a nuestro sello: el hacer frente a los problemas del país. Hoy seguimos avanzando para que las pensiones dejen de ser una fuente de angustia y sean lo que deben ser: un sustento para una vejez digna. Al igual que antes logramos introducir un Pilar Solidario al sistema previsional, hoy estamos introduciendo un sistema de ahorro colectivo que complementa el esfuerzo individual. En el futuro, estos avances deben ser complementados con otros de acuerdo a la realidad del país y las necesidades sociales, porque Chile es muchísimo más que la suma de 17 millones de individuos. Somos una comunidad humana, cuya fortaleza es la responsabilidad y la solidaridad. Chile necesita este tipo de seguro social. Nos hace bien como país mirarnos de otra forma y estoy segura que el futuro proyecto de ley de esta propuesta tendrá una buena acogida.

Muchas gracias y muy buenas noches."

Michelle Bachelet

April 12th, 2017