Sylwester Andrzej BIAŁOWAS\*, Meirav Aharoni Ben SIMHON\*\*

# A PENSIONS PANORAMA: REVIEWING ISRAEL'S PENSION SYSTEM

DOI: 10.21008/j.0239-9415.2022.086.02

Pension systems differ substantially: countries have diverse economies and populations, and distinctive ideological characteristics, they differ in their welfare, economic ideology, and their citizens' propensity to save. This paper reviews the Israeli pension system, and its past, present, and future challenges. It describes the changes from the first regulations by the Histadrut Union from the "pre-state period", the privatization reforms of 1985 which excluded Histadrut from the healthcare and pension systems, the stabilization of the system in 1995, the later government involvement including Old Age Insurance (based on age and number of insurance years), and the application of the mandatory pension law in 2008. The Israeli pension system relies mainly on mandatory private retirement savings, which will moderate the long-term fiscal impact. Given the important role played by private pension schemes and the regressive nature of some of its tax provisions, the main reform challenge was the system's ability to effectively protect the elderly, and its efficiency in securing and valuing retirement savings to guarantee pension adequacy. Ensuring pension adequacy and addressing longevity risks requires appropriate preparation by promoting a further rise in senior employment rates, reinforcing the protective role of basic pensions and the efficiency of the management of private retirement savings, and improving the fairness and effectiveness of the system's second pillar. The study includes the author's assessments and reflects on the implications of the highlighted changes, which adds to the discussion on the pros and cons of pension system structures.

**Keywords**: savings, pension systems, Israeli pension system, post-retirement income

<sup>\*</sup> Katedra Badań Rynku i Usług, Poznan University of Economics and Business, Polska. ORCID: 0000-0003-4575-5346.

<sup>\*\*</sup> Doctoral Seminars in English, Poznan University of Economics and Business.

### 1. INTRODUCTION

The pension landscape of many countries worldwide has been changing at an astonishing pace over the past few years; the pension issue has frequently taken center stage in the public arena, and aroused great interest on the part of researchers and policymakers. Global demographic processes that lead to population aging, such as a rising life expectancy and decreasing birth rates, enhancing longevity, and lower mortality rates (Holman, Foster, Hess, 2020; Jarzebski et al., 2021; Marciniuk & Zmyślona, 2022; Roll, Grinstein-weiss, Kondratjeva, & Bufe, 2020; Sobeck & Breunig, 2019; Takayama, 2017), have magnified the number of pensioners around the world and increased pressure to provide adequate pension support for retirement. In 2020, 9% of the global population was above 65 years old. This population is projected to increase by 2050 and become 16% of the global population. Moreover, in 2050 people over the age of 80 will constitute nearly 60% of the world's elderly population (Jarzebski et al., 2021). Therefore, the OECD average old-age dependency ratio was 30.4% in 2020 and is projected to increase to 52.7% in 2050 (OECD, 2021). Due to the increase in life expectancy, much research has described the conventional pension systems, worldwide, as not capable to cope with the increase in the number of pensioners and will not be able to support them through adequate longterm benefits (European Commission, 2012, 2018; OECD, 2011b, 2013, 2019). In view of the constantly evolving pension policies, demographic situation, and labor markets, reforming pensions became the main policy subject in developed and developing countries alike. Most countries widely accept that pension systems and rules need to change over time and pension reform should include measures to safeguard the adequacy of pensions. Policymakers across the globe have been struggling for decades to adapt their pension systems to the new reality of aging populations and tightening budgets (OECD, 2011b; Whitehouse, 2007).

## 2. ISRAEL'S PENSION SYSTEM – BACKGROUND

The first pension funds in Israel were established even before the state's foundation (before 1948) and were accompanied by a suitable national pension distribution system. These pensions were workplace occupational pensions, i.e. defined-benefit (DB) schemes that offered up to 70% of basic wage based on mutual monthly payments by employees (11% of wage) and employers (5% of wage). The system was established by the *Histadrut* Union Federation during the pre-state period (1920-1948). During this period and until the main economic reforms in 1985, the majority of the professionals and public sector workers in Israel, usually in unionized workplaces, were well-organized under labor unions, under the auspices of the *Histadrut*. The *Histadrut* Union Federation was a branched labor union that functioned as a micro-state, employer, and trade union; it was Israel's major union that owned most pension

funds in Israel. Three of seven pension funds, established by the labor union Histadrut in the period of 1942 to 1958, were the largest and represented many employees from all sectors, which made it the umbrella organization of all labor unions in Israel. The organization was established in the light of socialist ideology, as such, it provided its members with all their needs: Health care, housing, employment, insurance, banking, pensions, and also was the owner of a large number of businesses and services (Manor, 2015; Manor & Ratajczak, 2020). Pensions such as health care were a major source of power for the unions in Israel, and DB schemes were awarded exclusively to *Histadrut's* members through collective agreements (Benjamin, Nisim, & Segel-karpas, 2017; Lurie, 2018). Expansion orders of the Labor and Welfare Minister enabled additional big business organizations to grant their employees almost identical employer-employee jointly funded saving schemes. An exception from this were state employees who were granted fully-funded pension schemes from state revenues, and also were entitled to benefit from a rank related employer provision (Gal, 2002). Since the 1985 economic reforms the public sector was downsized, and varied externalization processes occurred: privatization, mediated employment, and outsourcing. The Histadrut, Israel's major union, lost its control over healthcare and pensions, which were its main source of influence over government policy and a great part of its members. The pensions privatization in Israel was an important step in the larger process of neoliberalism and privatization in Israel, and the *Histadrut's* loss of power enabled the government to pass many of the pensions privatization reforms (Lurie, 2018). The adoption of reforms in Israel and their implementation did not stem solely from purely economic motives; they also were based on neoliberal economic beliefs, political motives, and international relations. US concern about the possibility of Israel's economy collapsing created American pressure on Israel to reform its economic system according to Friedman and Milton's neoliberal principles in exchange for American economic aid (Lurie, 2018; Manor & Ratajczak, 2020).

Between the pre-state periods (1920-1948) to the main economic reforms in 1985 Israel's pension system has been characterized by three pillars. The first pillar was universal and public, i.e. the National Insurance Institute's flat-rate old age pension. The first pillar was obligatory, financed by National Insurance contributions, and included all working people. All Israeli residents were eligible for a basic public pension (i.e. an old-age pension), once they reach the retirement age stipulated by law, provided that insurance contributions had been duly paid by them for at least 60 months during 10 years, or 144 months in total prior to retirement, and were legally insured (Israel National Insurance Institute, n.d.). The basic public pension was updated once a year by indexation to the consumer price index (CPI) and the real growth in wages and was attached to the average income (Gavious, Spivak, & Yosef, 2009). The amount of allowance was constant for each resident, regardless of the contribution made during working years (Manor, 2015).

The second occupational pension pillar is the Partly Mandatory pension, which includes Defined benefits (DB) schemes and Pay-as-you-go (PAYG) plans. The

second pillar was mandatory only for organized employees but was not obligatory for the self-employed; the system was based on agreements between unions and employers and protected only union members' employees in the public and private sectors (Gavious et al., 2009). The retirement age stipulated by law was 65 for men and 60 for women, and a number of pension instruments were available at that time: budget pension (PAYG) plans for government employees only; pension funds for the rest of the public sector and organized employees in the private sector; provident funds that were partly used for pensions by employees or the self-employed; executive insurance 1 plans (life insurance that contains insurance and savings for the pension period), most were purchased by managers and the self-employed. Pension funds, provident funds, and executive life insurance were exclusively invested in non-traded earmarked government bonds (Gavious et al., 2009; Manor, 2015). Until 2008 there was no regulation on obligatory participation in pension saving schemes; about forty percent of labor market employees did not own any pension plan, and fifty-seven percent of the elderly did not receive any pension annuity other than oldage pensions (Gavious et al., 2009).

The third pillar of private savings is the voluntary pension: provident funds and executive life insurance. A voluntary pillar is usually aimed at savings for lump-sum withdrawal. The savings account was adapted to the savers' needs according to their decision, the same account could have been used for two purposes: accrual for pension purposes or long-term savings, provided that the savers have completed the minimum savings period set by law. Israeli employee wage was distributed between an insured wage for pensions (70% of the total wage), and a non-pensionable wage, mainly for reimbursement of expenses (the remaining 30%) (Benish, Haber, & Eliahou, 2016; Benjamin, Nisim, & Segel-Karpas, 2020; Carmi & Kimhi, 2018; Manor, 2015, 2017).

## 3. ISRAEL'S PENSION SYSTEM – REFORMS

Israel's regulators adopted the World Bank recommendations for reforms in the pension system at a relatively early stage. Since 1986 the authorities have rolled out a series of major reforms to improve the pension system, the reforms were introduced in stages and were designed to meet three main challenges: (i) Correcting the design flaws in the previous private pension system; replacing the old excessively generous defined-benefit (DB) system with a defined-contribution (DC) pension system (Brender, 2009); (ii) preparing the system to cope with the expected aging of the population, reducing its budgetary implications, and ensuring the financial viability of the pension system; (iii) ensuring pension adequacy and reducing poverty rates

<sup>&</sup>lt;sup>1</sup> The term "executive life insurance" does not attest to the nature of the product or its target audience but is meant solely to position the product from a marketing aspect.

among the elderly population (Brender, 2011; Giorno, Adda, 2016). Other objectives of the reforms introduced were to reduce government involvement, increase investment in the capital markets, and encourage privatization (Manor, 2015).

Reforms in Israel's pension system began in the second half of the 1990s and particularly accelerated since 2003, most pension reforms had been targeted to the structure of the second pillar while a few were also applied in the universal pillar. The first reforms started with changes in Israel's occupational pension system; traditional pension funds (defined benefit schemes) have been nationalized (Gavious et al., 2009; Troitsky, 2013). These pension funds, mostly owned by the *Histadrut* union, were quite generous, absented a mechanism for adjusting to demographic changes, and accrued large actuarial deficits in the 1980s and 1990s, as a result of binding agreements between employers and their employees. As early as 1995, in order to stabilize the dismal condition of the traditional pension system, several measures had been adopted. The government provided a partial financial bailout, the rights granted so far to the beneficiaries of old funds were reduced, and voluntary private saving schemes were closed to new account holders. In order to replace these old defined-benefit funds, new funds (defined-contribution) were established for new employees, that included an automatic actuarial balancing mechanism, also, the funds received partial support by the government in the form of earmarked bonds with a guaranteed return (Brender, 2011; Carmi, Kimhi, 2018; Giorno Adda, 2016). The first reforms had accomplished their objectives; they had eliminated the enormous actuarial deficit that was accumulated in the old funds' schemes, returned the long-term financial viability of the pension system, adapted it for future demographic changes, and resulted in the replacement of the defined benefits (DB) system with a defined contribution (DC) saving system (Brender, 2009; Giorno, Adda, 2016; Manor, 2015).

Since Israel applied reforms at such an early stage, its case enabled an evaluation of the World Bank recommendations regarding private pensions while the process is in progress (Lurie, 2018). Therefore, additional significant changes were taken: Between 2002 and 2004, the closure of the defined-benefit pension funds for government employees continued, and new employees recruited for the public sector have been covered by the same system as private-sector employees. In 2003, old-age pensions have been linked to the consumer price index (CPI), instead of the average wage linkage that was the prior custom. Since the average wage rises about 2% on average annually above inflation, it meant the erosion of pensions; retirees' incomes declined in relation to the rest of the population (Manor, 2015). This erosion of the universal pension pillar has large negative implications for poverty among the elderly; the price linkage mechanism misses its major objective, to prevent poverty among the elderly. Without intervention, this mechanism lasting over time will increase the elderly poverty rate, especially among those who lack a second pillar pension arrangement, with the old-age allowance being their only income. This mechanism of linking pensions to the CPI is still valid today but in order to correct most of the erosion, in the period between 2005 and 2008 under coalition agreements, old age allowances were raised (Manor, 2015). Also, in 2003 the retirement age was raised; to 67 for males, and 64 for females (the raise of the retirement age for females was planned in two stages; 62 immediately at the first stage and 64 at the second stage, until the completion of the legislation in 2017). The coverage of earmarked government bonds in old and new pension funds was reduced to 30%, which led pension funds to direct a larger component of their savings into the capital market (Carmi & Kimhi, 2018). In 2005 the new pension funds were sold by the government to insurance companies, and the provident funds were sold by banks to insurance companies and investment houses – as a result of these actions management fees were immediately raised. During 2016-2017 there was a reduction in management fees. Following public pressure, legislation was passed to restrict the managing fees by lowering the maximum fees (Manor, 2015). Additionally, two small pension funds that offered the lowest management fees were chosen by the Ministry of Finance to use as default funds and were recommended to the public. Since 2019, the Ministry of Finance requires all employers to add their employees to these funds.

After stabilizing the system, adjusting it to life expectancy, and linking pension allowances received to the CPI, policymakers were focused on reforms that will provide pensioners with a dignified existence. Thus, in 2008 the mandatory pension law for wage earners was enacted following an agreement between the *Histadrut* union federation and employers, and provident funds were converted from medium-term capital savings instruments to allowance-based pension savings instruments (Gavious et al., 2009; Troitsky, Spivak, 2013). In 2010 the mandatory pension was extended by the Minister of Economics for all employees (but not for the self-employed), in 2017, the law was also applied to the self-employed. Although pension reforms were intended to stabilize the system, one of its most notable weaknesses is investing in the capital market, which poses one of the main risks for the system. In order to strengthen the system and to protect the elderly's pension savings accumulation from a market crash, Israel implemented the Chilean age-based default model in 2012 (Manor, 2015; Manor, Ratajczak, 2020). Additionally, to ensure the elderly have adequate income, since 2014, the authorities have gradually increased the minimum rate of mandatory pension saving in the second pillar to 17.5% of wages (The minimum rate increased gradually from 2.5% in 2008 until it was fixed at 18.5% in 2017, for comparison, in 2013 the minimum rate was 15%). In 2017, in order to reinforce pensioner protection against possible financial shocks, the distribution of designated bonds was modified to take into account the saver's age; the allocation of earmarked bonds has been raised to 60% for savers above age 60, while the allocation to savers under 50 years of age is being gradually reduced (Carmi, Kimhi, 2018). In addition to these pension reforms, and in order to encourage the development of capital markets, the government took measures to reduce its involvement in the pension field and partially withdrew from the management of second-pillar assets. The issue of new earmarked bonds for provident funds and life insurance was eliminated, and the guarantee of high yields previously offered for old and new pension funds was reduced to only 30% of their assets (further accumulation will be possible through capital market investments, loans, and real estate). These regulations were intended to reduce the volatility of returns on pension savings and actually reintroduce a type of defined-benefit component into the system (Manor, 2015).

From the long-term perspective, Israel achieved most of the reforms' objectives; the Israeli pension system is stable and capable of facing the issue of aging. In addition, two other factors affect pensions in Israel: Israel enjoys a relatively high fertility rate (2.9%, births per woman in 2020 compared to the average of 1.59% in the OECD countries)(OECD, 2019, 2021, 2023); immigration to Israel is increasing contribution to the future growth and the ability of the next generation's employees to support future retirees (Lurie, 2018; Manor, Ratajczak, 2020). From a contemporary point of view, speaking of figures, the results of the reforms in the pension system in Israel are impressive, for example, the macroeconomic results of economic reforms have been impressive; in the period between 1990 and 2018: GDP per capita increased from 12.5K to 41.7K, USD, respectively; the debt to GDP ratio declined from 1.38 to 0.61, respectively. In 2018, Israel's surplus foreign trade was 9.6 billion USD, approximately 3% of GDP. The coverage rates of mandatory pensions increased from 35% in 2009 to 78.2% in 2018 allowing almost 43% of the population to have a future annuity and reduce future poverty. Substantial financial institutions in the capital market have become pension providers in Israel with total assets of NIS 1.2 trillion per year (equal to the annual GDP of Israel), as the accumulation continues to grow with annual contributions of 90 billion NIS and high returns. Government involvement in pension finance has dropped from 100% to 45%, and the majority of the pension accumulation is placed on the local capital market. In the period between 2005 and 2018; management fees in terms of assets dropped from 1.1% to 0.45%— 0.5%, respectively. Also, MOF is continuing its efforts to reduce management fees by presenting default low-fee funds (Manor, Ratajczak, 2020). The rapid changes in the Israeli pension system and the reforms which were applied over the past few decades reflect the new global perspective that imposed the responsibility for pension saving on individuals. Moreover, the application of the mandatory pension law in 2008, and the modified nature of the provident funds give evidence to the authorities' assumption that the individual lacks the ability and tools to plan their retirement future well and successfully. Policymakers understand that, unlike other products, in a pension product there is no learning mechanism, and it is not possible for an individual who has not properly prepared for retirement to retrace his or her steps and rectify past mistakes (Carmi, Kimhi, 2018).

### 4. ISRAEL'S CURRENT PENSION SYSTEM

## 4.1. Structure and Government Involvement

Israel's current pension system is based on two pillars: (i) The first pillar of the National Insurance Institute (NII); old-age allowances that include income supplement allowance for eligible individuals, and (ii) the second pillar, the occupational pillar; mainly Direct Contribution occupational pensions. The first pillar is operated since the establishment of the National Insurance Institute (NII) in 1954 which is responsible for managing and distributing benefits for social insurance schemes. The two main insurance benefits are (i) old-age insurance, and (ii) survivors' insurance. Old age insurance is one of the most important branches of the National Insurance Institute's social security system and is designed to ensure that residents of Israel receive a regular monthly income in their old age. Any Israeli resident born in Israel or who first immigrated before the age of 60-62 is eligible for an old-age pension provided he or she meets the conditions of entitlement, regardless of his or her level of income. The basic old-age pension rate is NIS 1,558 (459 USD) for an individual and NIS 2,342 (691 USD) for a couple. The basic old-age pension rate for those aged 80 or older is NIS 1,646 (485 USD) for an individual and NIS 2,430 (690 USD) for a couple (as of Jan 01, 2020) (NII); Survivors' insurance is designed to ensure the means of subsistence for the survivors - widow/er and orphans - of an Israeli resident who dies (except for those who lose their lives in war or due to crime). The amount of the allowance is determined by the age of the widow or widower and the number of children in her or his care. The National Insurance Institute also provides an income supplement for old-age pension recipients with no other form of an income besides the pension, to ensure them the minimum income necessary for their existence, health insurance contributions are deducted from the income supplement. The maximum income to receive a full or partial income supplement is determined according to age and family status, since 2016, employees with low work pensions are also eligible for this supplemental income. These social insurance benefits ensure that the state fulfills its role of taking care of its residents' well-being, by guaranteeing a basic income for all, the allowances are based on the pay-as-you-go (PAYG) principle, financed through a compulsory NII income-proportional tax, paid by each citizen from the age of 18 to retirement (Benjamin et al., 2017, 2020; Carmi, Kimhi, 2018).

The second pillar of the Israeli pension system is the occupational fund. Occupational pensions are compulsory in Israel. Since the establishment of the occupational funds, they were available only to *Histadrut* members or to unionized employees in large organizations, under collective agreements (these schemes are jointly financed by employers and employees, and pensioners are offered up to 70% of their basic wage after 35 years of saving). In 2008, Israel implemented mandatory pension coverage for all employees who were not covered by collectively bargained pensions.

Members entitled to a mandatory pension or to a collectively bargained pension may choose to invest their pension savings in a new pension fund, a provident fund, or an executive life insurance policy, and to switch between them, based on their own market preferences. In 2017, pension contributions also became compulsory for the self-employed. Veteran civil servants and other unionized employees in big corporations, still hold the direct benefit funds (unfunded pension), though such funds were no longer made available to new members as of 2001. As mentioned before, since 2008, all wage earners must contribute a given proportion of their income to a privately managed savings instrument, which will pay out a pension allowance. Importantly, the mandatory scheme takes 5.5% from the employee and 12% from the employer, although, of the employers' contribution (12%), only half of the funds are deposited to the pension scheme, while the other half is allocated to the severance package (Benjamin et al., 2017, 2020; Carmi, Kimhi, 2018). The Israeli pension system consists of five main types of pension savings instruments: old pension funds; new pension funds; new general pension funds; provident funds, and executive life insurance. The old and new pension funds both are required to invest in 30% nontradable earmarked government bonds. These bonds have returned a relatively stable and high yield of approximately 4% plus inflation. Provident funds, general new pension funds, and executive life insurance policies cannot invest in these types of bonds (OECD, 2011a). The Israeli pension system is supervised and regulated by the Capital Market Insurance and Savings Division (the CMISD), the CMISD is a division within Israel's Ministry of Finance (Benjamin et al., 2017, 2020; Carmi, Kimhi, 2018; OECD, 2011a). Old age allowance in Israel disbursed by the National Insurance Institute (the first pillar), is a fixed sum that is independent of the retiree's contribution, however, it is a relatively modest amount. This makes the first pillar, the occupational pension which is managed using a pure cumulative pension method, Israel's main pension pillar.

The government's involvement in the financing of pensions is reflected in both pillars and takes many forms; a cash payment paid by the NII, for the first-pillar pensions, and payments for public service retirees' pensions (employees recruited before 2002 or 2004). In the second pillar, it provides funds in a form of subsidies to old pension schemes (which are closed now), tax relief on contributions to pension savings and annuities upon pay-out, and also an interest guarantee on some secondpillar pension assets. The state's involvement in pension financing is relatively limited, and total public spending on pensions, by international standards, is comparatively low, partly because the Israeli population is younger than in most other OECD countries (OECD, 2011a). Israel's public expenditure on old-age and survivors benefits in 2015 was 12% of total government spending and accounted for 4.8% of GDP compared to the OECD average of 18.4% and 8%, respectively. Average annual returns of pension plans (funded and private pension plans) in Israel were all positive in nominal terms over the last 5 and 10 years and remained positive in most of them after adjusting for inflation; over the last 5 and 10 years, the nominal average annual returns were 4.1% and 7.1%, respectively. The real average annual returns over the

last 5 and 10 years were 4.2% and 5.8%, respectively. In 2018, pension plans suffered massive investment losses, as a result of the downturn in equity markets in the last quarter of this year (some of the major stock indices fell sharply, suffering sometimes one of the worst declines since the 2008 financial crisis, e.g. S&P500). The real investment rates of return (net of investment expenses) of pension plans were negative on average in the OECD (-3.2%), while the largest losses were recorded in Poland (-11.1%) and Turkey (-9.4%). Although 2018 was the worst year on record in terms of financial performance for funded and private pension plans in most OECD countries since the 2008 financial crisis, Israeli funded and private pension plans experienced positive returns in nominal terms (0.6%) but, still lower than inflation (0.8%). The real investment rates of return were negative (-0.2%) (OECD, 2019). Pension savings in the occupational pillar (i.e. the second pillar), were designed to be dependent on characteristics related to the individual's income, occupation, and demographic data. Those are also the main determinants of the pension allowance amount and the replacement rate of the pension systems worldwide. In Israel, DC pensions are also dependent on additional characteristics that include a return on the savings component invested in the capital market, the management fee percentage, the fund's actuarial deficit or surplus, and the allocation rate for earmarked bonds (Carmi & Kimhi, 2018). The net replacement rate is defined as "the individual net pension entitlement divided by net pre-retirement earnings, taking account of personal income taxes and social security contributions paid by workers and pensioners" (OECD 2019, P.154). The old-age pension replacement rate assesses how effectively a pension system provides a retirement income to replace earnings, the primary source of income before retirement. Israeli pension net replacement rates by earnings are 57.8% for men and 49.0% for women compared to the OECD average of 58.6% and 57.6%, respectively (OECD 2019, p. 155). Low-income earners in Israel have a higher net replacement rate; replacement rates by earnings are 81.1% for men and 69.2% for women, compared to the OECD average of 68.3% and 67.6%, respectively (OECD 2019, P.155). This relatively high net replacement rate can be explained by a flat rate of the National Insurance old-age pension (the first pillar), which is 16%-24% of the average wage. For those who earn 1.5 times the average wage, net replacement rates by earnings are 42.4% for men and 35.9% for women, compared to the OECD average of 54.7% and 53.7%, respectively (OECD 2019, p.155). Voluntary private pensions are widespread among ten OECD countries including Israel. The average net replacement rate for these countries is 70% (compared with 36% in gross terms when only mandatory schemes are taken into account), while the OECD average for net replacement rates of an average earner from mandatory (public and private) schemes is 59% (OECD, 2019). According to the Mercer CFA Institute World Pension Index; Israel with Norway and Australia are second-ranked (B+-grade) with systems that have a sound structure, and many good features, but have some areas for improvement that differentiates them from an A-grade system (Mercer CFA World Pension Index 2021: Evolution of the pension systems and the importance of private funded systems, 2022).

# 4.2. Characteristics and Future Challenges

The Israeli pension system is very centralized, mainly in pension funds and life insurance. In 2015, Seventy-five percent of the total assets of all instruments were managed by the five big insurance companies: Clal, Feonix, Harel, Menora Mivtahim, and Migdal. The market is expected to be more centralized unless measures will be taken to open up the market for further competition (Manor, 2015). Pension providers can invest in the Israeli market, as well as, in international markets, part of the portfolio can be also invested in real estate, toll road projects, transportation, electrical power plants, and so on. Still, according to investment regulations they need to keep a small percentage of cash for regular and unexpected payments. Pension providers produced high returns in the last decade; much of the high return in the past was due to the sharp reduction in interest rates, which produced high profits for bondholders in the few past years. The yield on the maturity of bonds is very low now, which means that the future return will be low as well. Coverage rates will continue to grow in the future. Two factors influence the increase in coverage rates: The first is the government's policy to encourage knowledge on financial issues including pensions and to increase the level of financial education. Second, following the application of the law requiring a pension provision for each resident, many individuals were added to the system and the numbers are continuing to grow (Carmi, Kimhi, 2018; Manor, 2015).

Occupational pensions in Israel have three major problematic characteristics: high and increased exposure to capital market risks (with the exception of the component invested in earmarked bonds), regressive savings incentives, and relatively high management fees, especially for low-income employees. Some of the reforms mentioned above were designed to minimize these flaws (Carmi, Kimhi, 2018). Additionally, one of the most notable shortcomings of the reforms and the privatization process that included the transition to defined contribution (DC) plans is the increase in social inequality. The DC monthly contribution is known, but the monthly allowance is unknown and is calculated at the time of retirement [(account balance + yield) – (management fee) / (the national life expectancy)], current arrangements suggest very low future pension entitlement through these DC funds (Benjamin et al., 2017, 2020; Carmi, Kimhi, 2018). Although Israeli policymakers designed a pension system that offers incentives for savers, the main beneficiaries of the regressive incentives and benefits of the primary savings product (i.e. the pension fund) are savers whose income is relatively high. Therefore, it seems like the Israeli pension policy fails to achieve its main objective to ensure basic pension benefits for all employees, especially for low-income employees, which makes their pension savings low as well. Furthermore, the increased privatization of the Israeli pension system, which includes a relatively small first pillar, largely exposed it to volatility in the financial market; this exposure also increases uncertainty about the size of the pension allowance to be received. These features underscore the government's limited involvement in determining the future pension status of its citizens, compared to other developed countries (Carmi, Kimhi, 2018). The majority of future challenges to the Israeli pension system involve macroeconomic issues which have a large influence on the pension system. These issues related to both religious orthodox Jewish and Arabs, and their integration into the Israeli labor market. These two large and vulnerable groups in Israeli society suffer from low-income rates and also low employment rates. The current relatively high poverty rate among pensioners, and the low minimum retirement age for females, are both also future challenges for the Israeli pension system (Manor, Ratajczak, 2020).

# 5. CONCLUSION

Israel is a young country with still dynamic population growth and a soundly structured pension system, yet it also needs to deal with the effects of an aging population. According to the Mercer CFA Institute World Pension Index; Israel with Norway and Australia are second-ranked (B+-grade) with systems that have a sound structure, and many good features, but have some areas for improvement that differentiates them from an A-grade system. The three best-evaluated (A-grade) pension systems are Iceland, the Netherlands, and Denmark, which have large levels of funded and private savings as a percentage of GDP (Mercer CFA World Pension Index 2021: Evolution of the pension systems and the importance of private funded systems, 2022). The old-age dependency ratio worldwide has been increasing since 2010 and is set to accelerate in the coming years, resulting from the rapid rise in life expectancy in the 20th century (European Commission, 2012, 2018; OECD, 2019, 2021). The OECD average old-age dependency ratio was 30.4% in 2020 and is projected to increase to 52.7% in 2050 (OECD, 2021). This global phenomenon will maybe be less pronounced in Israel than in the average OECD countries, because its population has grown more rapidly than that of other OECD countries (Gavious et al., 2009). Israel has long enjoyed high population growth originating from both a high birth rate and significant immigration. In 2020, about 28% of the Israeli citizens were children aged 0-14, which is high by comparison to the average of OECD member countries where only about 18% of the population are children under the age of 15. On the other hand in Israel 12% were aged 65 and over, much lower than OECD average of 17% (Carmi, Kimhi, 2018; Giorno, Adda, 2016). Israel is financially well prepared to withstand this demographic development, thanks to the reforms implemented since the mid-1990s. The Israeli pension system relies largely on mandatory private retirement savings, which will moderate the long-term fiscal impact. Yet, over the past few years, Israel's elderly poverty rate remains among the highest in the OECD, and questions concerning the fairness of Israel's pension system have arisen. Given the important role played by private pension schemes and the regressive nature of some of its tax provisions, the main reform challenge was the system's ability to effectively protect the elderly (the most vulnerable group with the highest poverty rates), and its efficiency in securing and valuing retirement savings to guarantee pension adequacy. Israel needs to continue focusing on policies guaranteeing pension adequacy and addressing longevity risks; these issues require appropriate preparation by promoting a further rise in senior employment rates, reinforcing the protective role of basic pensions and the efficiency of management of private retirement savings, and improving the fairness and effectiveness of the system's second pillar (Giorno, Adda, 2016; Manor, Ratajczak, 2020).

#### REFERENCES

- Benish, A., Haber, H., Eliahou, R. (2016). The regulatory welfare state in pension markets: mitigating high charges for low-income savers in the United Kingdom and Israel. *Journal of Social Policy*, 46(2), 313-330, doi: 10.1017/S0047279416000593.
- Benjamin, O., Nisim, S., Segel-Karpas, D. (2017). Cost action IS1409: Gender and health impacts of policies extended working life in western countries. Country Framing Report: Israel. COST, European Cooperation in Science and Technology.
- Benjamin, O., Nisim, S., Segel-Karpas, D. (2020). Israel. In: N.Á. Léime, J. Ogg, M. Rašticová, D. Street, M. Krekula, Bédiová, I. Madero-Cabib (Eds.), Extended working life policies: International gender and health perspectives. Springer International Publishing, 309-319, doi: 10.1007/978-3-030-40985-2.
- Brender, A. (2009). *Distributive effects of Israel's pension system*. Bank of Israel Discussion Paper, 19, 1-40. Retrieved from: http://www.boi.org.il (20.05.2023).
- Brender, A. (2011). First year of the Mandatory Pension Arrangement in Israel: Compliance with the Arrangement as an Indication of Its Potential Implications for Labor Supply. *Bank of Israel Discussion Paper*, 5, 1-32. Retrieved from: http://www.boi.org.il (20.05.2023).
- Carmi, S.M., Kimhi, A. (2018). *A primer on Israel's pension system*. In: D. Ben-David (Ed.), *Shoresh Research Paper*, 1-49. Retrieved from: http://shoresh.institute (20.05.2023).
- Dorfman, M., Palacios, R. (2012). World Bank Support for Pensions and Social Security. *Social Protection and Labor Discussion Paper*, 1208. Retrieved from: http://ideas.repec.org/p/wbk/hdnspu/70925.html (20.05.2023).
- European Commission (2012). Pension adequacy in the European Union 2010-2050. Report prepared jointly by the Directorate-General for Employment, Social Affairs and Inclusion of the European Commission and the Social Protection Committee, doi: 10.2767/77325.
- European Commission (2018). Pension adequacy report 2018: Current and future income adequacy in old age in the EU (vol. 1). Joint Report prepared by the European Commission (Directorate-General for Employment, Social Affairs and Inclusion) & Social Protection Committee, doi: 10.2767/406275.
- Gal, J. (2002). How well does a partnership in pensions really work? The Israeli public/private pension mix. *Aging and Society*, 22(2), 161-183, doi: 10.1017/S0144686X 02008619.
- Gavious, I., Spivak, A., Yosef, R. (2009). Pension reform in Israel under mandatory pension law. *Pensions*, 14(1), 4-13, doi: 10.1057/pm.2008.33.

- Giorno, C., Adda, J. (2016). Improving the pension system and the welfare of retirees in Israel. *OECD Economics Department Working Papers*, 1288. Organisation for Economic Co-operation and Development, OECD Publishing, doi: 10.1787/5jm0xf1fsqvf-en.
- Holman, D., Foster, L., Hess, M. (2020). Inequalities in women's awareness of changes to the State Pension Age in England and the role of cognitive ability. *Ageing and Society*, 40(1), 144-161, doi: 10.1017/S0144686X1800082X.
- Israel National Insurance Institute. (n.d.). Old Age Benefits.
- Jarzebski, M.P., Elmqvist, T., Gasparatos, A., Fukushi, K., Eckersten, S., Haase, D., Goodness, J., Khoshkar S., Saito, O., Kazuhiko T., Theorell T., Dong, N., Kasuga, F., Watanabe R., Sioen, G.B., Yokohari, M. (2021). Ageing and population shrinking: implications for sustainability in the urban century. *Npj Urban Sustainability*, 1(1), 1-17, doi: 10.1038/s42949-021-00023-z.
- Lurie, L. (2018). Pension privatization in Israel. In: A. Paz-Fuchs, R. Mandelkern, I. Galnoor (Eds.), *The privatization of Israel: The withdrawal of state responsibility*, New York: Palgrave Macmillan, 101-121, doi:1057/978-1-137-58261-4.
- Manor, M. (2015). Reforms to the Israeli pension system. In: P. Michoń, A. Poczta-Wajda, M. Osak, P. Marszałek, R. Gray, S. Białowąs (Eds.), *New trends in economics, management and finance*, Poznań: Poznań University of Economics and Business, 90-109.
- Manor, M. (2017). Efficient life cycle investment strategies in defined contribution pension plans in Israel. *Journal of Insurance*, *Financial Markets and Consumer Protection*, 26(4), 47-66.
- Manor, M., Ratajczak, J. (2020). Shift to private pension system: The case of Poland and Israel. *Economics and Business Review*, 6(20), 82-103.
- Marciniuk, A., Zmyślona, B. (2022). Marriage and Individual Equity Release Contracts with Dread Disease Insurance as a Tool for Managing the Pensioners' Budget. *Risks*, 10(7), doi: 10.3390/risks10070140.
- Mercer CFA World Pension Index 2021: Evolution of the pension systems and the importance of private funded systems (2022).
- OECD (2019). Society at a Glance 2019: OECD Social Indicators, Paris, doi: 10.1787/soc\_glance-2019-en.
- OECD (2021). *Pensions at a Glance 2021: OECD and G20 Indicators*. Paris: OECD Publishing, doi: 10.1787/ca401ebd-en.
- OECD (2023). Fertility rates (indicator). Paris, doi: 10.1787/8272fb01-en.
- Organisation for Economic Co-operation and Development. (2011a). *Israel: Review of the private pensions system*. Organisation for Economic Co-operation and Development, OECD Publishing.
- Organisation for Economic Co-operation and Development. (2011b). *Pensions at a glance 2011: Retirement-income systems in OECD and G20 countries*. Organisation for Economic Co-operation and Development, OECD Publishing, doi: 10.1787/pension\_glance-2011-en.
- Organisation for Economic Co-operation and Development (2013). *Pensions at a gance 2013: OECD and G20 indicators*. Organisation for Economic Co-operation and Development, OECD Publishing, doi: 10.1787/pension\_glance-2013-en.
- Organisation for Economic Co-operation and Development (2019). *Pensions at a glance 2019: OECD and G20 indicators*. Organisation for Economic Co-operation and Development, OECD Publishing.

- Palacios, R., Pallarès-Miralles, M. (2000). International patterns of pension provision (Social Protection Discussion Paper Series No. 0009). Social Protection Unit Human Development Network, The World Bank.
- Roll, S., Grinstein-Weiss, M., Kondratjeva, O., Bufe, S. (2023). Promoting Public Retirement Savings Accounts during Tax Filing: Evidence from a Field Experiment. *Journal of Pension Economics & Finance*, 22(1), 88-115.
- Sobeck, K., Breunig, R. (2019). The impact of government funded retirement contributions (matching) on the retirement savings behaviour of low and middle income individuals Kristen Sobeck and Robert Breunig Crawford School of Public Policy. Canberra: Australian National University.
- Takayama, N. (2017). Several Questions on Basic Ideas of the 1994 World Bank report "Averting the old age crisis", Cis discussion paper series 665, Center for Intergenerational Studies, Institute of Economic Research, Hitotsubashi University, 1-12.
- Troitsky, A., Spivak, R. (2013). Pension reform in Israel. *Public and Municipal Finance*, 2(1), 26-45.
- Whitehouse, E. (2007). Pensions panorama: Retirement-income systems in 53 countries. *The International Bank for Reconstruction and Development, The World Bank*, doi: 10.1787/9789264032118-en.
- Yin-Fah, B.C., Masud, J., Hamid, T.A., Paim, L. (2010). Financial Wellbeing of Older Peninsular Malaysians: A Gender Comparison. *Asian Social Science*, 6(3), 58-71, doi: 10.5539/ass.v6n3p58.

# SYSTEM EMERYTALNY W IZRAELU – PRZEGLĄD ROZWIĄZAŃ

### Streszczenie

Systemy emerytalne poszczególnych krajów różnią się, co wynika z odmiennych gospodarek, populacji, dobrobytu, polityki ekonomicznej oraz skłonności obywateli do oszczędzania. W niniejszym artykule dokonano przegladu izraelskiego systemu emerytalnego, jego historii oraz obecnych i przyszłych wyzwań. W artykule wskazano zmiany od pierwszych rozporządzeń Związku Histadrut z "okresu przedpaństwowego", poprzez reformy prywatyzacyjne z 1985 r. wyłączające Histadrut z systemu opieki zdrowotnej i emerytalnej, aż po stabilizację systemu w 1995 r. W dalszej części autorzy artykułu opisują późniejsze działania rządu, w tym wprowadzenie zabezpieczenia emerytalnego uzależnionego od wieku i liczby lat trwania ubezpieczenia oraz wprowadzenie bezwzględnie obowiązującego prawa emerytalnego w 2008 r. Izraelski system emerytalny opiera się w głównie na obowiązkowych prywatnych oszczędnościach emerytalnych, co łagodzi długoterminowe skutki fiskalne. Biorąc pod uwage ważną role odgrywaną przez prywatne programy emerytalne oraz regresywny charakter niektórych przepisów podatkowych, głównym wyzwaniem reformy było osiagniecie zdolności systemu do skutecznej ochrony osób starszych oraz jego skuteczność w zabezpieczaniu i wycenie oszczędności emerytalnych w celu zagwarantowania adekwatności emerytur. Zapewnienie adekwatności emerytur i uwzględnienie ryzyka długowieczności wymaga odpowiedniego przygotowania poprzez promowanie dalszego wzrostu wskaźników zatrudnienia osób starszych, wzmocnienie ochronnej roli podstawowych emerytur i skuteczności zarządzania prywatnymi oszczędnościami emerytalnymi oraz poprawę sprawiedliwości i skuteczności drugiego filaru systemu. Opracowanie zawiera oceny autorów i refleksje na temat implikacji wyróżnionych zmian, co wzbogaca dyskusję na temat zalet i wad struktur systemu emerytalnego.

**Słowa kluczowe**: oszczędności emerytalne, systemy emerytalne, system emerytalny w Izraelu