icpm INTERNATIONAL CENTRE FOR PENSION MANAGEMENT

Retirement Anxiety of Informal Workers: A View on the Chilean Pension System

Initial ICPM case study on this topic. To be presented and conducted at the ICPM Discussion Forum in Santiago, Chile.

22 October 2018

This report is provided for information purposes only. ICPM and its contributing authors do not accept any liability or responsibility for the use of the information contained within, and the recommendations may not necessarily reflect the views of the represented organizations.

This fictional case study was written by Rob Bauer, Executive Director of the International Centre for Pension Management (ICPM), Toronto, Canada, and Professor of Finance (Chair: Institutional Investors) at Maastricht University School of Business and Economics, Maastricht, The Netherlands and Fernando Larraín, CEO of the Association of Pension Funds, Chile. It is intended to be used as a basis for discussion. This case is not intended to serve as an endorsement, as a source of primary data, or an illustration of effective or ineffective public policy.

Introduction

Carmen Gonzalez, an administrative secretary at the Ministry of Labour and Social Security in Santiago, Chile is the first to recognize the irony that, despite working at the Ministry for close to a decade, her position guarantees neither employment security, nor old-age security. As a matter of fact, she has just been informed by a pension specialist that her retirement income will be considerably lower than expected.

Like many others, Carmen does not have an official employment contract. Instead, she is providing her services as a so-called "honorario": an informal or independent worker that gives an invoice for her services. While the Chilean Labour law regulates the employment of formal workers (e.g., employment contracts), it does not regulate or cover informal workers. Formal employees in the public sector receive the usual benefits, such as minimum wage and overtime pay, protection against workplace and labour market discrimination, and unemployment and workers' compensation insurance. Furthermore, they are obligated by law to contribute to the Chilean pension and health systems. Independent contractors, including Carmen, do not receive these benefits and protections.

Table 1 Labour Market Chile

	Number of workers	% of worker population
Employed	8.349.618	100%
Formal workers	5.917.423	71%
Informal workers	2.432.195	29%

Source: *INE, 2018 and National Employment Survey (May-July 2018).*

Table 1 summarizes the labour market structure in Chile. 71% of the employed are formal workers while 29% are informal workers. The informal workers can be subdivided into two categories: "cuenta propia" and "honorarios". The difference between the two is that "honorarios"[1] issue invoices for their services after which the Chilean internal revenue service retains 10% of their wage. For those workers who must pay taxes, the 10% withholding tax is deducted from their tax statement. In case the worker does not have to pay the full 10%, it is returned proportionally. "Cuenta propia" workers do not issue invoices[2].

As Carmen Gonzalez is rapidly approaching retirement, her primary concern is whether she will be able to make ends meet when she is retired. Although she is affiliated with the Chilean Pension System, she has contributed sporadically and on average a very small part of her income. This is because these contributions were voluntary for informal workers until the beginning of 2018. The legal environment combined with a general distrust in the pension system make it difficult for thousands of independent workers to prepare for adequate retirement income security.

Carmen wonders whether she can fix the discovered pension gap. But, what are her options? A few weeks ago, she decided to first study the history of the Chilean pension system. This could give her some additional insights before deciding on next steps.

[1] In Chile 2.061.017 workers issue an invoice. Half (approximately) of them were formal workers who also provide invoices for other services. The other half are "honorario workers".

[2] E.g., taxi drivers who are self-employed. These workers pay taxes through the VAT or other consumption taxes that need to be paid for services delivered.

A brief history of the Chilean pension system

Between 1924 and the late 1970s, retirement provision was centred on a Pay-As-You-Go (PAYG) financed Common Fund system. By 1979, there were 32 "Cajas de Previsión" (Social Security Institutions) in existence, with 2,291,183 workers paying into them. This construct was not guided by a general social security policy. This gave rise to over a hundred different social security schemes, with considerable inequality between the benefits of the various institutions providing these services.

Moreover, this system was expensive for all parties involved: the state, the insured (employees) and the employers. The system was also suffused with administrative and financial inefficiencies, reinforcing patterns of inequality present in the wider Chilean society. While a minority of privileged workers received a wide array of benefits and exemptions, the pensions received by the majority of the population were very low.

The system was reformed in 1980, under Augusto Pinochet's regime. The free market ideology put forward by the regime's policy-makers produced a high-reaching transformation of the role of the state and its socio-economic policies. In the social security and labour market areas, substantial reform was implemented by Labour minister José Piñera. The minister argued that the old pension system failed to achieve its goals, and instead of creating a more equal society, it created unjustifiable inequalities.

Subsequently, the old system was replaced with a compulsory, privately administered but state-supervised defined contribution (DC) pension scheme. The transition to the new scheme involved the creation of a new type of enterprise: "Administradoras de Fondos de Pensiones" (Pension Fund Administrators or AFPs). The AFPs are for-profit corporations that administer and invest the individual capitalization accounts, charging commissions for the administration of funds and other functions. The privatized scheme was made mandatory for all workers who joined the workforce after December 1981, while those already employed could choose either the previous PAYG system or the new system.

The individual pension accounts are financed through a 10% mandatory contribution of monthly earnings (wages) paid by formal employees plus an additional contribution to cover administrative costs (ranging from 0.77% to 1.45%) as well as disability and survivor insurance (1.53% paid by the employer). In addition, workers can make additional contributions above the mandatory 10%, administered in separate funds which can also be managed by the AFPs or by other financial institutions providing pension services.

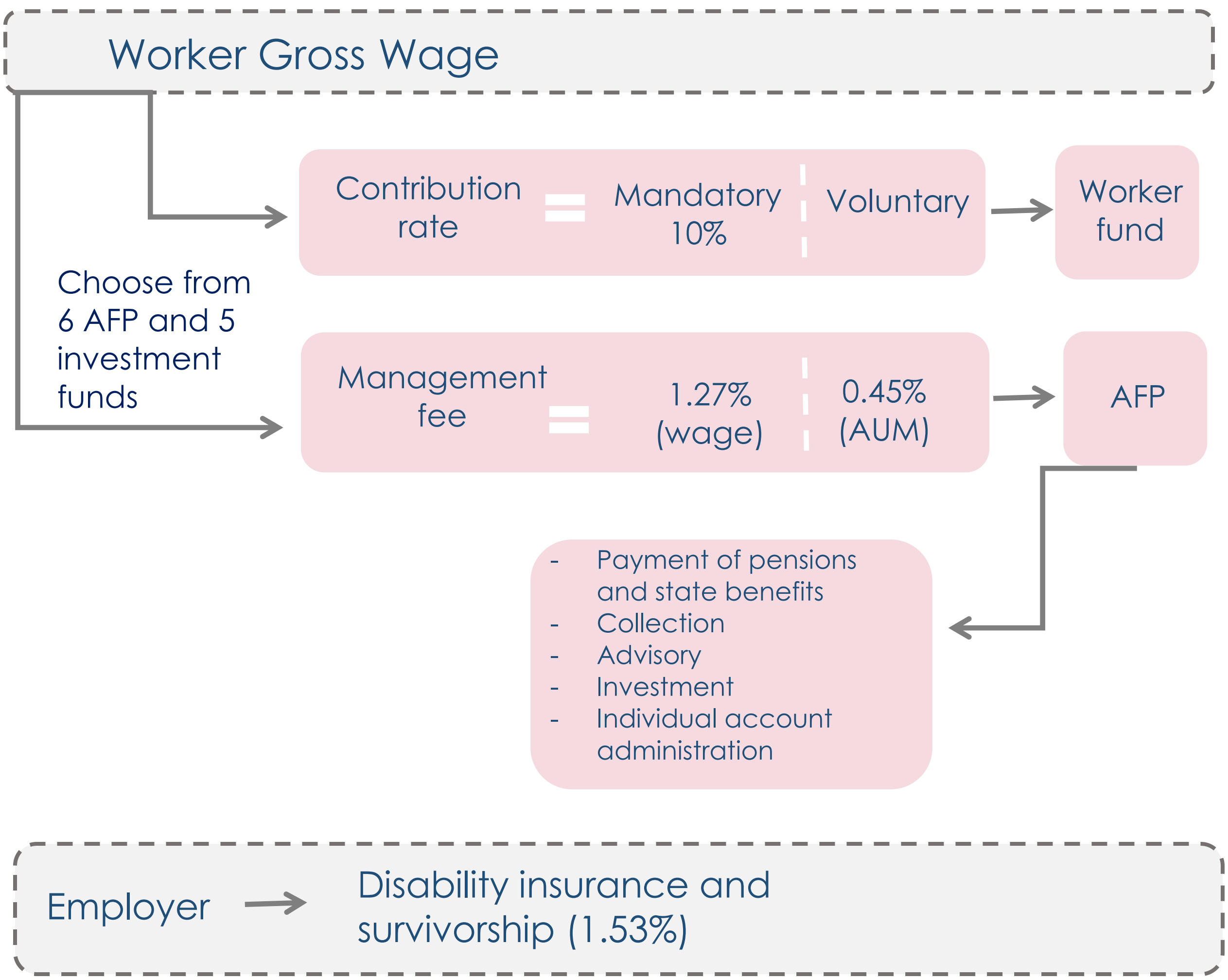
Saving into the second (mandatory) contributions pillar was declared mandatory for all employees who are entering the formal workforce for the first time but voluntary for independent workers until the 1st of January 2018. Starting in 2018, independent workers need to contribute as well[3].

[3] The new government, which started in March 2018, proposed a bill that is being discussed in Congress. The goal of the bill is to postpone the mandatory contribution and provide a gradual move towards mandatory contribution for independent workers.

The second pillar explained

The following diagram explains the flow of contributions to the pension system from a worker perspective. An employee is obliged to save 10% of her/his salary (mandatory savings). This amount goes to the worker fund, which is an individual retirement account. The worker subsequently decides which pension provider will manage her/his funds[4].

Figure 1 Pension Contributions in Chile



[4] Note that the worker can change the funds as many times as they want.

Today, there are six private pension funds that compete with each other in three dimensions: investment returns, fees and services. Each AFP charges different fees which range from 0.77% to 1.45%. The management fee is not based on assets under management, like in most DC systems around the globe, but it is structured as a percentage of the salary of the worker. Both the fees and the 10% contribution are capped ($2.142.088 monthly).

The for-profit AFP legally must manage the individual accounts (worker fund) and the management fees they receive in different accounts. That way, the worker funds will not be harmed in case of an AFP's insolvency. Also, the workers can choose to contribute additionally in a voluntary account. In that case, the worker can choose between AFPs and other financial service providers. The amount of assets under management in the mandatory accounts is $124.469.468,8 million (USD $191.491 million) and in voluntary savings $4.975.413,4 million (USD $7.654 million). Voluntary savings represent only 4% of the total of assets under management. 52% of the assets in voluntary accounts are currently managed by AFPs. Next to the collection and investment of the funds provided by the workers, the AFPs by law are obliged to provide other products and services. They are responsible for the administration and payment of the pensions and state benefits, they manage disability insurance, and give pension advice. In case an employer declares but does not pay out the worker's pension savings, AFPs will sue this employer.

Carmen's career history

With the history of the system in the back of her mind, Carmen Gonzalez started looking back at her career. For the majority of her working life, she has been employed as an independent worker. Originally not particularly interested in her retirement situation, Carmen's recent landmark birthday (she turned 50) motivated her to sort out her retirement plan. In Chile, female workers can legally retire when they reach the age of 60.[5] However, as in many other countries, employees can continue working and contributing after retirement since the retirement age can be extended.

While studying her personal situation, she also remembered the intense public debate on pensions in Chile over the last five years and in the recent general elections. Having read a lot in magazines and newspapers and after a few conversations with retirement specialists, Carmen realized that her pension situation may be quite worrisome. The details of her work history explain why the expected retirement income is probably lower than expected.

Carmen began to work as a formal worker when she was 26 years old. She worked for an employer until she was 30 years old. In the following five years, she partnered with a friend and opened a men's clothing store in Santiago. This enterprise was successful for a while, but business deteriorated gradually because of growing competition and lower prices from large department stores. The clothing company she owned could have hired her friend and her as formal employees. In that setting, Carmen would have contributed to the pension system. However, the prevailing business environment prevented them from making these contributions as these expenses would have required a lot of short-term liquidity that simply was not always available. As Carmen remained an entrepreneur, it was not mandatory to contribute to the pension system. Carmen worked as "an informal worker" for this period and decided

[5] The legal retirement age for Chilean men is 65 years. Data from the "Superintendencia de Pensiones" showed that the actual retirement age for women is 62 and for men 67.

not to save for pensions to maximize her company's profit and her present consumption.

Between 36 and 41 years old, after the closing of her business, she held several positions in which she invoiced her employers for services delivered. For instance, she was hired as a part-time receptionist in a dental clinic for three years. From then onwards, she has been working as a secretary in the Ministry of Labour and Social Security, with an "honorario" contract. This contract entitled her to a monthly gross salary of Ch$ 1.8 million. In this role it was not mandatory for her to contribute to social security.

She recently visited the Pension Funds Administrator (AFP) who she chose to execute her pension administration and investments. She was consulted by Carlos Ramirez, an experienced pension advisor at the AFP. He informed Carmen that she only made social security contributions for seven years, despite having a work history of 24. Carlos also showed some calculations about the expected retirement income if she would retire at the age of 60.

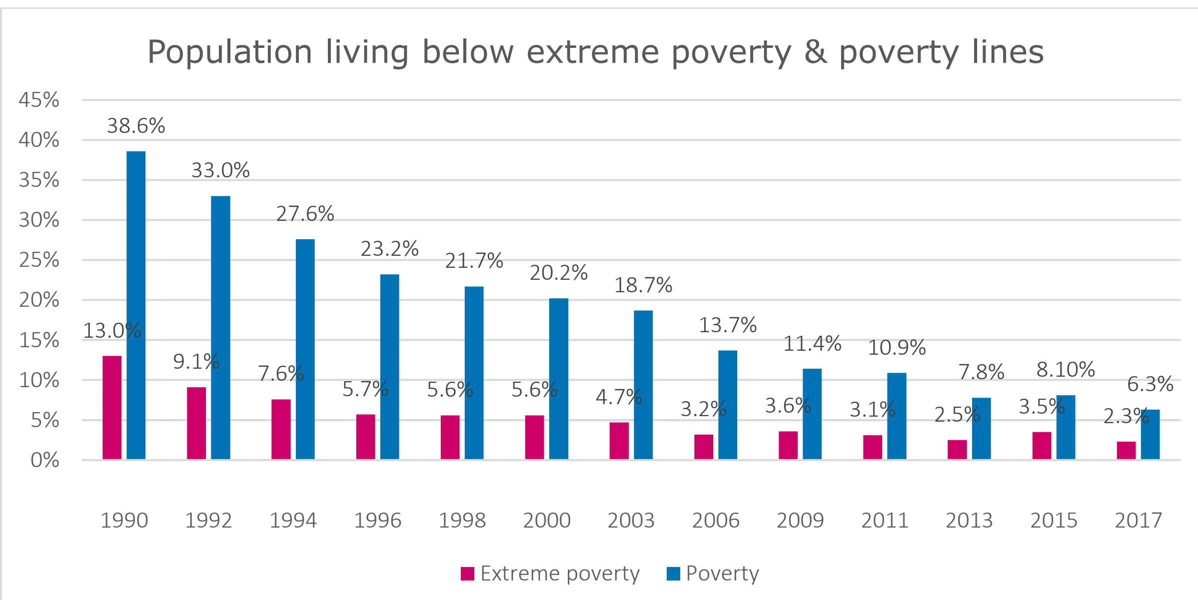
This information upset her. The expected income at retirement will by no means be enough to maintain her current standard of living. Suddenly, she remembered with a lot of regret the words of a friend: "the money you put in the AFP is not your property; it is better not to contribute and enjoy a higher monthly income".

The visit to the AFP and the predicted retirement income at age 60 left Carmen even more worried than she anticipated. But the recent pension reforms in Chile may bail her out. Will they?

The new system's performance

Did the reformed Chilean pension system deliver on its promise to provide universal old-age security and reduce the patterns of inequality? Official data of the Economic Commission for Latin America and the Caribbean in Figure 2 show that poverty and extreme poverty in Chile declined significantly since the 1990s, with the percentage of the population living in (extreme) poverty falling more than 30%.

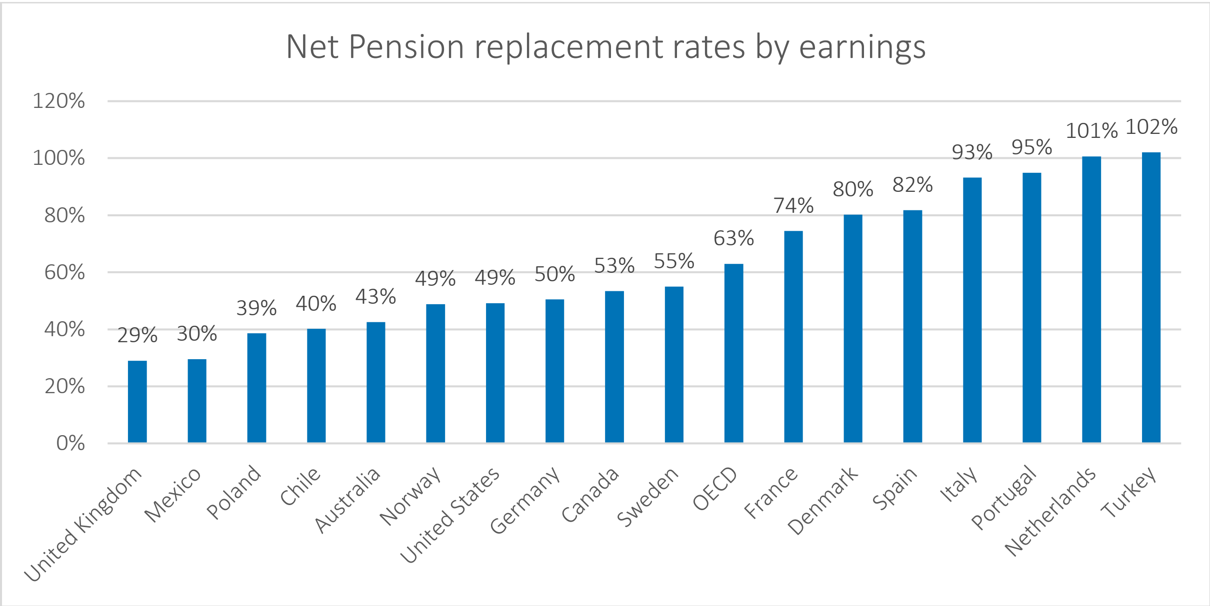
Figure 2 Population living below poverty



Source: *ECLAC: Economic Commission for Latin America and the Caribbean. Based on data from Household Surveys Database (BADEHOG). CEPALSTAT Databases. Data from 2015-2017 is based on official national data of the countries reported to ECLAC.*

Nonetheless, Chile has not been able to reduce income inequality at the same pace as poverty. Chile's pension system still struggles with low replacement rates and low mandatory contribution rates compared to other OECD countries[6]. Independent workers such as Carmen are suffering especially from this as can be seen in their average contributions to the pension system. These are either non-existent or substantially lower than the mandatory 10% contribution for formal workers which is already at the low end of the OECD spectrum. Consequently, as shown in Figure 3, this group of workers will end up with a very low replacement rate at retirement.

Figure 3 Replacement rates by earnings



Source: *OECD Pensions at a Glance 2017. Net pension replacement rates by earnings[7].*

Carlos Ramirez told Carmen that she is not alone in her worries about her retirement income. More than 40% of the Chilean population contributed less than 10 years to the pension system. In Chile, since workers have individual accounts and there is no minimum to receive a pension, there is a big variance in the amount that retired workers receive. The ILO assigns different categories depending on the amount of years a worker contributes to the

[6] See also Figures A1 and A2 in the Appendix.
[7] For a distinction between net and gross replacement, see Appendix

system. “Complete pensions” are for those that were able to contribute for more than 30. Those workers that contributed for 10 to 30 years will receive a “partial pension”. And those that contribute less than 10 years have “non-guaranteed income”. As shown in Figure A3 (appendix), for those workers that contribute to the system for 35 to 40 years their pension is close to the average Chilean income ($778,149). Moreover, it shows that people who have contributed for just 10 years (close to Carmen Gonzalez’ situation) will have a dramatically lower income. Finally, it shows that women are hit a lot harder than men. The average density of contributions for women is 15 years to finance 30 years after retirement[8], and 24 years for men to finance 21 years after retirement[9].

More reforms

In 2008, President Michelle Bachelet introduced a reform, which set up the current three-pillar system: Solidarity Pillar, Mandatory Contribution Pillar and a Voluntary Pillar. The aim of the redistribution / solidary government provided pillar was to solve some of the problems of the existing system as well as to include independent workers in the pension system by introducing a law that made contributions for health and social security obligatory. One of the purposes of the 2008 Pension Reform was to increase the coverage of self-employed workers, who represent around 30% of active workers. At that time, only 5% of the self-employed contributed voluntarily to the individual capitalization system.

The obligation to contribute for pensions, disability and survivorship insurance, and accident and occupational disease insurance to self-employed

[8] Women retire at 60 and their life expectancy (2018) when they get to 60 is 90 years old.
[9] Men retire at 65 and their life expectancy (2018) when they get to 65 is 86 years old.

persons was established. A gradual incorporation of these workers into the social security system was determined in 2008. The law provided independent workers with a transition period (2009-2011) to prepare for this new situation. Also, from 2012 to 2014, independent workers could request to not contribute to social security by making a formal request to the Chilean internal revenue service. The obligation to contribute for 2012 was based on 40% of the salary (the remaining part being exempt). This base gradually increased to 70% for 2013 and 100% for 2014 and 2015 respectively. Since 2015, the obligation to contribute based on 100% of salary was established. Every worker with invoices has to contribute[10].

The mandatory contribution to social security was defined as 10% of the salary, but the salary for self-employed workers was established as 80% of the total gross wage earned the year before the year of the income tax declaration. In addition, the 80% of the annual gross wage could not be less than a minimum monthly income ($288.000 in September 2018), nor higher than a monthly income taxable for social security ($2.142.360 in September 2018). The obligation to contribute to social security was not prescribed to all informal workers, but only for "honorario workers" like Carmen. Nonetheless, these workers could contribute voluntarily to their retirement accounts. Formal workers who enhance their salaries with additional self-employed activities with invoices must contribute to the social security system for the fees earned as a self-employed person and salaries as a dependent worker up to an annual taxable income equivalent to 12 times the monthly income taxable cap for social security (approximately $19 million in September 2018).

[10] Figures A4 and A5 in the appendix shows an invoice for an informal worker (simple statement without any contributions to social security) and an earnings statement of formal workers (without any voluntary contributions) respectively.

The state can force the contribution to social security by self-employed persons with invoices because the majority of these workers receive a tax refund from the internal revenue service. The invoice has a withholding tax of 10% of the gross fees, money that the contracting party of the service must transfer to the internal revenue service directly, as a tax advance that will potentially be paid back to the worker. For the clear majority of workers with invoices, the 10% withheld tax is higher than the income tax they must pay. In fact, many of these workers do not pay taxes as they do not exceed the annual income required to pay taxes. With this reform the annual tax refund for many informal workers has been eliminated.

The unions of state workers with invoices warned the government that they were not willing to contribute to social security contributions, arguing that their employment situation was irregular and that they fulfilled the requirements to be qualified as "formal" workers. The government sent a bill that was approved in the first months of 2016. The legal modification delayed the obligation to contribute to social security until January 1, 2018 (tax declaration of 2019) without the option to waive the payment. Self-employed workers could renounce the payment in the years 2015 to 2017. The indirect effect of this law was that informal workers contributed even less to their pension accounts (as a percentage of their wage) and more to several types of insurances and health care. Pensions contributions came third.

The new government, taking office on March 2018, created a bill to manage the latent conflict with government workers. The bill proposed a new gradual adjustment period of up to nine years to contribute to the pension system. Self-employed workers who are not willing to allocate 100% of their withholding tax to pay social security contributions will for a while be able to contribute a lower percentage of the gross fees to pensions and healthcare. This percentage will gradually increase, starting with 5% of the gross fees in 2018, 17% in 2019 and building up to 100% in 2027.

As of 2019, self-employed workers who issue invoices will begin to contribute for all social security schemes based on their gross fees for the year 2018. They will also be covered for disability and survivorship insurance, for work accidents and occupational insurance and for new insurance for the accompaniment of children with serious illnesses. As mentioned above, the payment of contributions for pensions and health will gradually grow. The obligation to contribute will apply to all self-employed workers who have annual gross fees of five monthly minimum incomes (CLP $ 1.44 million as of September 2018). The annual taxable income for social security will correspond to 80% of the annual gross fees. Table 2 shows for how many (invoicing) workers it is going to be mandatory to contribute given two restrictions: workers older than 50 years (women) and 55 years (men) are exempt as well as workers who earn less than five minimum wages per year. The total number of workers with invoices is 2.06 million. However, the real amount for whom it will be mandatory to contribute as independent worker is only 649.958 (69% from the private sector and 31% from the public sector).

The new bill will likely decrease the pension contributions made by “honorarios” or informal workers even more as this category of workers will use the 10% withheld tax to first pay for insurance and healthcare. However, the percentage of monthly withholding tax will gradually increase from 10%

to 17% in a period of 9 years. At that stage, the different social security contributions will be fully covered[11].

Table 2 Workers with invoices

Workers who issue invoices	2.061.017
After excluding workers with more than 50 (women) and 55 (men) years old and income less than five minimum wages per year ($1.38 million)	1.411.059
Workers that will contribute if the bill is approved	649.958
Public sector workers with invoice (average monthly wage $988.838)	197.298 (31%)
Private sector workers with invoice (average monthly wage $660.236)	452.660 (69%)

Source: *Ministry of Labour, 2018.*

A cocktail of anxiety, misconceptions and distrust

The information above shows that many other Chilean independent workers will share Carmen's anxiety towards pension and retirement planning. Many other factors could also play a role in explaining why Carmen and fellow informal workers have not become active in the pension system. Academic studies have shown that pension plan participants are expected to become more actively involved if *severity* (consequences of not engaging in such behaviour), *susceptibility* (perception of being at risk), *benefits of taking action*, and *self-efficacy* (feeling to be able to change something about the

[11] 1st, insurance for disability and survivor (1,53%); 2nd Insurance for labour accidents (0,95%), insurance for parents to be with sick kids (0,03%), health contributions (7%), pension contributions (10% contribution + 1,27% fee)

situation) are high, and *barriers* to act are low[12]. Additionally, these factors are also influenced by risk preferences, the propensity to plan for retirement, the level of financial literacy, and trust towards financial institutions and the pension system. All these combined with "national retirement anxiety", could play an important role in delaying the decision to gather information and become active.

The global economic and financial crisis of 2008 caused significant damage to the confidence of Chileans in the pension system. The riskier funds[13] fell 40%, destroying the trust and enthusiasm obtained after five years of high investment returns under the renewed multi-fund scheme[14]. The reputation of pension funds started falling. Today, there is a general lack of trust in Chilean institutions. This harms different sectors in Chile: ranging from politics, businesses to religious institutions and beyond, see Figure 4. Many private companies have been involved in scandals which also had a high impact on public opinion. This in turn gave rise to an increasing belief that private, for-profit companies should not operate in public goods arenas such as education, healthcare, infrastructure, and finally: pensions[15].

---

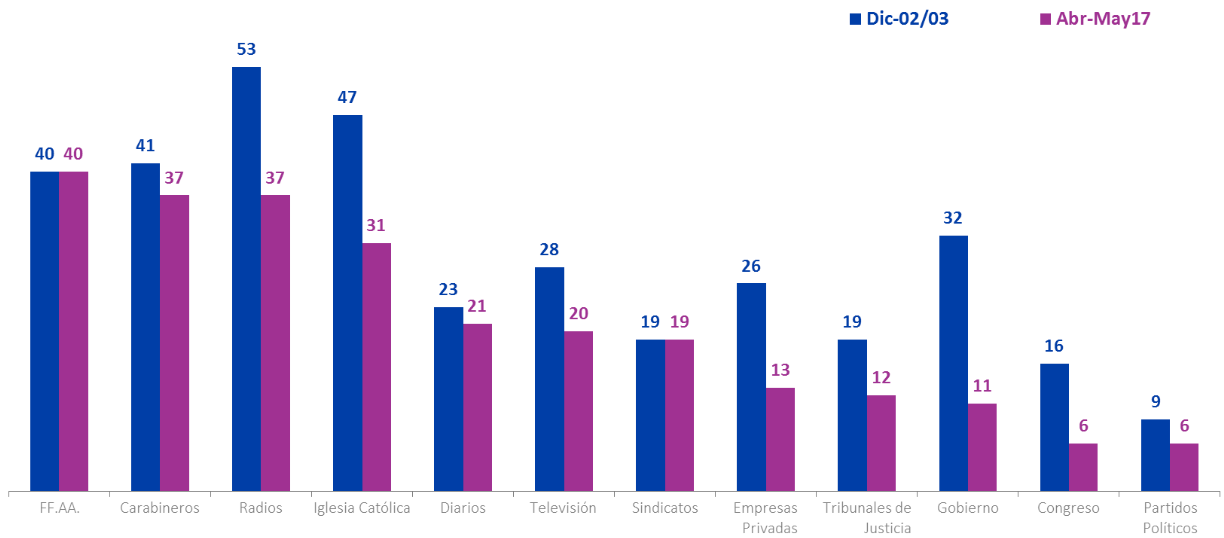
[12] See, for instance, the Retirement Belief Model as developed by Brüggen et al. Eberhardt, Wiebke and Brüggen, Elisabeth and Post, Thomas and Hoet, Chantal, The Retirement Belief Model: Understanding the Search for Pension Information (June 28, 2018). Available at SSRN: https://ssrn.com/abstract=3205085 or http://dx.doi.org/10.2139/ssrn.3205085

[13] Participants can choose the level of risk they want to have in their portfolio, choosing from fund A (highest risk) to fund E (lowest risk). There is a default option that depends on age and goes from fund B to D).

[14] In 2002, the Chilean government introduced a law and a changed the way pension funds allocate their portfolios to give to participants the freedom to choose the level of risk.

[15] The feeling of abuse from public institutions and private companies has been exacerbated by the decision that people working in the armed forces could remain in the existing PAYG system. This affected the confidence of citizens in a system that calls for increased savings and individual responsibility.

Figure 4 Trust in Chilean Institutions



Source: *Cadem, 2017. Highest score is 100*

In sum, the Chilean pension system, faces the challenge that the pensions it produces are insufficient for a very large part of the population. They reasons for this are insufficient contributions to the social security system, an increase in life expectancy, and a decade of low investment returns.

There are many other factors explaining the perception of AFPs by the Chilean population. They range from people having unrealistic expectations on replacement rates and investment returns to general distrust in for-profit private companies (as shown by Figure 4)[16]. People are convinced that the system provides low pensions to the majority and that the pension promise (a replacement rate of 70%) will not be fulfilled[17]. In the same vein, many Chileans expect extremely high investment returns on their funds. In a survey

[16] Figure A6 shows the operating expenses as a percentage of total assets across countries. Many Chileans think their funds are too expensive.

[17] Expectations on the replacement rate are even higher: Valdés (2015) using data from a survey done in the Bravo Commission showed that workers with a salary from $180.000 and 250.000 expected their retirement income was going to be $313.000.

in 2017[18], (Cadem, 2017), 75% of the people thought that a 10% real return of funds can be considered a “bad or mediocre return”. On top of that, workers do not understand why they must pay fees if investments have negative returns in any given year. These views, combined with the perception that AFPs are for-profit companies that reap the benefits of this system while the workers face the risk, led to a negative perception of the AFPs by Chilean workers[19].

Moreover, although the pension savings are collected in an individual account, many Chileans are complaining that they do not have access to their savings in case of a major life event such as buying a house or sudden medical cost because of a serious illness. Finally, they feel they cannot control the investments as strategic choices, such as fund menus, are made by the AFPs.

Carmen’s options?

Although Carmen is better informed after the session with pension specialist Carlos Ramirez, she is still uneasy with her pension situation. Going forward she wonders what options she has. Besides simply accepting the grim pension future, she may also start contributing larger amounts to her pension account as soon as possible, thereby accepting lower consumption patterns until her retirement. She may also plan to work longer, for instance until the age of 70. But will these measures suffice in her case?

[18] Cadem (2017).
[19] Note that the AFPs have private owners (in parenthesis) most of which are rooted in the commercial financial services industry: Provida (Metlife), Cuprum (Principal), Capital (Sura), Habitat (Prudential and Chilean Construction Chamber), Modelo (Andres Navarro), and Planvital (Generali).

What can she expect from the new Chilean government and politicians in general? This enduring pension crisis does not only hit Carmen. Many other informal workers are in a similar or even worse position. Can government help by redistributing income and wealth on a national level? Although she works at the ministry, she has no clue whether new reforms are underway that may tackle the existing pension problem more strategically.

Appendix

Figure A1 Replacement rates

Replacement rates by earnings (women where different)		
	Net Pension replacement rates by earnings	Gross Pension replacement rates
United Kingdom	29,0%	22,13%
Mexico	29,9% (27,7%)	26,4% (24,8%)
Poland	38,6% (34,1%)	31,6% (27,9%)
Chile	**40,1% (36,3%)**	**33,5% (30,3%)**
Australia	42,6% (38,8%)	32,2% (29,4%)
Norway	48,8%	45,1%
United States	49,1%	38,3%
Germany	50,5%	38,2%
Canada	53,4%	41,0%
Sweden	54,9%	56,0%
OECD	**62,9% (62,2%)**	**52,9% (52,3%)**
France	74,5%	60,5%
Denmark	80,2%	86,4%
Spain	81,8%	72,3%
Italy	93,2%	83,1%
Portugal	94,9%	74,0%
Netherlands	100,7%	96,9%
Turkey	102,1% (97,9%)	69,9% (67,0%)

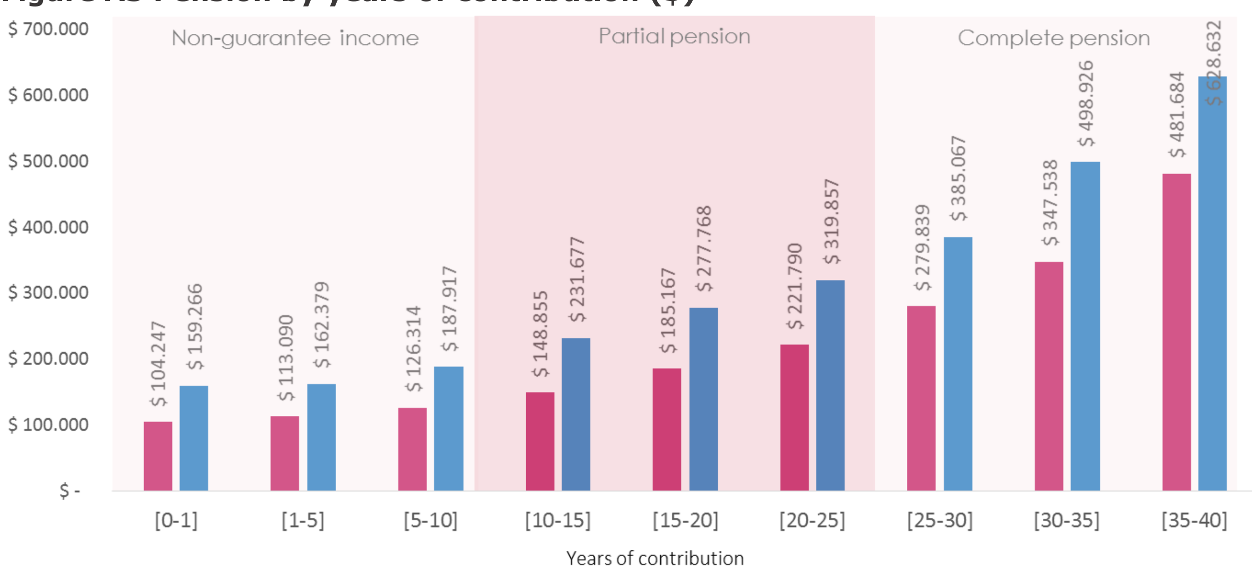
Source: *OECD Pensions at a Glance 2017. Tables 4.2 and 4.8: Net and gross pension replacement rates by earnings.*

Figure A2 Contribution rates (employer/employee)

	Employee	Employer	Total
Spain	4,70%	23,60%	28,3%
France	10,35%	15,05%	25,4%
Sweden	7,00%	15,88%	22,9%
USA	15,20%	6,20%	21,4%
Netherlands	12,90%	8,00%	20,9%
Germany	9,35%	9,35%	18,7%
Denmark	4,26%	8,52%	12,8%
Chile	11,21%	1,53%	12,7%
Korea	4,50%	4,50%	9,0%
OECD	7,70%	15,30%	18,4%

Source: *Pensions at a glance, 2017. For USA, NYC Social Security and FICA. For Spain, Ministry of Labour and Social Security.*

Figure A3 Pension by years of contribution ($)



Women	20.696	43.892	54.899	59.174	60.615	60.997	50.669	33.116	5.591
Men	6.975	29.557	50.094	70.061	81.690	78.854	74.472	57.962	14.063

■ Women ■ Men

Source: *Pensions by years of contribution (CLP$) based on information provided by the Superintendencia de Pensiones. According to ILO (1952), Art. 25 of the Convention 152 a Complete Pension shall be secured after 30 years of contribution or employment and a Reduced Benefit shall be secured after a qualifying period of 15 years of contribution or employment.*

Figures A4 Invoice example Carmen Gonzalez

Fee Invoice example

Carmen Gonzalez		
September 30, 2018		
Ministry of Economy		
Total professional fees	**$**	**1.800.000**
10% withheld taxes	$	180.000
Net Pay	**$**	**1.620.000**

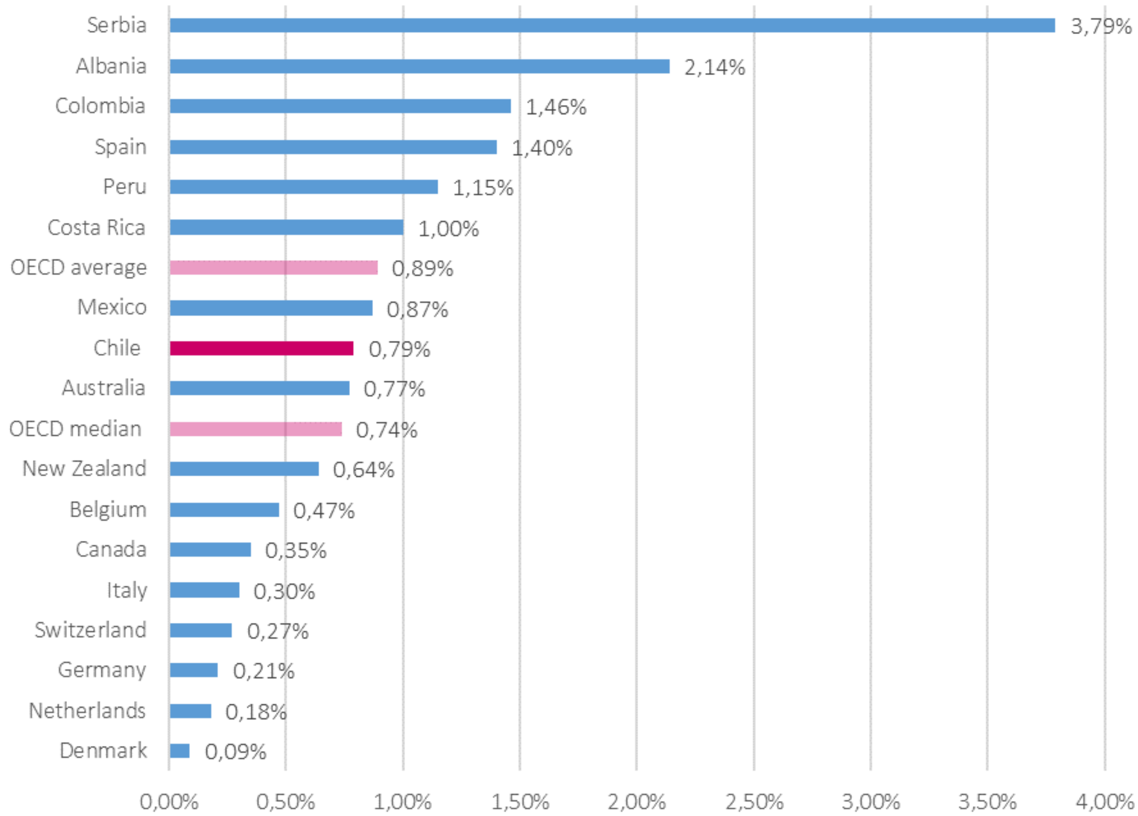
Figure A5 Earnings statement formal worker

Earnings statement example			
GROSS EARNING			
Base salary		$	1.800.000
Overtime pay			
Sales commissions			
Bonus payments			
Tota gross earnings		**$**	**1.800.000**
STATUTORY DEDUCTIONS			
Upper threshold limit (pension contributions) UF 78,3*	$ 2.142.088		
Upper threshold limit (unemployment insurance) UF 117,5*	$ 3.214.500		
Pension Contribution individual capitalization account	10%	$	180.000
AFP administration fee: AFP Modelo	0,77%	$	13.860
Healthcare contributions	7%	$	126.000
Unemployment insurance	0,60%	$	10.800
Voluntary pension contributions			
Total deducción		**$**	**330.660**
Sub total Subject to Tax		**$**	**1.469.340**
Second Category Income Tax (Tax rate 0,08 an rebate $83,380,80)		$	-34.166
Total After Tax		**$**	**1.435.174**
Transport/Lunch		$	50.000
Net Pay		**$**	**1.485.174**

** Value of UF on the april 30, 2018: $27.357,45*

Employer contributions		
Disability and survival insurance 1,53%	$	27.540
Unemployment insurance 2,4%	$	43.200
Work accident and occupational diseases insurance 0,915%	$	16.470
Accompaniment of childrens suffering from serious illnesses insurances 0,015%	$	270
Total contributions	**$**	**87.480**

Figure A6 Operating expenses as a percentage of total assets



***Source:** OECD, 2014, Global Pension Statistics: Operating expenses as a % of total assets. For Chile operating expenses includes intermediation fees and are calculated based on data provided by Superintendencia de Pensiones, 2017.*