From Bismarck to Friedman

Kristian Niemietz

15th IEA Discussion Paper

31st January 2007

Institute of Economic Affairs
2 Lord North Street
London
SW1P 3LB

www.iea.org.uk

IEA web publications are designed to promote discussion on economic issues and the role of markets in solving economic and social problems. Copyright remains with the author. If you would like to contact the author, in the first instance please contact rwellings@iea.org.uk. As with all IEA publications, the views expressed in IEA web publications are those of the author.

From Bismarck to Friedman

Kristian Niemietz¹

Chile provides the most frequently quoted example of a change from an established state PAYGO pension system to a private funded scheme based on personal savings. Most of the key results have been impressive and a lot of the often-heard criticisms of funded schemes have been disproved. A number of shortcomings remain. These shortcomings are seldom caused by features inherent to funded schemes, but rather by elements specific to the Chilean arrangement which could be altered given the political will.

Introduction

In 1981, Chile was the first country to move from a fully matured pure pay as you go (PAYGO) pension system to a fully funded, privately administered scheme based on individual saving accounts. A Chilean employee was obliged to deposit 10% of monthly gross earnings into a personal retirement account, run by a private pension fund administrator of his choice. There are currently six of these *Administradoras de Fondos de Pensiones* (AFPs) operating in the market, each of which offers five types of pension funds that differ in return and risk. AFPs charge a wage-related fee which pays administrative expenses and pays for disability and survivorship insurance via a group contract with an insurance company. A retiree can choose to retain his AFP-account, purchase a lifetime annuity from a life insurer, or combine both options ².

The pension reform, designed by an expert group headed by then-labour minister José Piñera, replaced a deficit-ridden system of privilege and discretion³. Nobody who had already paid contributions to the old system was forced to switch. The old institutions remained in place for participants who chose to remain or who already had retired. New entrants to the labour force were obliged to join the new system. Participants of the old one were given the option to change. If they did change to the new system, their already accrued entitlements were paid out to them in form of a non-tradable government bond due when retirement age was reached⁴.

Today, after 25 years of operation, a number of important conclusions can be drawn from the Chilean experience:

Returns and stability

Since 1981, the AFP's average rate of real return has been 10% p.a. At the same time, the example of Chile shows that financial markets volatility, often regarded as a problem for funded pension arrangements, has not been a significant problem in sufficiently diversified portfolios. Slightly negative overall returns have occurred, but only in two years⁵. Since the beginning, continual diversification has taken place in AFP accounts. In 1983, 44% of all AFP-assets were invested in government bonds and 53% in the domestic financial sector. Today, these proportions are down to 16%

¹ Kristian Niemietz is a graduate of economics at Humboldt University, Berlin.

² SAFP (2006)

³ Godoy & Valdés (1994) p. 137-143

⁴ Acuña & Iglesias p. 445

⁵ AFP-AG (2006) Statistics

and 30% respectively. Shares in domestic private companies represent 23% of investment portfolios and 30% of funds are invested abroad⁶. Two factors have led to this development.

Investments permitted to AFPs have been liberalised in a number of steps. In the first years, only government bonds and some financial sector instruments were allowed. Subsequently, equities, participation in investment funds, and investments abroad were added to the list of permissible investments. Quantitative limits have been lifted several times (although there are reasons to assume they still play too large a role)⁷.

Secondly, capital markets have been liberalised and institutional quality improved. The Financial Intermediation Ratio (FIR), which comprises all assets deposited in financial institutions as a percentage of GDP, was around 40% of GDP in 1980 and has risen to around 180% in 2001⁸. But whilst the sophistication of capital markets contributed to the success of the privatised pension system, the pension system has, in turn, contributed greatly to the development of capital markets. It has introduced institutional investors and large amounts of capital supply to the markets. Econometric models show that between 31% and 46% of the increase in the FIR has been caused by the pension reform⁹. The argument that private pensions will be subject to instability of investments only holds for cases where investment possibilities remain restricted and governments fail to liberalise capital markets, so that assets are concentrated in a few financial instruments.

Failure of a pension fund administrator is another commonly cited problem with private pensions solutions. This need not be a problem at all. The number of AFPs has dropped from 21 in the mid-1990s to six today, but this has not caused financial trouble to clients. The pension fund and the AFP itself are separate judicial entities. Bankruptcy of an AFP does not affect its client's account.

Savings and investment

Homburg (1988)¹⁰ and others have credited funded pension schemes for increasing the level of savings and investment. Stiglitz and Orszag (1999) have denied this. They have argued that mandatory savings for pensions could simply reduce voluntary savings in other sectors of the market. They have also pointed to the transition deficit that occurs when changing from an unfunded to a funded pension scheme¹¹, which has to be subtracted from overall savings.

In Chile, the savings rate has increased from 12% average in the 1970s to 23% in the 1990s and remained at that level¹². Bennet, Loayza and Schmidt-Hebbel (2001) have analysed the determinants of private sector saving behaviour and have found no reliable correlation between mandatory and voluntary saving¹³. An explanation might be that, for most people, saving is not an end in itself (as a neo-classical 'savings function' would suggest) but serves specific purposes. If old-age provision is

⁷ Berstein & Chumacero (2005) p. 5, 6

¹¹ Orszag & Stiglitz (1999) p. 9-16

⁶ SAFP Statistics (2006)

⁸ Corbo & Schmidt-Hebbel (2003) Chart 7

⁹ Corbo & Schmidt-Hebbel (2003) p. 27

¹⁰ Homburg (1988) p.49-61

¹² Bundesagentur für Außenwirtschaft (2006)

¹³ Bennet, Loayza & Schmidt-Hebbel (2001) p. 69-72

privatised, none of these other purposes disappears, but another one is added (as the state steps away from the pension system) and the means to meet that additional saving are set free as the size of the state pension scheme, and the tax burden necessary to finance it, shrinks. Further, the composition of savings is shifted towards investment-stimulating long-term savings¹⁴.

The argument concerning the transition deficit deserves a closer look, too. It is true that in Chile, obligations to pensioners in the old system have to be met whilst contributions have ended from those entering the new system. Also, accrued entitlements to contributors who switched to the privatised system also have to be reimbursed at retirement. This has caused a deficit of 3.4% of GDP per annum on average. But this debt existed previously – it was just hidden from government accounts. In fact, making this debt explicit created strong pressure to reduce government spending in the non-pension budget. Corbo and Schmidt-Hebbel (2003) believe that at least 25% and maybe even the whole deficit has been offset in this way¹⁵. Governments have generally run budget surpluses since the reform¹⁶.

Those who interpret the transition deficit as a net loss to the transition generation fail to see that governments are often reluctant to limit their scope. Also, the transition deficit can be financed by a sale of state assets, the cash flows from which (if positive) might well have similar characteristics to the cash flows related to the liability stream from PAYGO pensions. In the 1980s, Chilean energy and telecommunication companies were privatised, which at the same time contained the budget deficit and provided attractive investment opportunities for the AFPs¹⁷.

Labour markets

PAYGO systems and funded schemes differ substantially with regard to their impact on labour markets. James (1998) and others have pointed out that social security contributions are mostly perceived as a tax, while payments to one's own savings account are far less so 18. A tax on labour supply distorts the labour market. Stiglitz and Orszag (1999) have disagreed with this point, too. According to them, PAYGO contributions are perceived as a tax only in so far as they contain elements of redistribution. If the pension system is switched to individual accounts, redistribution must be shifted to other distortionary taxes if its overall level is to be held constant. Redistribution could be lowered altogether, but this could also be done within a PAYGO system. Edwards and Cox Edwards (2002) have developed a model simulation of Chile's labour market. They have shown that the pension reform has indeed increased employment. There is yet another effect. In a transition country such as Chile, the labour market (indeed the whole economy) is usually divided into a formal and an informal sector. As the informal sector lacks enforceability of contracts, access to credit, documentation of property relations and so on, it will be less productive. If taxes on formal employment fall, incentives to tax-evading informal employment are lowered. Some people will switch from the informal to the formal sector, so the composition of the economy changes in favour of the latter. The share of the more productive sector in the economy will rise, and so will overall

¹⁵ Corbo & Schmidt-Hebbel (2003) p. 9,10

¹⁴ Booth (1999) p.232

¹⁶ Central Bank of Chile (2006)

¹⁷ SAFP Publications (2006) p.142, 143

¹⁸ James (1998)

productivity¹⁹. Pension privatisation can thus increase employment and labour productivity at the same time. The trouble with the Stiglitz and Orszag argument is that they identify redistribution as such as the source of distortion in PAYGO schemes. The main reason why PAYGO contributions are not really distinguishable from a tax is that their contributors do not acquire property rights, secured by enforceable contracts. Their entitlements are of a diffuse nature and will only be made concrete through the political decision process²⁰. A funded scheme as the Chilean one, in contrast, permits an entirely separate consideration of the issues of old-age provision (in which a system has been set up where there is a 1:1 relation between effort and reward) and redistribution. In this way, resources can be pinpointed to old people most in need, ensuring a minimum living standard with greater spending efficiency. In Chile, there are two types of old-age income supplements, but both are means-tested and modest. Old age poverty has fallen from 30% in the late 1980s to less than 10%²¹. Whilst both forms of payments to the old poor cost about 0.5% of GDP²² combined this is much less than government subsidies to the old system pension system.

'Financial supermarkets' or 'Welfare supermarkets'?

Despite the benefits discussed above, Chile's retirement system does have numerous shortcomings. AFP net management fees of around 1.5% of a monthly gross wage²³ are often perceived as being high. The reasons for the high level of fees are both the high expenses of the AFPs as well as the low intensity of competition. Over the last 10 years, the average rate of profit in the AFP-industry was 28%²⁴, but still, no new entries into the industry have been recorded in the same time span.

As for the expenses, Stiglitz and Orszag (2003), among others, have claimed that in pension fund management, economies of scale play such a dominant role that a high degree of competition was impossible in a small market. Valdés Prieto (2005) of the Chilean Think Tank CEP has shown that if unit costs are modelled econometrically, the above assertion is true when total costs are considered. But in the actual management of the funds, activities such as marketing excluded, economies of scale play no major role. There could be up to 23 AFPs at the minimal cost level²⁵. The trouble is that AFPs are prohibited from engaging in any business other than pension fund management, which artificially fragments the financial sector. Costs such as marketing rise less than proportionally with the number of products sold, so if an AFP could be part of a bank, an insurance company, a mutual fund or another institution with which its activities overlap, efficiency thresholds could be substantially lowered. Additionally, other financial institutions would be encouraged to enter the AFP-market if they did not have to duplicate their fixed costs. Cost efficiency and competition could both be enhanced. Security of funds need not be endangered if pension funds are held under separate custody.

-

 $^{^{19}}$ Edwards & Cox Edwards (2002) p.22 - 28 $\,$

²⁰ Booth (1998) p.4

²¹ Soto (2005) p.5

²² AFP-AG Publications p.6

²³ Favre et al (2006) p.26

²⁴ Superintendencia de Administradoras de Fondos de Pensiones, Statistics (2006)

²⁵ Valdés Prieto (2005) p.4

If the industry structure were left unregulated, at least two scenarios (or any combination of them) are imaginable. 'Financial supermarkets' offering a wide range of financial products out of a single retailer, with maximum use of economies of scope, could develop. Alternatively, another business area where capital reserve formation plays a large role is private health insurance, a vital sector in Chile. There could be 'welfare supermarkets' offering pension fund saving, health insurance, and perhaps even a personal unemployment accounts (although that is a product with a very different time horizon) together.

Coverage rates

Only around 60% of the labour force is covered by AFP-savings. Affiliation is practically universal, but many people show large gaps in payment patterns. It should not be forgotten that 60% is still the highest social security coverage in the whole of Latin America, and it is especially noteworthy that the coverage rate for the lowest income quintile is far above that of any other country in the region²⁶. The coverage issue is related to a great number of socio-economic variables, but the clearest determinant of coverage is whether the employee is employed formally or informally. Among workers with a labour contract, 94% are covered, compared with 19% of those without a labour contract²⁷. It is in the informal sector where most people work as self-employed micro-entrepreneurs and where the AFP-system has not expanded. Although the rule of law has greatly deepened in Chile, an extralegal sector, as defined by Peruvian economist Hernando de Soto, proves to be persistent. Further legal reform is needed.

Financial literacy

A nation-wide survey has revealed that the great majority of AFP-affiliates are totally unfamiliar with key features of retirement saving. In one survey, not much more than a fifth of those questioned could correctly (within +/-20%) quantify their account balance; not much more than 2% knew how much their AFP charged them; and only 16% knew which of the five types of funds they participated in²⁸. These results have aroused calls for government-bids for the cheapest AFP on a voluntary basis. Such proposals are misleading; a bid would endanger one of the greatest achievements of the pension reform, which is the de-politicisation of old-age provision. Instead, the right to contract AFPs and open saving accounts should be extended. Group contracts and perhaps group accounts organised by employers, unions and other voluntary associations would have great advantages: First, workers who feel insecure with the AFP-system could leave the choice to somebody they trust, whilst those willing to organise their pension savings by themselves could, of course, go on doing so. Again, there could be mixed approaches, where some workers could both participate in a company or union-based account and hold an individual account in addition. Secondly, group contracts could result in favourable conditions and lower prices.

Rofman (2005) Table 5
 Arenas de Mesa, Behrman & Bravo (2004) p.13, 15

²⁸ Arenas de Mesa, Bravo, Behrman, Mitchell & Todd (2006) p.17-21

Conclusion

Pension privatisation can produce great benefits, and the perceived disadvantages are often exaggerated. But this is by no means a natural result. Correct implementation is essential. In Chile, returns have been high and the system has been robust in the face of market turbulence - but this requires liberalised capital markets and investment rules to increase investment opportunities. The transition has been affordable and savings and investment have been stimulated – but this requires great fiscal discipline during the process. There have been highly beneficial effects on the labour market – but these require a genuine separation of old-age provision and redistribution. Some of the greatest weaknesses around Chile's pension market are the predetermined industry structure, where potential for innovation is lost, the rigid contract structure, and the context of a large informal economy. Still, on balance, José Pinera's reform has enormous merits that deserve admiration.

References

Acuña, Rodrigo & Iglesias, Augusto: 'La Reforma a las Pensiones' (2000); *Centro de Estudios Publicos*; Serial Paper *Las Reformas Sociales*, Chapter 11

Arenas de Mesa, Alberto (2000): 'Cobertura Previsional en Chile. Lecciones y Desafios del Sistema de Pensiones Administrado por el Sector Privado'; CEPAL, Serial Paper *Financiamento del Desarollo* #105; Santiago de Chile http://www.eclac.cl/publicaciones/xml/8/5788/lcl1457e.pdf

Arenas de Mesa, Alberto; Bravo, David; Behrman, Jere (2004): 'Characteristics of and Determinants of the Density of Contributions in a Private Social Security System' University of Michigan Retirement Research Center; Working Paper #077 http://www.mrrc.isr.umich.edu/publications/Papers/pdf/wp077.pdf

Arenas de Mesa, Alberto; Bravo, David; Behrman, Jere; Mitchell, Olivia & Todd, Petra (2006): 'The Chilean Pension Reform Turns 25: Lessons from the Social Protection Survey'; Pension Research Council Working Paper #9 http://rider.wharton.upenn.edu/~prc/PRC/WP/PRC%20WP9-2006.pdf#search=%22The%20Chilean%20Pension%20Reform%20Turns%2025%20 Lessons%20from%20the%20Social%20Protection%20Survey%22

Asociacion Gremial de Administradoras de Fondos de Pensiones (AFP-AG) Publications (2006): 'The AFP System: Myths and Realities' http://www.afp-ag.cl/ingles/publicaciones/Myths and Realities.pdf

Asociación Gremial de Administradoras de Fondos de Pensiones (AFP-AG)(2006): Statistics

Bennett, Herman; Loayza, Norman & Schmidt-Hebbel, Klaus (2001): 'Un Estudio del Ahorro Agregado por Agentes Economicos en Chile'; Central Bank of Chile Studies http://www.bcentral.cl/esp/estpub/estudios/bancacentral/pdf/049_082Bennet.pdf#search=%22Un%20Estudio%20del%20Ahorro%20Agregado%20por%20Agentes%20Economicos%20en%20Chile%22

Berstein, Solange & Chumacero, Romulo (2005): 'Cuantificacion de los Costos de los Limites de Inversion para los Fondos de Pensiones Chilenos.'; SAFP Studies http://www.safp.cl/files/doctrab/DT00003.pdf

Booth, Philip (1999): 'The Problems with PAYGO Pensions'; Journal of Pensions Management Vol.4 #3

Booth, Philip (1998): 'The Transition from Social Insecurity'; IEA Journal *Economic Affairs* Vol.18 #1

Bundesagentur für Außenwirtschaft (Foreign trade department of the German Ministry of Economics)(2006): 'Wirtschaftstrends kompakt: Chile 2006' http://www.bfai.de/ext/anlagen/PubAnlage 2171.pdf

Central Bank of Chile (2006): 'Fundamentals of the Chilean Economy' http://www.bcentral.cl/eng/infoeconomic/reports/bccheconomy/pdf/fundamentals0320 06.pdf

Corbo, Vittorio & Schmidt-Hebbel, Klaus (2003): 'Efectos Macroeconomicos de la Reforma de Pensiones en Chile'; Central Bank of Chile Studies http://www.josepinera.com/text/corbo-schmidt.pdf#search=%22Efectos%20Macroeconomicos%20de%20la%20Reforma%20de%20Pensiones%20en%20Chile%22

Edwards, Sebastian & Cox Edwards, Alejandra (2002): 'Economic Reforms and Labor Markets: Policy Issues from Chile' http://www.anderson.ucla.edu/faculty/sebastian.edwards/labor_chile.pdf#search=%2 2Economic%20Reforms%20and%20Labor%20Markets%3A%20Policy%20Issues%2

Favre, Michele; Mellguizo, Angel; Muñoz, Angel & Vial, Joaquin (2006): 'A 25 Años de la Reforma del Sistema Previsional Chileno. Evaluacion y Propuestas de Ajuste'; BBVA Provida Publications

http://serviciodeestudios.bbva.com/TLBB/fbin/AMAR_0603_DocumentosChile_01_tc m208-

70363.pdf#search=%22A%2025%20A%C3%B1os%20de%20la%20Reforma%20del %20Sistema%20Previsional%20Chileno%20Evaluacion%20y%20Propuestas%20de %20Ajuste%22

Godoy, Oscar & Valdés, Salvador (1994): 'Democracia y Prevision en Chile: Experiencia con dos Sistemas' in *Cuadernos de Economia* #93

Homburg, Stefan (1988): 'Theorie der Altersicherung'; Springer-Verlag, Berlin/Heidelberg

0from%20Chile%22

James, Estelle (1998): 'Pension reform: Is there an Efficiency-Equity Trade-Off?' http://www.worldbank.org/html/dec/Publications/Workpapers/WPS1700series/wps1767
http://www.worldbank.org/html/dec/Publications/Workpapers/WPS1700series/wps176
http://www.worldbank.org/html/dec/Publications/Workpapers/WPS1700series/wps176
http://www.worldbank.org/html/dec/Publications/Workpapers/WPS1700series/wps176
<a href="mailto:reform: 7/wps1767.pdf#search=%22estelle%20james%20pension%20reform: 7/wps1767.pdf#search=%22estelle%20james%20pension%20reform: 7/wps1767.pdf#search=%22estelle%20james%20pension%20reform: 7/wps1767.pdf#search=%20pension%20reform: 7/wps1767.pdf#search=%20pension%20pe

Orszag, Peter & Stiglitz, Joseph (1999): 'Rethinking Pension Reform: Ten Myths about Social Security Systems'

http://www.worldbank.org/knowledge/chiefecon/conferen/papers/rethinking.pdf#search=%22Rethinking%20Pension%20Reform%3A%20Ten%20Myths%20about%20Social%20Security%20System%22

Rofman, Rafael (2005): 'Social Security Coverage in Latin America'; Social Protection Discussion Paper Series 0523

http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/0523.pdf

Soto, Mauricio (2006): 'Chilean Pension Reform: The Good, the Bad and the In-Between'; Boston College for Retirement Research, Issue in Brief No. 31 http://www.bc.edu/centers/crr/issues/ib 31.pdf

Superintendencia de Administradoras de Fondos de Pensiones (SAFP) (2006)

Superintendencia de Administradoras de Fondos de Pensiones (SAFP) Statistics (2006)

Superintendencia de Administradoras de Fondos de Pensiones (SAFP) Publications (2006): 'The Chilean Pension System' http://www.safp.cl/sischilpen/english.html

Valdés Prieto, Salvador (2006): 'Licitaciones para aumentar la competencia entre las AFP'; Centro de Estudios Publicos Chile, *Puntos de Referencia* #278 http://www.cepchile.cl/dms/archivo_3654_1839/pder278_valdes.pdf.