

Ząbkowicz, Anna

Article

Mandatory pension funds in Chile: Decline of the arrangement?

e-Finanse: Financial Internet Quarterly

Provided in Cooperation with:

University of Information Technology and Management, Rzeszów

Suggested Citation: Ząbkowicz, Anna (2017) : Mandatory pension funds in Chile: Decline of the arrangement?, e-Finanse: Financial Internet Quarterly, ISSN 1734-039X, De Gruyter Open, Berlin, Vol. 13, Iss. 4, pp. 149-155,
<https://doi.org/10.1515/fiqf-2016-0043>

This Version is available at:

<https://hdl.handle.net/10419/197399>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by-nc-nd/3.0>

MANDATORY PENSION FUNDS IN CHILE: DECLINE OF THE ARRANGEMENT?

ANNA ZĄBKOWICZ¹

Abstract

Chile has been both a pioneer and the most radical follower of the idea of converting pension savings into contributions to privately-managed capital funds. Two recent portions of reforms under President Bachelet extended the social safety net as well as re-introduced publicly-administered programs on behalf of retirees.

Does such direction, in the country with the longest lasting evidence of privatized fully-funded pensions mean a fall of the arrangement? The article attempts a political-economic argumentation in aim to form the answer.

The premise is that risk sharing constitutes a crucial issue in insurance industry where old-age security is largely placed. In social security segment the risk of default on liabilities is backed by taxing capacity of the state; in fully-funded-pensions plans normally this is individual contributor who faces the portfolio risk. Therefore change in risk sharing between the contributors to the funds, pension management companies and the state is fundamental for evaluation of the reforms. The review of Chilean reforms reveals an institutional arrangement which is fundamental to risk sharing, namely the relation between contribution and benefit, left intact. This finding supports the conclusion that bringing recently the state back into retirement system can not be conceived as any systemic revolution.

JEL classification: P16, B52

Keywords: the political economy of pension reforms - funded pensions - risk sharing

Received: 10.06.2017

Accepted: 20.12.2017

¹ Jagiellonian University in Cracow, Faculty of Management and Social Communication, e-mail: anna.zabkowicz@uj.edu.pl.

The article is an effect of the project – „Financialization New Trends and Directions of Development” - International conference, conducted by the University of

Information Technology and Management in Rzeszów with Narodowy Bank Polski under the scope of economic education programme

INTRODUCTION

Funded pensions are secured through accumulation of contributions by or on behalf of fund's affiliates and through investing accumulated funds in financial assets (Barr & Diamond, 2010). Since funding is normally managed by private companies this institutional arrangement allows for advancements in privatization of the pension industry. Actually, these phenomena are an outcome of fundamental reforms carried on in numerous emerging market economies of Latin America as well as of Central and Eastern Europe at the turn of 20th and 21st centuries. In developed market economies the reforms promote voluntary funded pension plans. In some emerging market economies this institutional arrangement has been developed “green field” and, additionally, mandatory pension funding was introduced, not without persuasion of the World Bank (Sarfati & Ghellab, 2012).

Chile has been both a pioneer and the most radical follower of the idea of converting pension savings into contributions to privately-managed capital funds. The funds were created in 1981 on the mandatory-insurance basis. Recently, more than 80 per cent of pension savings in Chile is invested under the rules governing this retirement system and 98 per cent of the insured are in the private pension system. This is a much more tilted reliance on mandatory private-managed savings than in the average OECD country which is 22,7 percent (Garcia-Huitron & van Leuvensteijn, 2015, p.197). Nowhere was the change so embracing. The early 21st century saw retreat from the pension funds created on mandatory basis worldwide. Also in Chile the 2008 crisis echoed with a prolonged re-reform of the pension system. Reforms of 2008 and 2015 under the socialist President Michelle Bachelet extend the social safety net as well as re-introduce publicly-administered programmes. This change again seems to be internationally meaningful, also for Poland being one of the follower-countries¹.

The article poses the question whether a drive in new direction in the country of vast evidence on mandatory, funded, defined-contribution pensions means a decline of the arrangement? How to evaluate the weight of the change and, consequently, what is prognosis for bringing the state back in?

The explanation given here is not technocratic but of political-economic nature. It is based on the proposition that risk sharing constitutes a crucial issue in insurance industry where old-age security systems are largely placed. As long as it is maintained that both provision and “safe” level of old-age income are their goal, the state remains one of the parties in the scheme. As far as capital funded pension plans are considered, private pension management companies make another party. Since such plans are at the core of the pension system under the analysis, thus change in risk sharing between contributors to the funds, fund-management firms and the state is fundamental for evaluation of the system's reforms. To be explicit, the question of portfolio risk or risk of failed investment is taken here under consideration.

THE REFORMS AND THEIR EVALUATION

Apparently, universal old-age insurance is a very special branch of finance as far as its original social mission concerned. Its traditional core idea was social security which is provided by an income (pension) to be paid to a person when in the retirement age. In other words, income high enough to protect from poverty has been at heart of the mission. In the course of time the state took ultimate responsibility for pension benefits as well as for administration of the system which worked on the pay-as-you go basis (PAYG) in most of the countries concerned.

In 1981, Chile was the first country to switch from a public PAYG pension system to individual accounts and funded pensions, and to invite private companies into the pension industry. Under the 1981 reform Chilean state transferred management of new pension accounts from public agency toward private companies and, simultaneously, made contributions to these accounts mandatory, thus making fund-managing companies (the AFPs after *Administradoras de fondos de pensiones*) legally privileged vis a vis other financial firms competing for voluntary savings. Another structural change in 1981 referred to the relation between individual contribution and pension benefit. The latter needs a wider elaboration to show what difference a different contribution-benefit formula actually makes from economic-political perspective².

In operational language of pension reforms a

1 This is a reference both to demise of pension funds on mandatory basis (so called OFEs) in Poland and to Polish state's role in recent pension plans based on automatic enrollment (the PPKs).

The article is an effect of the project – „Financialization New Trends and Directions of Development” - International conference, conducted by the University of

2 This is political-economic approach which must not be confused with risk management and risk-based supervision for pensions in the field of finance.

formula for calculating pensions is named a “Defined Benefit” either a “Defined Contribution”. Under Defined Benefit (DB) formula, basically, public insurers were believed to afford benefits adequate to social minimum, mostly due to financing on PAYG basis, since this system of financing allowed for income redistribution. According to this formula, benefit may be based on the worker’s final wage and length of service, however, it does not depend on the amount of assets accumulated in the person’s name; instead, funds are adjusted to meet obligations; the risk of varying rates of return to pension assets finally falls on the sponsor. In traditional system the public management agency was backed by the state budget who was the sponsor. The paradigmatic reform changed the basic relation between contribution and benefit in the system as a whole. Under so called Defined Contribution (DC) formula the benefit is determined by the amount of capital paid in toward a person’s pension. A pure DC plan adjusts obligations to match available funds; thus this is individual contributor who faces the portfolio risk (Barr & Diamond, 2008a). In brief, along with changing DB formula to DC formula the risk of old-age poverty is shifted from managing agent to contributor, with extremely low retirement benefit eventually being supplied up to minimal level from tax revenues.

We claim that the consequent change in risk sharing among the contributors to the funds, management companies and the state is fundamental for how the reform is evaluated by the parties engaged. Under DB formula value of benefit, as calculated in accordance with the state-imposed rules, is actually guaranteed by the state. To put it differently, the state runs the risk that inflows to the system do not balance the outflows which are due to benefits. Under DC formula the parameters of contribution are precise and contributed savings are transparently registered on individual member accounts to be invested in securities markets; the size of benefit depends on returns on capital, and therefore is uncertain. The risk of failed investment can be shared between contributors, pension management companies and the state (e.g. to the amount of the state-acknowledged minimal pension). Thus, whether the old-age insurance is governed by DB formula either by DC formula seems to be the crux of the win-loss matter and thus becomes a major issue of institutional political economy of the pension systems.

The shift from DB formula to DC formula constituted

another foundation of the 1981 reform, besides capitalization of pension funds and their privatization. In effect, the Chilean retirement system between 1981 and 2008 was comprised of two pillars, the privately-administered second pillar and the first pillar, administered by the state. The first pillar contained the closing PAYG system and the tax-financed military-force and police-force schemes as well as retirement income safety net, and it was practically non-contributory. The second pillar was based on mandatory contributions to individual accounts managed by the private licensed companies (AFPs) under Defined Contribution formula and, as already said, it absorbed more than 80 per cent of pension savings in Chile.

The performance of the system was rather alarming. Suffice it to say, that benefits paid out to a bulk of pensioners were inadequate to national social minimum (Mesa-Lago & Bertranou, 2016, p.7-8). In 2007, that is in the eve of the re-reform, the minimum pension averaged 62 per cent of the minimum wage, and projections suggested that 35 per cent of men and 60 per cent of women would eventually receive it. Moreover, so called rates of replacement, which is an average pension as related to the average salary during the insured active life, were dramatically low. Even after the first wave of re-reform, they remained close or below the internationally-acknowledged minimum of 45 per cent. Chile’s case dramatically exposes costs of the fully-funded DC formula system design in terms of social security which is, however, a topic for another article (see Mesa-Lago & Bertranou, 2016).

Chile’s pension reforms of 2008 and 2015 open space for renewed role of the state. Having in mind that by some the AFP-system is regarded to be a liberal project, a novel in the shape of increasing state aid may seem paradoxical. From another angle, for those, who believe the state to be an arbiter between private business and citizenry, the scope of state assistance may be still highly disappointing. The re-reforming pensions in 2008 transformed modest social assistance in the non-contributory pillar into increased tax-financed coverage of the poorest (see table 1).

As far as another, more recent reform considered, the 2015 report by Presidential Advisory Pension Commission revealed its members divided, basically, between two global proposals. “Proposal A” recommends building on the 2008 reform by expanding the non-contributory tax-financed system and improving the

Table 1: Pension benefits under 2008 reform

Pillar		Non-contributory	Contributory (only fully funded capital accounts)
Administration		Social Security Administration	Pension management companies (AFPs) and insurance companies
Financing		General tax revenues	Workers contributions according to taxable wage
Benefits	Poorest 60%, no contributions required	Basic pension benefit	-
	Poorest 60%, some contributions required	Supplementary or additional pension benefit	"self-financed pension benefit"
	Fully contributory	-	"self-financed pension benefit"

Source: based on Bertranou (2016, p. 14), annex 2

fully-funded component (Barr & Diamond, 2016, p.7). In general, it goes along with the view expressed in the IMF's official statement, having been published just in the eve of approving one of the specific reform proposals in the Chilean Congress in early November 2016. According to this stance, "Chile's pension system is rooted in sound principles " and "[t]he pension reform should preserve the current system", however strengthening its delivery since "shortcomings are becoming evident" (IMF, 2016).

"Proposal B" reduces the size of individual savings component and diverts about half of total contributions that currently go to mandatory pension funds into a new partially-funded element, organized through citizen social security accounts. Thus, it addresses the widespread hostility towards the AFP system by reducing its scale, and is a partial political response to near-universal support for the Solidarity Pension System (Barr & Diamond, 2016, p.7). Just for being politicized, however, it is criticized by international experts. As a matter of fact, option "B" proposes increasing the scope of the solidarity benefits up to 80% of population, which means increased state contributions from general tax revenues and expansion of the first pillar, leaving however the second pillar at the core of the system.

Both reform proposals are by no means revolutionary. This observation goes with Barr's and Diamond's opinion: "Thus the specific proposals show a direction of travel, but more work is needed on many of the details; and there is no agreement about the need, or lack of need, for basic structural change." (Barr & Diamond, 2016, p. 8).

Rather, they can be considered as an attempt to support the mandatory funded-pensions longevity thanks to developing the state's safety net composed

of solidarity benefits and/or social insurance³. How can this claim be defended? The ultimate argument is the pattern of risk sharing between contributors to the funds, fund-management companies and the state. The Chile's pension system was grounded on two major institutional arrangements, namely on mandatory contributions to the AFP-managed funds and on DC formula. All referred attempts to re-reform do not question the AFP component at the core of the system. Such direction of travel does not mean a gradual demise of mandatory pension funds in Chile, no matter which of the two recommended packages is going to win majority in the Government and in the Congress. As far as contribution-benefit formula concerned, the assessment of the pension system in 2015, though obviously fair in enumerating the problems, hardly touched the issue. While attitudes towards contributory pillar managed by private companies are rather clear-cut in Proposal A and Proposal B, any change in benefit-contribution relation remains out of question. To be precise, the shift back from DC- to DB-formula was recommended solely in the package which did not win support of the Commission since it received only one vote ("Proposal C")⁴. According to this proposal all the deposits and savings were to be transferred into the purely PAYG system, which implies abolition of privately

³ This view corresponds with panorama of social change under democracy in Chile as evaluated by an insider and a sociologist, Manuel Antonio Garretón in his book on improved neo-liberalism and moderate progress (Garretón, 2012). In the period this article refers to the fourth Concertación government (2006-2010) led by socialist Michelle Bachelet initiated major reforms to the social security and pension systems. When in 2009 the political right won the presidency in an electoral process for the first time since 1958 with its candidate Sebastián Piñera, the new government largely maintained the generally business-friendly policies of the Concertación, and also continued social policies promoted by Bachelet (BTI, 2016).

⁴ The only vote came from an expert from Poland, Professor Leokadia Oręziak (see Oręziak, 2016).

managed pension funds. It would have been a recurrence of DB formula system (Barr & Diamond, 2016, pp.7-8). Although the Commission themselves, as quoted by Barr and Diamond (2016, p.7), recognize that such radical change “seeks to respond to the views expressed during the public participation process”, apparently this option has no chance to become real.

Thus, bringing the state back into Chilean pension system does not mean any fundamental change in risk sharing on behalf of contributors. The paradigmatic reform of 1981 abolished the employer’s contribution and shifted responsibility to workers who see their taxable income diminished due to mandatory pension savings, deposited in funds in order to be capitalized, and due to commissions and premiums paid to managing companies and insurance companies. They face the portfolio risk revealed by fluctuations of value of capital accumulated in individual accounts, like those up to 64.4 per cent of GDP in 2007, and down to 52.8 per cent of GDP in 2008 due to the international financial crisis. The system gives them no chance to opt out in the face of steady decline of the annual real rate of return (from 20.6 per cent to 8.8. per cent since the inception of the system⁵). Rebuilding of social security solidarity mechanism included in Proposal B could have brought some relief to the low-income workers. Thanks to solidarity benefits they, possibly, would not be subject to excessive risk neither to complicated decision making, regarding portfolio investment options, choice of fund administrators, etc., to such extent as under the current system. Only those with income above certain level would contribute to the fully-funded individual saving accounts plan and take the full risk. In principle, however, with employers as non-participants to the schemes and with managing companies rewarded without any direct link to their services (see Kritzer, 2008; Knowledge@Wharton, 2009), those who suffer losses are still contributor-employees.

This grossly unfair position is acutely realized by Chilean people, and nationwide protests demanding reforms of the country’s pension system are not the only demonstration of this state of mind. According to Social Security Administration data, in 2007 about 40 per cent of affiliates with mandatory accounts were non-contributors and were not paying any administrative fees; in 2004 about half of retirees under the system of individual accounts retired before the normal retirement age (Kritzer, 2008,

p.78, 73). These outcomes should be partly associated with deficiencies of labor market. Namely, the Chileans do not contribute regularly to their retirement accounts possibly because getting work is too precarious for many and too many work outside the formal sector. However, these outcomes can be seen also as fund-affiliates’ massive boycott on the AFP-system either by evading it or by leaving it as soon as possible.

Experts, on contrary, when referring to the risk exposure demonstrate calmness of mind. Their technocratic reasoning can be skimmed as follows. In general, the system by transferring responsibility to an individual provides multiple economic advantages and diminishes political responsibility of the state to use funds that come from active workers to underwrite retirees. According to the IMF, “[o]ver the last 30 years, the fully funded DC formula system has raised national savings, aided the development of capital markets, and reduced fiscal risks.”(IMF, 2016). Individual risk exposure itself got limited due to introduced arrangements. Firstly, affiliates can choose among different income funds, with young persons, in principle, investing in variable income funds with relatively high risk, and with the older ones choosing funds with lower profitability and less exposed to possible losses. Nevertheless, since no sort of investment is risk-free, in the face of losses “[t]he only thing left (...) is to wait until the recessionary economic cycle is over...” (Knowledge@Wharton, 2009, p. 4). Interestingly enough, this argument was delivered by Professor Fernando Bravo who was a member of Presidential Commission in 2008 and a head of Presidential Commission in 2014/2015. Secondly, managing companies are obliged to meet a minimum level of return for each of the mentioned funds. In the event any of them fails to meet the guarantee obligation it must transfer the difference between actual return and the minimum level from its own reserve fund⁶. Moreover, parametric and institutional changes that would constitute challenges to AFPs are recommended, like setting maximum allowable losses for abnormal investment periods, relating charges and commissions to the real performance of administrators, along with monitoring shared between fund management staff, fund contributors and the government (Knowledge@Wharton,

5 These data like the previous ones were retrieved from Mesa-Lago and Bertranou (2016), p.12.

The article is an effect of the project – „Financialization New Trends and Directions of Development” - international conference, conducted by the University of

Information Technology and Management in Rzeszów with Narodowy Bank Polski under the scope of economic education programme

2009). However, one can doubt in the effectiveness of such risk-limiting pension engineering if one considers ignorance and confusion of the fund-affiliates on the one hand and the pension-funds managers' insider knowledge and economic power on the other hand.

The 1981 reform initiated a departure to principles definitely different than counter-poverty and counter-exclusion functions. The reforms under President Bachelet in some respects seem to recur to the solidarity mission of the old-age insurance in the sense that contributors can have losses of assets, like those during the 2008+ financial turbulence, cushioned by a basic pension that sets a social floor. Undoubtedly, the basic and supplementary pension benefits as well as the idea of social-insurance benefit constitute a real progress in terms of social security. Increased tax-financed coverage, however, is addressed to the poorest. From the point of view of the major-risk-bearing middle-income group of affiliates to the funds this change brings only little relief in their oppressive situation.

CONCLUSION

The evidence from Chile provides a series of lessons. This is a “laboratory” case of paradigmatic reforming old-age insurance industry by designing fully-funded pensions and by inviting private companies to do business. Another founding principle is an utterly different formula of calculating pensions which determines risk sharing in the industry. The first founding principle, however, seems to be at the forefront, with recent retreat from mandatory

funding winning considerably much scholar consideration and inducing questions about eventual fall of the arrangement. This article tries to stress the meaning of the second one. Chilean case is an example that change in formula of calculating pensions is easily overlooked in the debate and, even more, this issue happens to be marginalized by the reformers.

Recent pension reforms in Chile reinforce the role of the state and, eventually, diminish the weight of the pensions paid out due to mandatory funding managed by private companies, like bringing social insurance back in would do. The Presidential Commission's proposals drive the pension system toward some form of increased state's assistance and intervention. With respect to this direction, and taking the first founding principle only, it could be assumed that we see the decline of the arrangement. Nevertheless, the current reform is going to become no counter-revolution in respect of the formula of calculating pensions⁷. Thus, it should be regarded rather as mere correction. The Chilean case shows how effective are barriers against putting the relation between contribution and benefit under debate, in spite of the evident popular support for the previous system. In sum, Chilean reforms seem to leave the foundations of the system intact. Bringing the state back in must be seen rather as an attempt to support the longevity of the fully funded Defined Contribution formula system thanks to solidarity benefits and/or social insurance, because the latter subsidize total retirement benefits and improve the distressing rates of replacement.

7 To put it straight, as far as now Chile is not going to follow suit of Peru or Argentina. In Argentina a radical return to the previous Defined Benefit formula materialized, the private component was eliminated and private savings were transferred toward the social security administration (Hujo & Rulli, 2014, p.1).

REFERENCES

- Barr, N., Diamond, P. (2016). Reforming Pensions in Chile. *Polityka Społeczna, No.1*, 4-9. Retrieved from: https://www.ipiss.com.pl/?lang=enecon.lse.ac.uk/staff/nb/Barr_and_Diamond_2016_Chile.pdf.
- Barr, N., Diamond, P. (2010). *Pension Reform. A Short Guide*. New York: Oxford University Press.
- Barr, N., Diamond, P. (2008a). Reforming Pensions. ISSR Draft, November. Retrieved from http://econ.lse.ac.uk/staff/nb/Barr_Diamond_crr.pdf [13.03.2015].
- Barr, N., Diamond, P. (2008b). *Reforming Pensions: Principles and Policy Choices*. New York: Oxford University Press, <http://dx.doi.org/10.1093/acprof:oso/9780195311303.001.0001>.
- Barr, N. (2001). The Truth about Pension Reform. *Finance and Development*, 38(3), 6-9 *Business in Americas* (2016), 3 November. Retrieved from: [http://www.bnamerica.com/en/news/insurance/chilean-congress-raises-solidarity-pensions\[6.02.2017\]\)](http://www.bnamerica.com/en/news/insurance/chilean-congress-raises-solidarity-pensions[6.02.2017])).
- Bertelsmann Stiftung Transformation Index [BTI] (2016). Chile Country Report. Retrieved from: www.bti-project.org/fileadmin/files/BTI/Downloads/Reports/2016/pdf/BTI_2016_Chile.pdf.
- Credit Suisse (2014). Chile: Pension Fund Snapshot as of May 2014. *Economics research*, 19 June 2014. Retrieved from: <http://www.credit-suisse.com/researchandanalytics>.
- Garcia-Huitron, M., van Leuvensteijn, M. (2015). International Pension Reform Diffusion: A Tale about Chile and the Netherlands Trying to Learn from Each Other. *Het Verzekerings-Archief Afl.4*, 196-200. Retrieved from: <https://www.apg.nl/en/pdfs/chilean-example-in-dutch-pension-debate.pdf>.
- Garreton, M. (2012). *Neoliberalismo corregido y progressimo limitado: los gobiernos concertacion en Chile 1990-2010*. Santiago: Editorial Arcis.
- Hujo, K., Rulli, M. (2014). The Political Economy of Pension Re-Reform in Chile and Argentina. Toward More Inclusive Protection, Geneva: United Nations Research Institute for Social Development Research Paper 2014-1, April.
- Hyde, M. (2014). Classical Liberalism and Conservatism: How is Chile's "Private " Pension System Best Conceptualised?, *Reader in Work & Pensions*, School of Government, Plymouth University, Plymouth, UK. Retrieved from: <https://c4ss.org/wp-content/uploads/2014/10/pensions.pdf>.
- International Monetary Fund [IMF] (2016). Chile: Staff Concluding Statement of the 2016 Article IV Mission. Retrieved from: www.imf.org/en/News/Articles/2016/11/02/MS110216-Chile-Staff-Concluding-Statement-of-the-2016-Article-IV-Mission.
- Knowledge@Wharton (2009). The Fall of Pension Funds in Chile: A Lesson from the Downturn, February 25. Retrieved from: <http://knowledge.wharton.upenn.edu/article/the-fall-of-pension-funds-in-chile-a-lesson-from-the-downturn/>.
- Kritzer, B.E. (2008). Chile's Next Generation Pension Reform. *Social Security Bulletin*, Vol.68, No.2, 69-84.
- Mesa-Lago, C., Bertranou, F. (2016). Pension Reforms in Chile and Social Security Principles, 1981-2015. *International Social Security Review Vol.69, Issue 1*, January/March: 25-45, DOI:10.1111/issr.12093, <http://onlinelibrary.wiley.com/doi/10.1111/issr.12093/full>.
- Sarfati, H., Ghellab, Y. (2012). The Political Economy of Pension Reforms in Times of Global Crisis: State Unilateralism or Social Dialogue? Working Paper No. 37, Geneva: ILO, February.
- Singh, A. (1996). Pension Reform, the Stock Market, Capital Formation and Economic Growth: A Critical Commentary on the World Bank's Proposals, CEPA Working Paper Series I. Center for Economic Policy Analysis. New York: CEPA.
- Vasquez, I. (2016). The Attack on Chile's Private Pension System, August 16, Cato Institute, retrieved from www.cato.org
- Wehlau, D. (2007). Lobbying for Pension Reform. Institutional Investors as Driving Forces of Pension Privatisation?, Paper prepared for the 14th workshop on alternative economic policy in Europe. September 26th – 28th, Brussels: Euromemorandum.
- World Bank (1994). *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth*. Oxford: Oxford University Press.