

Economics and Business Review

Volume 6 (20) Number 1 2020

CONTENTS

ARTICLES

Integration of immigrants and the role of policy in the OECD countries

Katarzyna Woźniak

Determinants of the non-performing loan ratio in the European Union banking sectors with a high level of impaired loans

Radosław Ciukaj, Krzysztof Kil

Does the inclusion of exposure to volatility into diversified portfolio improve the investment results? Portfolio construction from the perspective of a Polish investor

Michał Latoszek, Robert Ślepaczuk

Shift to private pension system: The case of Poland and Israel

Moshe Manor, Joanna Ratajczak

Boardroom leadership: The board of directors as a source of strategic leadership

Julio David Castellanos, Babu George

Editorial Board

Horst Brezinski
Maciej Cieślukowski
Gary L. Evans
Niels Hermes
Witold Jurek
Tadeusz Kowalski (Editor-in-Chief)
Jacek Mizerka
Henryk Mruk
Ida Musiałkowska
Jerzy Schroeder

International Editorial Advisory Board

Edward I. Altman – NYU Stern School of Business
Ivo Bischoff – University of Kassel
Udo Broll – School of International Studies (ZIS), Technische Universität, Dresden
Conrad Ciccotello – University of Denver, Denver
Wojciech Florkowski – University of Georgia, Griffin
Binam Ghimire – Northumbria University, Newcastle upon Tyne
Christopher J. Green – Loughborough University
Mark J. Holmes – University of Waikato, Hamilton
Bruce E. Kaufman – Georgia State University, Atlanta
Robert Lensink – University of Groningen
Steve Letza – The European Centre for Corporate Governance
Victor Murinde – SOAS University of London
Hugh Scullion – National University of Ireland, Galway
Yochanan Shachmurove – The City College, City University of New York
Richard Sweeney – The McDonough School of Business, Georgetown University, Washington D.C.
Thomas Taylor – School of Business and Accountancy, Wake Forest University, Winston-Salem
Clas Wahlborg – Argyros School of Business and Economics, Chapman University, Orange
Habte G. Woldu – School of Management, The University of Texas at Dallas

Thematic Editors

Economics: *Horst Brezinski, Maciej Cieślukowski, Ida Musiałkowska, Witold Jurek, Tadeusz Kowalski* • **Econometrics:** *Witold Jurek* • **Finance:** *Maciej Cieślukowski, Gary Evans, Witold Jurek, Jacek Mizerka* • **Management:** *Gary Evans, Jacek Mizerka, Henryk Mruk, Jerzy Schroeder* • **Statistics:** *Marcin Anholcer, Maciej Beręsewicz, Elżbieta Gołata*

Language Editor: *Owen Easteal* • **IT Editor:** *Marcin Reguła*

© Copyright by Poznań University of Economics and Business, Poznań 2020

Paper based publication

ISSN 2392-1641
e-ISSN 2450-0097

POZNAŃ UNIVERSITY OF ECONOMICS AND BUSINESS PRESS
ul. Powstańców Wielkopolskich 16, 61-895 Poznań, Poland
phone +48 61 854 31 54, +48 61 854 31 55
www.wydawnictwo.ue.poznan.pl, e-mail: wydawnictwo@ue.poznan.pl
postal address: al. Niepodległości 10, 61-875 Poznań, Poland

Printed and bound in Poland by:
Poznań University of Economics and Business Print Shop

Circulation: 215 copies



Economics and Business Review

Volume 6 (20) Number 1 2020

CONTENTS

Integration of immigrants and the role of policy in the OECD countries <i>Katarzyna Woźniak</i>	3
Determinants of the non-performing loan ratio in the European Union banking sectors with a high level of impaired loans <i>Radosław Ciukaj, Krzysztof Kil</i>	22
Does the inclusion of exposure to volatility into diversified portfolio improve the investment results? Portfolio construction from the perspective of a Polish investor <i>Michał Latoszek, Robert Ślepaczuk</i>	46
Shift to private pension system: The case of Poland and Israel <i>Moshe Manor, Joanna Ratajczak</i>	82
Boardroom leadership: The board of directors as a source of strategic leadership <i>Julio David Castellanos, Babu George</i>	103

Shift to private pension system: The case of Poland and Israel¹

Moshe Manor², Joanna Ratajczak³

Abstract: Following Chilean experiences as well as the World Bank suggestions post-communist Poland and post-collectivist Israel—underwent deep reforms which led to the privatization of old age security. The aim of the article is to compare the Polish and Israeli paths of pension privatization in the last thirty years. The main conclusions are: (1) the economic, demographic and political environments at the moment of the design and implementation of the pension reform were quite similar in both countries; however (2) the scope and scale of the privatization was different: in Poland there was only partial shift towards private pension system while in Israel full privatization of the system was implemented; (3) the decisive factors were: the inertia of the already existing pension systems and the power of foreign influencers; (4) the retreat from privatization in Poland and the increase in Israel took place due to the different mix of disadvantages of the new pension arrangements, short-term political aims and international pressure.

Keywords: pension system, pension privatization, private pension system, Poland, Israel.

JEL codes: K31, K38, P36, P52, N3.

Introduction

Pension systems have undergone many reforms in the last few decades. Some of them were aimed at a shift towards private pension systems. These may involve: (1) management (storing information, collecting pension contributions, asset management, structure of assets, especially the size of the share of non-tradable bonds and delivering annuities of insurance products) or (2) pen-

¹ Article received 10 October 2019, accepted 16 March 2020.

² Financial and economic consultant and lecturer of business administration, 3 Haorev St. Rosh Haayin, 4855011 Israel, ORCID: <https://orcid.org/0000-0003-4111-9115>.

³ Department for Labor and Social Policy, Poznań University of Economics and Business, al. Niepodległości 10, 61-875 Poznań, Poland, joanna.ratajczak@ue.poznan.pl, ORCID: <https://orcid.org/0000-0002-2709-4698>.

sion financing (the shift from a public pension contribution towards a private one, which results in the transformation of legal regime: from public law to civil law) (see also Palmer & Góra, 2004, pp. 16–17). It has to be stressed that the shift towards private pension systems may be connected with only one of the changes mentioned above or a combination of them: it means that what is called a shift towards a private pension system can be of different scope and scale in different countries. Moreover the shift towards private pension systems is quite often labelled as a privatization of the pension system and treated accordingly as a part of paradigmatic or systemic pension reforms (e.g. Müller, 1999, 2000; Orenstein, 2013). However, it is quite ambiguous as to what pension privatization means, as well as to what is called partial or full pension privatization.⁴

The first paradigmatic shift towards a private pension system was performed in Chile in 1981 and had its followers in Latin America (Barr & Diamond, 2016). The Chilean example inspired the World Bank to propose that such a shift should become a key element of the pension reform for post-socialist countries (World Bank, 1994). The shift towards private pension schemes was assumed to meet demographic challenges and the secondary goals of the pension system, especially economic growth accomplished thanks to an acceleration of domestic savings. This approach was criticized for both theoretical and empirical reasons (Orszag & Stiglitz, 1999; Barr, 2002) and the World Bank modified its proposition (Ramesh, 2006; Orenstein, 2013, pp. 269–270).

The purpose of this paper is to compare two countries: Poland and Israel with regard to their shifts towards private pension schemes and further development of these paths. To achieve this goal political economy and comparative analysis are used. Both countries abandoned a controlled economy and introduced the market economy only in the last three decades. They were facing similar economic challenges even though their political background (Poland—communist dictatorship and Israel—democracy with a socialist centralized economy) differed substantially.⁵ Both countries decided to implement a shift

⁴ In the literature concerning economics of the welfare state and the public sector there are basically three types of privatization distinguished (Barr, 2012, pp. 71–72): (1) privatization of production, (2) privatization of financing and (3) privatization of production and financing. In the first case only the „production” of an obligatory pension, fully or partly, is shifted from public towards private management companies as sub-contractors which, on behalf of the public authority, are responsible for investing the funds and mostly for paying out annuities. Privatization of financing means that the obligatory pension contribution is shifted from public financing towards private financing, which results in moving from public individual pension entitlements towards private ones. When both these shifts take place simultaneously pension contribution becomes private and is managed by private institutions. This classification can be extended by the third dimension, i.e. regulation (more Barr, 2012, pp. 73–75).

⁵ See section 4.

towards a private pension system: Israel did it step by step over two decades, Poland conducted a systemic pension reform in 1999. In both countries this shift was called “privatization of the pension system”, both in English publications (Müller, 1999; Fultz, 2012; Hagemeyer, Makarski, & Tyrowicz, 2015) and in Polish (Żukowski, 2013) or Hebrew ones (Spivak, 2013) which can lead to many misunderstandings (Góra, 2013; p. 15–16). The Polish and Israeli pension systems have undergone further pension reforms and have been analyzed in the literature (Fultz & Ruck, 2008; Tompson & Price, 2009; OECD, 2015; Yosef & Spivak, 2008). However there has been no research so far which compares both paths towards conversion into private pension systems. This article addresses this gap and is split into three main sections: the case of Chile as a first example of fully shifting towards a private pension system and in the second and third sections of this paper the Polish and Israeli paths and experiences within this area, followed by conclusions.

1. The Chilean case

Prior to the reforms Chile had a financially unsustainable PAYG pension system with a high deficit which included numerous special schemes intended for different groups (Asher & Vasudevan, 2008, p. 6). More than a decade before the reforms the system was considered to be unfair, abused by interest groups and not focused on those who needed it most (Iglesias-Palau, 2009, p. 8). In 1981 Chile adopted a free market economic model and implemented pension reform (De Mesa & Mesa-Lago, 2006, p. 154).

The reform shut down the old PAYG programs for new joiners and introduced new, mandatory, fully funded pension funds of defined contribution (DC) type⁶, managed by private management companies (AFP's). The contribution rate was set at 10%, for all employees (Asher & Vasudevan, 2008, pp. 7–8). In 1981 the total transition cost (implicit deficit) was estimated at 136% of GDP. Only three years later, in 1984, its annual amount was 5% of GDP and later declined to 2.5% of GDP annually (Chilean Pension Commission, 2015, p. 54).

The reform has been treated as successful as pension funds (1) contributed greatly to the development of the Chilean financial market (Hermes, 1995, p. 117)⁷ and became the main actors in financing infrastructure projects (Asher & Vasudevan, 2008, p. 13); (2) generated relatively high return rates. However, some problems also arose (Orenstein, 2013, p. 270): (1) weak competition;

⁶ In defined contribution (DC) type annuities are based on the affiliates' accumulation, while in the defined benefit (DB) type annuities are based mostly on valorized earnings in the reference period and the contributory period.

⁷ In 2018 funds' assets amounted to 70% of GDP (OECD, 2019, p. 211).

(2) high commission charges; (3) insufficient coverage and (4) low replacement rates⁸, especially for women.

To solve the first two problems some parametric reforms have been introduced since 1981: management fees were modified and reduced by about 70% (Asher & Vasudevan, 2008, pp. 17–18) and every two years bidding on fees was introduced: all new joiners were assigned to the pension fund which offered the lowest management fee. Furthermore in 2002, six years before the financial crisis, Chile was first to develop and fully operate an age-based default pension model which offered five funds with different risk profiles according to the age of the fund's member (Hormazabal, 2012, pp. 4–5). The results in 2008–2009 proved that the system succeeded in protecting the older members' accumulation and at the same time allowed the young affiliates to gain more returns during the first 20 years of contributions (Hormazabal, 2012, pp. 12–14).

Nevertheless the Chilean system still presented some weaknesses: it generated low coverage and replacement rates.⁹ The main reasons for the above were the following: (a) contribution for self-employed was not mandatory; (b) low-paid employees, especially females, suffered from instability of their working careers. To remedy the issue certain reforms were implemented as of 1996 (Kritzer, 2008, p. 77): (a) contribution became mandatory for the self-employed; (b) a new PAYG solidarity pillar fund, financed by tax in order to raise minimum pensions was created as well as a government guarantee for a minimum benefit from the funded pillar; (c) the contribution rate was increased to 14% (Santoro, 2017, p. 1); (d) pension credits for raising children were introduced.

These reforms led to an increase in coverage rate (contributors to wage earners) from 50%–60% prior to reforms to 86.7% in 2018 (OECD, 2019, p. 207), which is the highest value in Latin America. The Chilean pension system has also been successful in terms of satisfactory returns of all AFPs¹⁰, limited fiscal expense and later on also reducing management fees as well as the introduction of the age-based default model. On the other hand the system is not able to provide adequate annuities, also for permanent contributors: net replacement rate amounts to 37.3% for an average earner compared to OECD average of 58.6% (OECD, 2019, p.155). Adjustments have been introduced, but they are still insufficient (Barr & Diamond, 2016, pp. 5–8), so poverty relief remains one of the profound challenges.

⁸ Defined as net income after retirement divided by net income before retirement.

⁹ In 2008 net replacement rates amounted to 37.3% for average-earners, the same as prior to the reforms, and lower than OECD average of 58.6% (OECD, 2019, p. 155).

¹⁰ However some indicate that high return rates, especially in the first decade after the reform were due to the high return rates of government bonds and bank deposits guaranteed by the stat, in which the funds' assets were solely invested (Barr & Diamond, 2010, p. 170).

2. The Polish case

2.1. Reasons and concept

After more than fifty years of being a satellite state in the Soviet sphere of influence, in 1989 Poland began the transformation to democracy and a free market. The transition process was characterized by institutional changes and societal, political and economic instability. One part of the Polish society protected the status quo, the other opted for individualization and free choice to achieve increase in individual welfare. The family underwent profound changes such as growing instability, lower marriage and fertility rates (Kotowska, Jóźwiak, Matysiak, & Baranowska, 2008, pp. 798–821). However, the aging process was to accelerate only a decade later (European Commission, 2017, pp. 12–20). Privatization and restructuring of the economy resulted in an increase in unemployment (up to 15%), a decrease in GDP in 1990–1991 accompanied by very high inflation rate (250% in 1989), an increase in government budgetary deficit and relatively high external debt (Kowalski, 2009, 2013, p. 129, 182). The political scene was very unstable: the government often changed and premature elections took place (Kowalski, 2013, pp. 160–163).

After 1989 two parametric pension reforms initiated the shift (1991, 1994) (Żukowski, 1994). The original Polish pension system delivered wide coverage (more than 90% of workers), a relatively high replacement rate (70%), steady valorization of pensions, redistribution towards lower paid workers/pensioners and numerous pension privileges. From the mid-80s the social pension fund (FUS) suffered from a significant deficit (Bielawska, 2014, p. 116), which was predicted to increase in the future unless pension reforms were undertaken (Chłon, Góra, & Rutkowski, 1999, pp. 8–10).

Three reform options were considered (Hausner, 1998): (1) the social approach (1990–1996), aimed at the protection of pensioners with no cost limit; (2) a sustainable approach (1992–1996), aimed at the reduction of pension costs (especially state subsidies) through parametric changes; (3) a structural approach (1991–1999), supporting economic growth and sustainability in the long term. Because of conflict within the government the Government Plenipotentiary for Social Security Reform was constituted (Ratajczak-Tuchołka, 2010). The office followed the third option of the pension reform and was deeply inspired by the World Bank's concept¹¹ (Góra, 2003, p. 19). It was called "Security through diversity" and proposed partial substitution of PAYG social pension insurance by a funded component (open pension fund, OFE) and change in the pension

¹¹ The World Bank affected the Polish concept both by spreading knowledge and financial support (organizing conferences and seminars; sending its workers e.g. Michał Rutkowski to work on the Polish pension reform) (Tompson & Price, 2009, pp. 141–144). The new pension expert elite dominated the scene: even other experts' pension reform proposals were totally neglected.

formula from a DB to a DC one. Political consensus existed during the conceptualization and passing of the pension reform. Trade-offs were made with the opponents of the reforms (Ratajczak-Tuchołka, 2013). However some issues remained unsolved, e.g. the removal of early pensions or delivering annuities from the funded pillar which caused a lot of political and economic strife in the coming years (Tompson & Price, 2009, p. 151).

The systemic pension reform was introduced in 1999. Only a partial shift towards a private pension system took place: instead of a public supplier (ZUS), private suppliers (OFE) managed by private companies (PTE) were created. The shift towards private financing did not occur: the obligatory social pension contribution rate did not change and was only split between two mandatory pillars; 2/3 of the contribution remained PAYG and 1/3 became funded. The partial shift towards private pensions (instead of one fully privatized in providing and financing) was justified by two reasons: a complete shift towards a funded system did not diversify risks properly and caused transition costs which would be too high (Chłton et al., 1999, p. 5). The social campaign was confusing and resulted in persuading people that the privatization mix would address all demographic, macroeconomic and political risks (Chłton et al., 1999, p. 6).¹² It also made the public believe that obligatory funded pension entitlements were private savings. Introduction of OFE was perceived as a “forward escape strategy” from the current unsustainability of the public pension system (Golinowska, 2014, p. 97) but was not a part of the transition (Góra, 2013, pp. 8–9). Such a systemic reform was possible because the shift towards a private pension system addressed society’s aspirations to build up individual savings and their liberal idea of justice on the one hand and lack of knowledge and experience in the financial market on the other. Poland as a beginner in the free-market economy wanted to show readiness for paradigmatic reforms to foreign creditors and investors.

2.2. Problems and further developments

There were three main problems which accrued: lack of technical preparation for the reform (Góra, 2003, pp. 22–23; Chłton-Domińczak, Franco, & Palmer, 2012, p. 42); the very high operating costs of pension funds and too little competition between them (Fultz, 2012, pp. 11–12); additionally transition costs were underestimated.

It must be stressed that Poland entered the pension reform with a high public budget deficit (Bielawska, Chłton-Domińczak, & Stańko, 2017, p. 15) and problems with transition costs additionally deteriorated public finances.¹³ The

¹² Which was identified in the literature as a pension myth (Barr, 2002).

¹³ The transition costs amounted to 0.3 % of GDP in 2000 and increased to 1.6% of GDP in 2010 (in the period 2000–2010 altogether 14.5% of GDP). The general government deficit stood at 3% of GDP in 2000 and 7.6% of GDP in 2010 due to the great recession.

reasons were: (a) the income from government property privatization, which was aimed to cover part of transition costs, appeared much lower than expected and was targeted differently (Kłos & Marchewka-Bartkowiak, 2009, p. 9; Marchewka-Bartkowiak, 2011, p. 4); (b) the lower contribution in the PAYG pillar since a large share of contributors divided the pension contribution between PAYG and funded pillars and uniformed workers were moved into a separate pension system again; (c) higher costs of running PAYG pensions (postponing by six years the elimination of early pensions without their reduction, termless prolonging of preferential regulations for miners).

The first “wave” of pension fund reforms was aimed at protection of the insured: reduction of costs, especially for the biggest pension funds and the abandonment of very aggressive customer acquisition as well as changes in the calculation of the guaranteed return benchmark and changes in investment policy towards a more aggressive one (Table 1).

The second “wave” of pension fund reforms addressed the problem of transition costs and its consequences for public finance. Poland had been making preparations for EU-accession and had aimed at fulfilling the convergence criteria related to the debt deficit (no more than 3% of GDP) and government debt (no more than 60% of GDP), so the pressure was even higher, especially as Poland had been suffering from the “chronic” excessive deficit of the general government sector (Bielawska, 2014, p. 117). The changes (Table 1) were aimed at both diminishing the total pension contribution amount to the pension funds (decrease in the pension contribution rate, introduction of voluntary participation) and a reduction in pension funds’ assets (e.g. redeeming of assets invested in state-bonds¹⁴, obligatory transfer of individual pension capital to PAYG before retirement) as well as withdrawal of the private pension funds from the decumulation phase of pension capital. It shows quite a clear direction: the state was withdrawing, step by step, from the private pension system.

There were some additional factors which facilitated the process. Firstly, after the pension reform lost its owner as the Government Plenipotentiary’s post was annulled, supervisory competencies were, following several transitions, ultimately transferred to the Polish Financial Supervision Authority. Secondly, the EU became a more and more important actor on the “pension scene” in Poland: directly due to the Maastricht criteria and changes which led to the inclusion of pension subsidies in the public debt (Golinowska, 2014, p. 97; Bielawska, 2014, p. 120); indirectly by requiring the applicant’s own financial contribution to access the EU funds which competed against the rising government subsidies for the pension system. Thirdly, the global financial crisis 2007–2009 contributed to restriction or temporary suspension of the contri-

¹⁴ Remitting of state-bonds was justified by “rolling up” the state debt: the government issued state bonds to cover transition costs from the old to the new pension system and OFE bought them with pension contributions, so the interests paid were unnecessary costs.

Table 1. Reforms aimed at open pension funds (OFE) since the paradigmatic pension reform

Group of pension reforms	Year	Changes
Privatization of the pension system	1999	– introduction of obligatory open pension funds, contribution rate of 7.3%
Changes in membership	2002	– moving of uniformed workers to the separate pension system
	2012	– ban on acquisition of new members
	2014	– participation in pension funds becomes voluntary
Reduction of pension funds' assets	2011	– reduction of pension contribution to pension funds from 7.3% to 2.3% (and an increase to 3.1% in 2017)
	2014	– voluntary contribution to pension funds at the level of 2.92% – redeeming of 51.5% of assets invested in state bonds (about PLN 153 m, i.e. about 8% of GDP)
Phasing out pension funds from the decumulation phase	2009	– the pension provision from the pension fund has to be transferred monthly to the PAYG pillar and paid out together with the pension from PAYG pillar
	2014	– introduction of “security slide”—ten years before retirement pension capital in OFE can be transferred monthly to PAYG pillar, so that at the minimum retirement age all pension capital is registered in the PAYG pillar only
Reduction of pension funds' costs and increase in competition between them	2004	– contribution fee set to 7% maximum – changes in the amount of transfer fee (for changing the OFE)—flat rate provision – changes in the management fee—introduction of regression scale
	2010	– maximum contribution fee lowered to 3.5% – changes in management fee—introduction of maximum nominal fee level and success fee
	2011	– removal of transfer fee (for changing the OFE)
	2014	– maximum contribution fee lowered to 1.75% – reduction of maximum management fee to 0.6% of net assets annually
Changes in investment strategies	2004	– changes in calculation of the internal benchmark for pension funds
	2011	– increase in investment limits for shares listed on the Warsaw Stock Exchange by 2.5% annually from the previous 40%
	2013	– increase in limits on foreign investments
	2014	– ban on investing in state bonds – pension funds are obliged to invest 90% of assets in equities – introduction of an external benchmark for pension funds

Source: Authors' compilation.

bution rate (e.g. Latvia, Lithuania, Estonia) or even the termination of obligatory pension funds (e.g. Hungary) in the countries which had shifted towards private pension schemes. Poland did not suffer much from the financial crisis but it boosted the discussion about the funded pillar (Golinowska & Żukowski, 2011; Bielawska et al., 2017, p. 21). Fourthly, in 2008 the Constitutional Court adjudicated that the obligatory pension contribution remain public (and not private) (183/10/A/2008), which enabled a reduction of pension contributions towards OFE in favor of the PAYG pillar and a redemption of pension funds' assets put in state bonds in 2013 (163/10/A/2015). Fifthly, the process of equalizing and raising the minimum retirement age, which began in 2013, was cancelled in 2017 following a pre-electoral promise of the incumbent Polish president. Sixthly, due to the forecast of behavioral economics and existing asymmetry of information only 15% of OFE members joined the pension funds for the second time when they were given the choice.

2.3. Challenges

The first reduction of obligatory pension contribution rate from 7% to 2.3% in 2011 reduced the government debt by 0.6 % of GDP in the reference year; redeeming 51.5% of OFE assets located in state bonds diminished public debt by 5 pp of GDP in 2014 while further changes in the contribution rate and making pension funds voluntary accounted for the reduction of transition costs by 0.3–0.4% of GDP (Bielawska et al., 2017, p. 50). To improve the balance of the current social insurance and public finance a complete termination of OFE was announced: in 2020 the pension capital has to be either transferred from OFE to an individual voluntary Pension Retirement Account (IKE) and charged with 15% fee for the state (default option) or to the PAYG pillar with no fee (on application).

It has to be stressed that the public narrative about pension funds was largely one-sided and selective all the time. Initially pension funds were shown as the most important and desired part of the systemic pension reform. Ten years later OFEs were presented as the costliest part of the pension system, both on the micro¹⁵ and macro level (Fultz, 2012, pp. 15–16). All of it contributed to the erosion of trust in the pension funds and the financial market. One of the outcomes is that the actual share of employees was much lower than predicted in the new Employee Pension Plans (39% < 75%; Pałasz, 2019).¹⁶

Shifting towards a private pension system was aimed at the so called secondary goals of the pension system. Some of them were achieved such as the de-

¹⁵ However until 2012, the real return on OFE was the highest among all CEE countries which privatized their pension system (Bielawska et al., 2017, pp. 40–42).

¹⁶ This proposal was accompanied by the introduction of employee pension plans in autumn 2018. These are quasi-obligatory plans which started in July 2019 and are aimed at building up national savings for development (Ministry of Development, 2016).

velopment of the financial market, but some results did not meet the expectations. This applies especially to acceleration of the economic growth which, as Barr and Diamond indicate, depends strongly on country-specific factors (Barr & Diamond, 2010, p. 72). Shifting the management of assets towards private institutions only increases the political risk in the funded part of the pension system as the Polish case shows: long-term stability of the pension system was given up in favour of short-term fiscal goals (Bielawska, 2014, p. 120).

It must be said that the shift towards a private pension system was only part of the systemic pension reform 1999. From the micro point of view the crucial part was the implementation of the DC pension formula both in the payg (NDC) and funded (FDC) parts of the obligatory pension systems. Introduction of very equivalent pension formula resulted in much lower replacement rates and an increase in poverty rates for all insured people, especially for women (Ratajczak, 2019, p. 91). The poverty issue has not been properly addressed by the politicians so far.

3. The Israeli case

3.1. Reasons and concept

In the last 30 years Israel has faced many reforms of the pension system as part of broader economic reforms. “East European Jewish immigrants to Palestine viewed the Zionist and the socialist revolution as complementary and inseparable goals and sought to create an economy in which market forces were controlled for the benefit of society as a whole” (Kay, 2012, p. 101). Consequently until 1985 the Israeli economy was centralized and controlled by the government and by an umbrella organization of all labor unions in Israel “Histadrut”, both ruled by the Labor Party. The Histadrut represented 80% of the workforce and also owned 25% of the economy’s capital in all fields, including pension funds (Ben Porat, 2008, p. 94). This structure was successful until 1973 when the war and the oil crisis broke out and the government gradually lost control over the economy: budget deficit in 1980–1984 was 13.2% of the GDP and annual inflation stood at around 400% (Ben Basat, 2002, p. 6).

In 1985 a stabilization program was introduced by a national unity government of the big parties Likud and Labor in cooperation with employers, Histadrut and the Bank of Israel (BOI). The program included a price freeze and a sharp reduction in the government deficit. In the following years inflation plummeted and the deficit shrank to 0.6%–3.6% (Ben Basat, 2002, p. 6). The success of the stabilization programme allowed the Ministry of Finance (MOF) to start a series of structural changes, including pension reforms which were designed according to the American agenda and aimed at opening the economy to international investors; reduction of the government involvement

in the economy; development of high-tech industry and achieving a sustainable growth.

The reasons for the reforms were not strictly economic but they also were based on neoliberal economic beliefs, political motives and international relations. The major powerful forces that drove the reforms were MOF seniors, BOI and the academic community, mostly educated at American universities. Assistance came from politicians of both parties and from the USA, Israel's main ally against the Arab countries supported by the USSR.

The motives for reforms of MOF and BOI have already been explained. For the Likud party, which has been in power most of the time since 1977, it was an opportunity to weaken or ruin the organizations that were affiliated with the Labor Party, mainly the Histadrut. At the same time the young generation of the Labor Party perceived the old economic institution of the Histadrut as a burden because of the conflict of interest between its role as a union and an entrepreneur and advocated that Histadrut should remain a union federation only (Ratson, 2010, p. 471). The USA feared Israel's possible economic collapse and requested that the Israelis execute reforms designed according to Milton Friedman's neoliberal principles in order to gain American economic support (Kay, 2012, p. 111). This American approach continued also in 2003 when Israel increased its debt on international financial markets by USD 10 bn. backed by American guarantee.

Prior to the reforms the pension system consisted of the first pillar of PAYG flat rate old age pension and the second pillar which included: (a) PAYG, DB, a tax-financed lifetime annuity plan for government employees only; (b) DB pension funds with contributions from employees and employers and a lifetime annuity; (c) provident funds and executive life insurance with contributions from employees and employers with the possibility of a lump-sum withdrawal. All funded instruments were invested solely in earmarked bonds.¹⁷ However, pension savings were not obligatory; only public sector workers and employees under sectoral agreements were enrolled automatically. Around 43% of Israeli population did not have any pension arrangement regarding the funded pillar until 2008 when a mandatory private pension was introduced (Manor, 2015, pp. 90–94).

3.2. Problems and further developments

The pension system faced several problems: (a) an actuarial deficit of pension funds caused mainly by the population's aging which had been ignored for many years¹⁸; (b) low coverage and severe poverty among the population that did not have any private pension arrangements at all; (c) the future high budget burden of PAYG and earmarked bonds.

¹⁷ Special non-tradable government bonds issued to pension providers.

¹⁸ In the late 80s actuarial balance was applied for the first time.

Macroeconomic results of economic reforms have been impressive in the past 30 years. GDP per capita increased from USD 12.5K in 1990 to USD 41.7K in 2018 (Country Economy, 2019). The debt to GDP ratio declined from 1.38 in 1990 to 0.61 in 2018 (Bank of Israel, 2019a). Although Israel has remained in foreign trade deficit most of the time in the past 15 years it has also obtained a surplus of around USD 9.6 billion in 2018, i.e. approximately 3% of GDP (Bank of Israel, 2019a).

The pension reforms were intended to stabilize the system and prepare it for the future difficulties such as ageing and poverty relief; they were also meant to develop the capital market and reduce the burden on the state budget. The main steps included introduction of the mandatory private pension pillar to raise coverage rates and deal with poverty; eliminate a lump-sum withdrawal before retirement and allow it on retirement only if a minimum annuity was achieved. The reforms also eliminated PAYG for new joiners and turned the system from actuarially imbalanced, DB, invested in non-tradable earmarked bonds, to actuarially balanced, DC, privately managed and invested in capital markets. To protect the older people's accumulation from a market crash, which is one of the main risks for a system invested in capital markets, Israel adopted the Chilean age-based default model.

The mandatory pension caused groups which did not use to have pension arrangements in the second pillar to join the new system and enabled coverage rates to jump from 35% in 2009 (OECD, 2011, p. 9) to 78.2% in 2018 (OECD, 2019, p. 207) allowing almost 43% of population to have a future annuity and reduce future poverty. Major institutions in the capital markets became pension providers, with total assets of NIS 1.2 trillion (which almost equals the annual GDP of Israel) and growth of accumulation continues with annual contributions of 90 billion NIS and high returns (Bank of Israel, 2019b). Most of the pension accumulation is placed on the local capital market while government involvement in pension finance has dropped from 100% to around 45%.

Management fees in terms of assets dropped from 1.1% in 2005 to 0.7% in 2014 (Giorno & Adda, 2016, p. 33) and to 0.45%–0.5% in 2018 (Ministry of Finance, 2019a, p. 7). MOF is continuing its efforts to reduce the management fees by presenting default low-fee funds. All new affiliates who have not chosen a fund are automatically assigned there, which exerts pressure on all funds to lower their fees.

The average real return of the private funds between 2005 and 2014 amounted to 4.5% compared to OECD average of 2.5% (Giorno & Adda, 2016, p. 32). According to the research done for this paper based on MOF data, the real average return in 2001–2019 was 6.04%. According to OECD data (OECD 2011, 2019) net replacement rates have dropped for all types of earners. This result contradicts the simulation result of 0.83–0.87 (Manor, 2017, pp. 60–61). The main reason for the above difference is OECD's assumption of real returns of

3% (OECD, 2019, p. 144), while in fact the returns were higher. On the other hand, poverty rates of 19% among pensioners in 2016 are higher than OECD average of 13.5% (OECD, 2019, p. 187), because mandatory private pensions only started in 2008 for employees and from 2017 for the self-employed and lump-sum withdrawals were banned only from 2008.

The total burden of pension on the state budget (including PAYG payments, support for the old-type pension funds, subsidies for the new pension funds and tax benefits) was only 7% of GDP in 2014 compared to OECD average of 8.5% (Giorno & Adda, 2016, p. 17). Transition costs that includes the PAYG pension left to be paid and the support for the old-type pension funds amounted to 2.25% of the GDP in 2018 (Ministry of Finance, 2019b, p. 113, 338). This burden is expected to be lower in the future and is predicted to make up 1.2%–1.5% of GDP (Ministry of Finance, 2019b, p. 341).

The 2008 crisis was a significant phenomenon for most of the western economies and caused a remarkable slow-down of growth; high ratio of government debt to GDP due to the steps taken in order to rescue the financial system and to prevent deeply negative returns of pension funds. The impact of the crisis on Israel's economy was much more moderate. No financial institution had to be rescued and the losses of Israeli banks were equal to their annual profits at worst. The GDP grew in 2008 by 3.3%, in 2009 the growth slowed to 1.3% but recovered to 4%–5% in 2010–2011.

Government debt to GDP ratio declined from 79% in 2007 to 71% in 2008. The real returns of pension funds were –15% in 2008, less than in other OECD countries, and have recovered continually since 2009. This can explain why Israel had no need to nationalize pension funds in order to reduce the debt to GDP ratio, while in part of CEE and Latin America it was one of the major motives to not shift to a private pension system and return to PAYG system.

The comparison of the reforms in Israel and those in Chile (Section 1) shows a large similarity: shutting down the PAYG system to new joiners; a shift to funds which are privately managed, DC type, invested in capital markets system; a mandatory pension in the second pillar; development of the local capital markets using the pension accumulation; reduction of government involvement in pensions and of the burden on the state budget; similar transition cost to GDP and an ability to bear the cost; high management fees at the beginning and successful efforts to reduce them later on; and finally the adoption of the age based default investment model. The main differences encompass low contribution rates in Chile that led to low net replacement rates, while in Israel the contribution rates and net replacement rates are high; Chile also supports low earners by providing a minimum pension and strengthening the first PAYG pillar as a complementary step towards poverty relief. So far Israel has not taken any steps to strengthen the public PAYG first pillar which is much lower than in the OECD and probably will have to do so in the future.

3.3. Challenges

The reforms achieved most of their goals. In the long run the Israeli pension system after the reforms has been stable and capable of facing the issue of ageing. The relatively high fertility rate and immigration to Israel also contribute to the future growth and ability of the next working generation to support future pensioners. Net replacement rates are expected to be reasonable with a smaller burden on state budget.

The main problems and challenges are macroeconomic issues that have a large influence on the pension system. These issues refer especially to the labour activity among the Haredim and Arabs and relatively low incomes within those groups. Positive changes have been observed, especially in Arab society; as for the Haredim, the adjustment is difficult for political reasons. Other challenges for the pension system are: the current, relatively high poverty rate among pensioners and a lower minimum retirement age for females than for males.

However, the possibility of return to PAYG system is very unlikely due to the success and acceptance of the reforms by a major part of Israeli society, most politicians, the MOF, BOI seniors and academics. Prior to the reforms most of the Israeli pension system was funded and production was carried out by non-government entities, mostly private, although it the assets were not invested in capital markets. In this sense the main reforms were introduced in order to privatize the production. Contributions for other types of savings have always been popular in Israel¹⁹, hence the implementation of private savings, including pensions, was very easy and the citizens' financial awareness could be taken for granted.

Conclusions

There are some similarities and differences between the Polish and Israeli cases, both in the pre-reform period, in the shift toward a private pension system itself and in the further developments.

In both countries, similarly as in Chile, the transformation towards a neo-liberal market economy took place and liberalism became the main ideological background both for economic and social reforms.

Both countries, as did Chile, moved towards larger individualization in the pension system because of the introduction of the DC pension formula and reduction of inter- and intragenerational redistribution.

¹⁹ Total private savings, including households and business sector, amounted to 23.7% of GDP according to the Bank of Israel (one of the highest values in OECD).

However, the institutional starting points were different: in Israel, the shift towards private management and financing had already existed for non-government workers, especially for those covered by Histadrut or sectoral agreements. The problem which appeared was that coverage was insufficient, which was also the Chilean case. Also in Poland, for over half a century no private savings for old age had been made for at least two reasons: there had been no financial products until the beginning of the 90s and the public pension system offered both a wide coverage and adequate pensions. Moreover, even after the establishment and growth of the financial market the Polish society showed no interest in saving money for retirement (also in voluntary forms), being focused on everyday consumption (Gorynia et al., 2016, p. 96).

The Polish and Israeli demographic environments at the moment of conceptualization of the pension reform were partly similar: both societies were relatively young, but Poland had already registered a rapidly declining fertility rate, which was not the case of Israel. However as in the Chilean case both countries showed a serious sustainability problem with the running of the PAYG pension system which was perceived not only as too costly but also as unfair. It was a very important stimulus for shifting towards a private pension system but both in Chile and Poland the secondary goals of the pension system, i.e. an increase in internal savings, acceleration of economic growth, motivation for legal employment also played a crucial role. In the 90s Poland suffered from a much higher inflation than Israel but had up to 10 pp lower government deficit and 30–50% lower government debt than Israel; at the same time, however, Poland also had a very low level of internal savings (Gorynia et al., 2016, p. 104). So at the time around the beginning of the pension reform the situation of public finance was relatively better in Poland than in Israel—however this was also a key factor which led to the retreat from public-private mix in pension management in Poland in the coming years.

The shift towards private pension systems in Chile and Israel was part of the structural reforms which was not the case in Poland. However, in both Poland and Israel the systemic reform had different scope and scale. Poland conducted a partial shift towards a private pension system only: about one third of the obligatory pension contributions collected by the government was transferred into private pension funds. From that point of view, the Chilean model previously promoted by the World Bank was useful for Poland, but mostly at the technical level.²⁰ Conversely, following the Chilean example, Israel fully moved towards a private pension system and replaced the old pension system with a brand new one.

Moving towards a private pension scheme caused similar problems in Chile and both analyzed countries: excessive fees, too little competition and non-optimal investment strategy in line with participants' ages. It shows that neither

²⁰ Although those technicalities create a number of economic outcomes.

Poland nor Israel sufficiently learnt from the Chilean experience and underestimated the market failures (e.g. asymmetry of information), which required state intervention. Israel consistently followed the path of full movement towards a private pension system, bearing the transition costs (which were higher than in Poland²¹) and learning from private pension system leaders such as Chile (e.g. introducing of the default age model). One of the key political issues in Chile and Israel was the increasing influence of the USA both on the economy and on politics. However, in Israel and Chile the awareness of the importance of savings had already existed or was an important goal of the publicly financed financial education. Conversely about a decade later Poland retreated gradually from the private management of pensions: contributions were reduced, funded assets were diverted to the PAYG pillar, private annuities were eliminated, and funded pensions became voluntary.

The mix of unfinished pension reforms, underestimated transition costs and sources of their finance together with rising pressure of the EU and Polish aspirations to fulfil the Maastricht criteria led to a domination of a short-term perspective. The political risk became the key factor and as in the case of the introduction of private management of the pension system the withdrawal has been conducted with the political consensus of the consecutive ruling forces and the simultaneous objection of the financial market. Poland was not an exception—other Central and East-European countries affected by the consequences of the financial crisis of 2008 withdrew from the private pension systems having approval of the IMF. On the other hand, Israel went on with the reforms, despite the transition cost, and gained long-term sustainability of its pension system which prepared it better for the ageing society and other future challenges. It also has to be stressed that the USA has always remained the prevailing force behind the full shift towards a private pension system, fostering and encouraging the culture of individual prudence and faith in the inviolability of private ownership of pension savings. Luckily Israel did not suffer from the financial crisis of 2008, so it did not need any international assistance or suggestions from the World Bank and the IMF.

Inadequacy of pension benefits remains to be the main problem of all the pension systems analyzed in this paper. However, it is not caused by the privatization itself but the change in the pension benefit calculation towards an equivalent DC pension formula. It is true that the shift towards a private pension system mostly led to individualization of the pension entitlements, but the DC pension formula was also introduced without movement towards funding. Poland remains the only example of this (Chłoń-Domińczak et al., 2012) but NDC was not the Israeli case. Rising poverty among older people, especially

²¹ However, it has to be stressed, that the transition costs are differently defined; the Polish definition is the narrowest, covering the amount of transferred contributions to the funded pillar only (Bielawska et al., 2017).

females, became the most important factor for maintaining the minimum pension in Poland and for the introduction of a flat-rate PAYG financed minimum old-age income in Chile and Israel²². The second important problem of both Chile and Israel is the inadequate coverage for low earners. However it is not the result of privatization; it stems from the lack of proper regulation which would meet the challenge of short-sightedness, procrastination and insufficient knowledge (more Barr & Diamond, 2010, pp. 40–43).

One should emphasize here that the shift towards a private pension system is always only a part of the whole pension reform and should be analyzed in a very broad context. Considering the limitations of this article it was decided to focus entirely on the political economy of the issue. Further research could focus on the effects of involving private sector institutions in running the universal public system, for example.

References

- Asher, M., & Vasudevan, D., (2008). *Rethinking Pension Reforms in Chile: Implications for Developing Asia*. (Working Paper SPP 07-08). Retrieved September 22, 2019 from https://www.researchgate.net/profile/Mukul_Asher/publication/237323335_Rethinking_Pension_Reforms_in_Chile_Implications_for_Developing_Asia/links/53e9cd210cf2dc24b3cad78c.pdf
- Bank of Israel. (2019a). *The deficit and public debt 1980-2018*. Information & Statistics Department. Retrieved September 26, 2019 from <https://www.boi.org.il/en/DataAndStatistics/Pages/MainPage.aspx?Level=2&Sid=19&SubjectType=2>
- Bank of Israel. (2019b). *Public assets September 2019*. Information & Statistics Department. Retrieved September 26, 2019 from <https://www.boi.org.il/en/DataAndStatistics/Pages/MainPage.aspx?Level=3&Sid=47&SubjectType=2>
- Barr, N. (2002). Reforming pensions: Myths, truths, and policy choices. *International Social Security Review*, 55(2), 3-36. doi:10.1111/1468-246X.00122
- Barr, N. (2012). *Economics of the welfare state* (5th ed.). Oxford: Oxford University Press.
- Barr, N., & Diamond, P. (2010). *Pension reform. A short guide*. New York: Oxford University Press.
- Barr, N., & Diamond, P. (2016, January). Reforming pensions in Chile. *Polityka Społeczna*, 12, 4-8.
- Ben Basat, A. (2002). *The Israeli economy 1985-1998: From government intervention to market economics*. Cambridge, MA: MIT Press.
- Ben Porat, G. (2008). *Israel since 1980*. New York: Cambridge University Press.
- Bielawska, K. (2014). Sustainability of structural pension reforms in the CEE countries—experiences and lessons for the future. *Insurance Review*, 4(14), 111-121.

²² Chile, Poland or Israel are not exceptions. In countries, which implemented DC pension formula in the basic pension system, the creation of “exogenous, tax-financed social safety nets or lowest means-tested, pension-level guarantees, and introduce policy-motivated, tax-financed account add-ins” is suggested (Góra & Palmer, 2019, p. 21).

- Bielawska, K., Chłoń-Domińczak, A., & Stańko, D. (2017). *Retreat from mandatory pension funds in countries of the Eastern and Central Europe in result of financial and fiscal crisis: Causes, effects and recommendations for fiscal rules*. (MPRA Paper No. 83345). Retrieved September 28, 2019 from <https://mpra.ub.uni-muenchen.de/83345/>
- Chilean Pension Commission. (2015). Final report of the Presidential Advisory Commission on the pension system. Santiago. Retrieved September 26, 2019 from <http://www.comision-pensiones.cl/report.html>
- Chłon, A., Góra, M., & Rutkowski, M. (1999). Shaping pension reform in Poland: Security through diversity. *Social Protection and Labor Policy and Technical Notes 20852*, The World Bank.
- Chłoń-Domińczak, A., Franco, D., & Palmer, E. (2012). The first wave of NDC reforms: The experiences of Italy, Latvia, Poland, and Sweden. In R. Holzmann, E. Palmer, & D. Robalino (Eds.), *Nonfinancial defined contribution pension schemes in a changing pension world*, Vol. 1: *Progress, issues, and implementation* (pp. 31-86). Washington D.C.: The World Bank & Swedish Social Insurance Agency. doi:10.15713/ins.mmj.3
- Country Economy. (2019). *Israel GDP and GDP per capita*. Retrieved September 29, 2019 from <https://countryeconomy.com/gdp/israel>
- De Mesa, A. 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.
- European Commission. (2017). The 2018 Ageing Report underlying assumptions & projection methodologies (Vol. 8014). doi:10.2765/40638
- Fultz, E. (2012). The retrenchment of second-tier pensions in Hungary and Poland: A precautionary tale. *International Social Security Review*, 65(3), 1-25. doi:10.1111/j.1468-246X.2012.01434.x
- Fultz, E., & Ruck, M. (2008). Pension reform in Central and Eastern Europe: Emerging issues and patterns. *International Labour Review*, 140(1), 19-43.
- Giorno, C., & Adda, J. (2016). *Improving the pension system and the welfare of retirees in Israel*. (OECD Economics Department Working Papers, No. 1288). Paris: OECD Publishing. Retrieved from <http://dx.doi.org/10.1787/5jm0xf1fsqvf-en>
- Golinowska, S. (2014). Funkcje państwa w zabezpieczeniu dochodów na okres starości. Zmiana warunków i paradygmatu na przykładzie polskiej reformy systemu emerytalnego. In K. Frieske, & E. Przychodaj (Eds.), *Ubezpieczenia społeczne w procesie zmian. 80 lat Zakładu Ubezpieczeń Społecznych* (pp. 89-111). Warszawa: Instytut Pracy i Spraw Socjalnych and Zakład Ubezpieczeń Społecznych.
- Golinowska, S., & Żukowski, M. (2011). The impact of the economic and financial crisis on the Polish pension system. *Zeitschrift für Sozialreform*, 57(3), 267-285.
- Gorynia, M., Kowalski, T., Matysiak, A., Orłowski, W., Rapacki, R., Wojtyna, A., ... Żukowski, M. (2016). The Polish economy: Achievements, failures and development opportunities. *Economics and Business Review*, 2(16), 92-114.
- Góra, M. (2003). *Reintroducing intergenerational equilibrium: Key concepts behind the new Polish pension system*. (William Davidson Institute Working Paper, No. 574). doi:10.2139/ssrn.417761
- Góra, M. (2013). Political economy of pension reforms: Selected general issues and the Polish pension reform case. *IZA Journal of Labor and Development*, 2(2), 1-31. doi:10.1186/2193-9020-2-2

- Góra, M., & Palmer, E. (2019). *NDC: The Generic Old-Age Pension Scheme*. (IZA—Labor and Development Discussion Paper, No. 12221).
- Hagemeyer, J., Makarski, K., & Tyrowicz, J. (2015). Unprivatizing the pension system: The case of Poland. *Applied Economics*, 47(8), 833-852. doi:10.1080/00036846.2014.980577
- Hausner, J. (1998, March). Security through diversity: Conditions for successful reform of the pension system in Poland. *Collegium Budapest Discussion Series*.
- Hermes, N. (1995). *Financial markets and the role of the government in Chile*. Capelle a/d IJssel: Labyrinth Publication.
- Hormazabal, S., (2010). *Multi-funds in the Chilean pension system*. (Working Paper No. 10/28). Madrid: BBVA Research.
- Iglesias-Palau, A. (2009). *Pension reform in Chile revisited: What has been learned?*. (OECD Social, Employment and Migration Working Papers No. 86).
- Kay, A. (2012). From Altneuland to the New Promised Land: A study of the evolution of Americanization of the Israel economy. *Jewish Political Studies Review*, 24(1/2), 99-128.
- Kłós, B., & Marchewka-Bartkowiak, K. (2009). Kontrowersje wokół systemu emerytalnego i długu publicznego. *BAS*, 17(25).
- Kotowska, I., Józwiak, J., Matysiak, A., & Baranowska, A. (2008). Poland: Fertility decline as a response to profound societal and labour market changes?. *Demographic Research*, 19, 795-854. doi:10.4054/DemRes.2008.19.22
- Kowalski, T. (2009). Comparative analysis of economic transformation in Poland and selected Central European countries. *MPRA Paper*, 1(8)(16610), 1-44.
- Kowalski, T. (2013). *Globalization and transformation in central European countries: The case of Poland*. Poznań: Poznań University of Economics Press. doi:10.1017/CBO9781107415324.004
- Kritzer, B. E. (2008). Chile's next generation pension reform. *Social Security Bulletin*, 68(2), 68-69.
- Manor, M., (2015). Reforms to Israeli pension system. In *New trends in economics, management and finance* (1st ed., pp. 89-108). (Doctorals seminars in English). Poznań: Poznan University of Economic.
- Manor, M. (2017). Efficient life cycle investment strategies in defined contribution pension plans in Israel. *Journal of Insurance, Financial Markets & Consumer Protection*, 4(26), 47-66.
- Marchewka-Bartkowiak, K. (2011). Przychody z prywatyzacji i ich rozdysponowanie w budżecie państwa. *BAS*, 7(51).
- Ministry of Development. (2016). *Responsible development. Nanotechnology and the Environment*. doi:/10.1038/359115a0
- Ministry of Finance. (2019a). *Default pension funds. Capital markets and insurance director*. Retrieved September 26, 2019 from <https://mof.gov.il/hon/Pages/Default-PensionFund.aspx>
- Ministry of Finance, (2019b). *Financial statements 2018 of Israel. Accountant general*. Retrieved September 26, 2019 from https://mof.gov.il/AG/AccountingReports/FinancialReports/MoneyReports2018_b.pdf
- Müller, K. (1999). *The political economy of pension reform in Central-Eastern Europe*. Cheltenham and Northampton, MA: Edward Elgar.

- Müller, K. (2000). Pension privatization in Latin America. *Journal of International Development*, 12(4), 507-518. doi:10.1002/1099-1328(200005)12:4<507::AID-JID687>3.3.CO;2-1
- OECD. (2011). *Pensions at a glance 2011: Retirement-income Systems in OECD and G20 Countries*. Paris: OECD Publishing.
- OECD. (2015). Study on replacement rates and other issues related to pension systems. Paris: OECD Publishing.
- OECD. (2019). *Pensions at a glance 2019: OECD and G20 Indicators*. Paris: OECD Publishing.
- Orenstein, M. A. (2013). Pension privatization: Evolution of a paradigm. *Governance*, 26(2), 259-281. doi:10.1111/gove.12024
- Orszag, P. R., & Stiglitz, J. E. (1999, September 14-15). *Rethinking pension reform: Ten myths about social security systems*. (World Bank Conference, "New ideas about old age security", pp. 1-46).
- Pałasz, A. (2019, December 12). PPK? Nie, dziękuję. *Gazeta Prawna*. Retrieved December 14, 2019 from <https://www.parkiet.com/Pracownicze-plany-kapitalowe-PPK/312139986-PPK-Nie-dziekuje.html>
- Palmer, E., & Góra, M. (2004). *Shifting perspectives in pensions*. (IZA Discussion Paper, No. 1369).
- Ramesh, M. (2006). The World Bank and pension reforms. In D. Stone & C. Wright (Eds.), *The World Bank and governance. A decade of reform and reaction* (pp. 109-124). Abingdon: Routledge.
- Ratson, M. (2010). Policy entrepreneurs, political constructions and window of opportunities: The politics of the pension reforms in Israel. *Israel Sociology*, 11(2), 463-484.
- Ratajczak, J. (2019). *Równość w systemie emerytalnym. Emerytury kobiet i mężczyzn w Polsce*. Poznań: Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu.
- Ratajczak-Tuchołka, J. (2010). Die polnische Altersrentenreform von 2009 – Welche Lehren können andere Länder aus den polnischen Erfahrungen ziehen? In A. Stuchlik (Ed.), *Rentenreform in Mittel- und Osteuropa. Impulse und Politikleitbilder für die Europäische Union* (pp. 109-126). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Ratajczak-Tuchołka, J. (2013). Polish pension system: 1989-2012. In P. Michoń, J. Orczyk, & M. Żukowski (Eds.), *Facing the challenges social policy in Poland after 1990* (pp. 122-139). Poznań: Poznań University of Economics Press.
- Santoro, M. (2017). *Pension reform options in Chile: Some tradeoffs*. (Working Paper, No. 17(53)). International Monetary Fund.
- Spivak, A., (2013). *Pensions in Israel and abroad: Major developments, approaches and ideological influences*. (Van Leer Institute, Disputes in Economics—Second Series No. 4, Jerusalem).
- Tompson, W., & Price, R. (2009). *The political economy of reform: Lessons from pensions, product markets and labour markets in ten OECD countries*. Retrieved September 26, 2019 from <http://www.oecd.org/dataoecd/51/5/46190166.pdf>
- Yosef, R., Spivak, A., (2008). The new pension world: After the Big Bang of 2003. *Policy Studies*, 5, 1-54.
- World Bank. (1994). *Averting the old-age crisis. Policies to protect the old and promote growth. A World Bank Policy Research Report*. doi:/10.1007/bf02681086

- Żukowski, M. (1994). Pensions policy in Poland after 1945: between 'Bismarck' and 'Beveridge' traditions. In J. Hills, J. Ditch, & H. Glennerster (Eds.), *Beveridge and Social Security. An International Retrospective* (pp. 154-170). Oxford: Oxford University Press.
- Żukowski, M. (2013). Dwie fale reform emerytalnych w krajach Europy Środkowo-Wschodniej 1998-2012. *Studia Oeconomica Posnaniensia*, 1(1), 91-100.

Aims and Scope

The **Economics and Business Review** is a quarterly journal focusing on theoretical, empirical and applied research in the fields of Economics and Corporate and Public Finance. The Journal welcomes the submission of high quality articles dealing with micro, mezzo and macro issues well founded in modern theories and relevant to an international audience. The EBR's goal is to provide a platform for academicians all over the world to share, discuss and integrate state-of-the-art Economics and Finance thinking with special focus on new market economies.

The manuscript

1. Articles submitted for publication in the **Economics and Business Review** should contain original, unpublished work not submitted for publication elsewhere.
2. Manuscripts intended for publication should be written in English, edited in Word in accordance with the **APA editorial** guidelines and sent to: secretary@ebr.edu.pl. Authors should upload two versions of their manuscript. One should be a complete text, while in the second all document information identifying the author(s) should be removed from papers to allow them to be sent to anonymous referees.
3. Manuscripts are to be typewritten in **12' font in A4 paper** format, one and half spaced and be aligned. Pages should be numbered. Maximum size of the paper should be up to 20 pages.
4. Papers should have an abstract of about 100-150 words, keywords and the Journal of Economic Literature classification code (**JEL Codes**).
5. Authors should clearly declare the aim(s) of the paper. Papers should be divided into numbered (in Arabic numerals) sections.
6. **Acknowledgements** and references to grants, affiliations, postal and e-mail addresses, etc. should appear as a separate footnote to the author's name a, b, etc and should not be included in the main list of footnotes.
7. **Footnotes** should be listed consecutively throughout the text in Arabic numerals. Cross-references should refer to particular section numbers: e.g.: See Section 1.4.
8. **Quoted texts** of more than 40 words should be separated from the main body by a four-spaced indentation of the margin as a block.
9. **References** The EBR 2017 editorial style is based on the **6th edition** of the Publication Manual of the American Psychological Association (**APA**). For more information see APA Style used in EBR guidelines.
10. **Copyrights** will be established in the name of the **E&BR publisher**, namely the Poznań University of Economics and Business Press.

More information and advice on the suitability and formats of manuscripts can be obtained from:

Economics and Business Review

al. Niepodległości 10

61-875 Poznań

Poland

e-mail: secretary@ebr.edu.pl

www.ebr.edu.pl

Subscription

Economics and Business Review (E&BR) is published quarterly and is the successor to the Poznań University of Economics Review. The E&BR is published by the Poznań University of Economics and Business Press.

Economics and Business Review is indexed and distributed in Claritave Analytics, DOAJ, ERIH plus, ProQuest, EBSCO, CEJSH, BazEcon, Index Copernicus and De Gruyter Open (Sciendo).

Subscription rates for the print version of the E&BR: institutions: 1 year – €50.00; individuals: 1 year – €25.00. Single copies: institutions – €15.00; individuals – €10.00. The E&BR on-line edition is free of charge.