PENSION SAVINGS
The Real Return

2019 Edition

BETTER FINANCE

The European Federation of Investors and Financial Services Users
Fédération Européenne des Épargnants et Usagers des Services Financiers

Pension Savings: The Real Return
2019 Edition

A Research Report by BETTER FINANCE

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Acronyms

AIF	Alternative Investment Fund
AMC	Annual Management Charges
AuM	Assets under Management
BE	Belgium
BG	Bulgaria
Bln	Billion
BPETR	‘Barclay’s Pan-European High Yield Total Return’ Index
CAC 40	‘Cotation Assistée en Continu 40’ Index
CMU	Capital Markets Union
DAX 30	‘Deutsche Aktieindex 30’ Index
DB	Defined Benefit plan
DC	Defined Contribution plan
DE	Germany
DG	Directorate General of the Commission of the European Union
DK	Denmark
DWP	United Kingdom’s Governmental Agency Department for Work and Pensions
EBA	European Banking Authority
EE	Estonia
EEE	Exempt-Exempt-Exempt Regime
EET	Exempt-Exempt-Tax Regime
ETF	Exchange-Traded Fund
EIOPA	European Insurance and Occupational Pensions Authority
ES	Spain
ESAs	European Supervisory Authorities
ESMA	European Securities and Markets Authority
EU	European Union
EURIBOR	Euro InterBank Offered Rate
EX	Executive Summary
FR	France
FSMA	Financial Services and Market Authority (Belgium)
FSUG	Financial Services Users Group - European Commission’s Expert Group
FTSE 100	The Financial Times Stock Exchange 100 Index
FW	Foreword

GDP	Gross Domestic Product
HICP	Harmonised Indices of Consumer Prices
IBEX 35	Índice Bursátil Español 35 Index
IKZE	'Indywidualne konto zabezpieczenia emerytalnego' – Polish specific Individual pension savings account
IRA	United States specific Individual Retirement Account
IT	Italy
JPM	J&P Morgan Indices
KIID	Key Investor Information Document
LV	Latvia
NAV	Net Asset Value
Mln	Million
MSCI	Morgan Stanley Capital International Indices
NL	Netherlands
OECD	The Organisation for Economic Co-Operation and Development
OFT	United Kingdom's Office for Fair Trading
PAYG	Pay-As-You-Go Principle
PIP	Italian specific 'Individual Investment Plan'
PL	Poland
PRIIP(s)	Packaged Retail and Insurance-Based Investment Products
RO	Romania
S&P	Standard & Poor Indexes
SE	Sweden
SK	Slovakia
SME	Small and Medium-sized Enterprise
SPIVA Scorecard	Standard & Poor Dow Jones' Indices Research Report on Active Management performances
TEE	Tax-Exempt-Exempt Regime
TCR/TER	Total Cost Ratio/ Total Expense Ratio
UCITS	Undertakings for the Collective Investment of Transferable Securities
UK	United Kingdom

Glossary of terms

Accrued benefits* – is the amount of accumulated pension benefits of a pension plan member on the basis of years of service.

Accumulated assets* – is the total value of assets accumulated in a pension fund.

Active member* – is a pension plan member who is making contributions (and/or on behalf of whom contributions are being made) and is accumulating assets.

AIF(s) – or Alternative Investment Funds are a form of collective investment funds under E.U. law that do not require authorization as a UCITS fund.[1]

Annuity* – is a form of financial contract mostly sold by life insurance companies that guarantees a fixed or variable payment of income benefit (monthly, quarterly, half-yearly, or yearly) for the life of a person(s) (the annuitant) or for a specified period of time. It is different than a life insurance contract which provides income to the beneficiary after the death of the insured. An annuity may be bought through instalments or as a single lump sum. Benefits may start immediately or at a pre-defined time in the future or at a specific age.

Annuity rate* – is the present value of a series of payments of unit value per period payable to an individual that is calculated based on factors such as the mortality of the annuitant and the possible investment returns.

Asset allocation* – is the act of investing the pension fund's assets following its investment strategy.

Asset management* – is the act of investing the pension fund's assets following its investment strategy.

Asset manager* – is(are) the individual(s) or entity(ies) endowed with the responsibility to physically invest the pension fund assets. Asset managers may also set out the investment strategy for a pension fund.

Average earnings scheme* – is a scheme where the pension benefits earned for a year depend on how much the member's earnings were for the given year.

Basic state pension* – is a non-earning related pension paid by the State to individuals with a minimum number of service years.

Basis points (bps) – represent the 100th division of 1%.

Benchmark (financial) – is a referential index for a type of security. Its aim is to show, customized for a level and geographic or sectorial focus, the general price or performance of the market for a financial instrument.

Beneficiary* – is an individual who is entitled to a benefit (including the plan member and dependants).

Benefit* – is a payment made to a pension fund member (or dependants) after retirement.

[1] See Article 4(1) of Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers and amending Directives 2003/41/EC and 2009/65/EC and Regulations (EC) No 1060/2009 and (EU) No 1095/2010, OJ L 174, 1.7.2011, p. 1–73.

Bonds – are instruments that recognize a debt. Although they deliver the same utility as bank loans, i.e. enabling the temporary transfer of capital from one person to another, with or without a price (interest) attached, bonds can be also be issued by non-financial institutions (States, companies) and by financial non-banking institutions (asset management companies). In essence, bonds are considered more stable (the risk of default is lower) and in theory deliver a lower, but fixed, rate of profit. Nevertheless, Table EX2 of the Executive Summary shows that the aggregated European Bond Index highly overperformed the equity one.

Closed pension funds* – are the funds that support only pension plans that are limited to certain employees. (e.g. those of an employer or group of employers).

Collective investment schemes – are financial products characterised by the pooling of funds (money or asset contributions) of investors and investing the total into different assets (securities) and managed by a common asset manager. Under E.U. law collective investment schemes are regulated under 6 different legal forms: UCITS (see below), the most common for individual investors; AIFs (see above), European Venture Capital funds (EuVECA), European Long-Term Investment Funds (ELTIFs), European Social Entrepreneurship Funds (ESEF) or Money Market Funds.[2]

Contribution* – is a payment made to a pension plan by a plan sponsor or a plan member.

Contribution base* – is the reference salary used to calculate the contribution.

Contribution rate* – is the amount (typically expressed as a percentage of the contribution base) that is needed to be paid into the pension fund.

Contributory pension scheme* – is a pension scheme where both the employer and the members have to pay into the scheme.

Custodian* – is the entity responsible, as a minimum, for holding the pension fund assets and for ensuring their safekeeping.

Defered member* – is a pension plan member that no longer contributes to or accrues benefits from the plan but has not yet begun to receive retirement benefits from that plan.

Deferred pension* – is a pension arrangement in which a portion of an employee's income is paid out at a date after which that income is actually earned.

Defined benefit (DB) occupational pension plans* – are occupational plans other than defined contributions plans. DB plans generally can be classified into one of three main types, "traditional", "mixed" and "hybrid" plans. These are schemes where "the pension payment is defined as a percentage of income and employment career. The employee receives a thus pre-defined pension and does not bear the risk of longevity and the risk of investment. Defined Benefits schemes may be part of an individual employment contract or collective agreement. Pension contributions are usually paid by the employee and the employer".[3]

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[2] See European Commission, 'Investment Funds' (28 August 2019) https://ec.europa.eu/info/business-economy-euro/growth-and-investment/investment-funds_en.

[3] Werner Eichhorst, Maarten Gerard, Michael J. Kendzia, Christine Mayrhruber, Connie Nielsen, Gerhard Runstler, Thomas Url, 'Pension Systems in the EU: Contingent Liabilities and

"Traditional" DB plan* – is a DB plan where benefits are linked through a formula to the members' wages or salaries, length of employment, or other factors.

"Hybrid" DB plan* – is a DB plan where benefits depend on a rate of return credited to contributions, where this rate of return is either specified in the plan rules, independently of the actual return on any supporting assets (e.g. fixed, indexed to a market benchmark, tied to salary or profit growth, etc.), or is calculated with reference to the actual return of any supporting assets and a minimum return guarantee specified in the plan rules.

"Mixed" DB plan* – is a DB plans that has two separate DB and DC components, but which are treated as part of the same plan.

Defined contribution (DC) occupational pension plans* – are occupational pension plans under which the plan sponsor pays fixed contributions and has no legal or constructive obligation to pay further contributions to an ongoing plan in the event of unfavorable plan experience. These are schemes where "the pension payment depends on the level of defined pension contributions, the career and the returns on investments. The employee has to bear the risk of longevity and the risk of investment. Pension contributions can be paid by the employee and/or the employer and/or the state".[4]

Dependency ratio* – are occupational pension plans under which the plan sponsor pays fixed contributions and has no legal or constructive obligation to pay further contributions to an ongoing plan in the event of unfavourable plan experience.

Early retirement* – is a situation when an individual decides to retire earlier later and draw the pension benefits earlier than their normal retirement age.

Economic dependency ratio* – is the division between the number of inactive (dependent) population and the number of active (independent or contributing) population. It ranges from 0% to 100% and it indicates how much of the inactive population's (dependent) consumption is financed from the active population's (independent) contributions.[5] In general, the inactive (dependent) population is represented by children, retired persons and persons living on social benefits.

EET system* – is a form of taxation of pension plans, whereby contributions are exempt, investment income and capital gains of the pension fund are also exempt, and benefits are taxed from personal income taxation.

Equity (or stocks/shares) – are titles of participation to a publicly listed company's economic activity. With regards to other categorizations, an equity is also a security, a financial asset or, under E.U. law, a transferable security.[6]

Assets in the Public and Private Sector' EP Directorate General for Internal Policies IP/A/ECON/ST/2010-26.

[4] Ibid.

[5] For more detail on the concept, see Elke Loichinger, Bernhard Hammer, Alexia Prskawetz, Michael Freiberger, Joze Sambt, 'Economic Dependency Ratios: Present Situation and Future Scenarios' MS13 Policy Paper on Implications of Population Ageing for Transfer Systems, Working Paper no. 74, 18th December 2014, 3.

[6] Article 4(44) of Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU, OJ L 173, p. 349–496 (MiFID II).

ETE system* – is a form of taxation whereby contributions are exempt, investment income and capital gains of the pension fund are taxed, and benefits are also exempt from personal income taxation.

ETF(s) – or Exchange-Traded Funds are investment funds that are sold and bought on the market as an individual security (such as shares, bonds). ETFs are structured financial products, containing a basket of underlying assets, and are increasingly more used due to the very low management fees that they entail.

Fund member* – is an individual who is either an active (working or contributing, and hence actively accumulating assets) or passive (retired, and hence receiving benefits), or deferred (holding deferred benefits) participant in a pension plan.

Funded pension plans* – are occupational or personal pension plans that accumulate dedicated assets to cover the plan's liabilities.

Funding ratio (funding level) * – is the relative value of a scheme's assets and liabilities, usually expressed as a percentage figure.

Gross rate of return* – is the rate of return of an asset or portfolio over a specified time period, prior to discounting any fees of commissions.

Gross/net replacement rate – is the ratio between the pre-retirement gross or net income and the amount of pension received by a person after retirement. The calculation methodology may differ from source to source as the average working life monthly gross or net income can used to calculate it (divided by the amount of pension) or the past 5 year's average gross income etc. (see below **OECD net replacement rate**).

Group pension funds* – are multi-employer pension funds that pool the assets of pension plans established for related employers.

Hedging and hedge funds – while hedging is a complex financial technique (most often using derivatives) to protect or reduce exposure to risky financial positions or to financial risks (for instance, currency hedging means reducing exposure to the volatility of a certain currency), a hedge fund is an investment pool that uses complex and varying investment techniques to generate profit.

Indexation* – is the method with which pension benefits are adjusted to take into account changes in the cost of living (e.g. prices and/or earnings).

Individual pension plans* – is a pension fund that comprises the assets of a single member and his/her beneficiaries, usually in the form of an individual account.

Industry pension funds* – are funds that pool the assets of pension plans established for unrelated employers who are involved in the same trade or businesses.

Mandatory contribution* – is the level of contribution the member (or an entity on behalf of the member) is required to pay according to scheme rules.

Mandatory occupational plans* – Participation in these plans is mandatory for employers. Employers are obliged by law to participate in a pension plan. Employers must set up (and make contributions to) occupational pension plans which employees will normally be required to join. Where employers are obliged to offer an occupational pension plan, but the employees' membership is on a voluntary basis, these plans are also considered mandatory.

Mandatory personal pension plans* - are personal plans that individuals must join or which are eligible to receive mandatory pension contributions. Individuals may be required to make pension contributions to a pension plan of their choice normally within a certain range of choices or to a specific pension plan.

Mathematical provisions (insurances) – or *mathematical reserves* or *reserves*, are the value of liquid assets set aside by an insurance company that would be needed to cover all current liabilities (payment obligations), determined using actuarial principles.

Minimum pension* – is the minimum level of pension benefits the plan pays out in all circumstances.

Mixed indexation* – is the method with which pension benefits are adjusted taking into account changes in both wages and prices.

Money market instruments – are short-term financial products or positions (contracts) that are characterized by the very high liquidity rate, such as deposits, shor-term loans, repo-agreements and so on.

MTF – multilateral trading facility, is the term used by the revised Markets in Financial Instruments Directive (MiFID II) to designate securities exchanges that are not a regulated market (such as the London Stock Exchange, for example).

Multi-employer pension funds* – are funds that pool the assets of pension plans established by various plan sponsors. There are three types of multi-employer pension funds:

a) for related employers i.e. companies that are financially connected or owned by a single holding group (group pension funds);
b) for unrelated employers who are involved in the same trade or business (industry pension funds);
c) for unrelated employers that may be in different trades or businesses (collective pension funds).

NAV – Net Asset Value, or the amount to which the market capitalisation of a financial product (for this report, pension funds' or insurance funds' holdings) or a share/unit of it arises at a given point. In general, the Net Asset Value is calculated per unit or share of a collective investment scheme using the daily closing market prices for each type of security in the portfolio.

Net rate of return* – is the rate of return of an asset or portfolio over a specified time period, after discounting any fees of commissions.

Normal retirement age* – is the age from which the individual is eligible for pension benefits.

Non-contributory pension scheme* – is a pension scheme where the members do not have to pay into scheme.

Occupational pension plans* – access to such plans is linked to an employment or professional relationship between the plan member and the entity that establishes the plan (the plan sponsor). Occupational plans may be established by employers or groups of thereof (e.g. industry associations) and labour or professional associations, jointly or separately. The plan may be administrated directly by the plan sponsor or by an independent entity (a pension fund or a financial institution acting as pension provider). In the latter case, the plan sponsor may still have oversight responsibilities over the operation of the plan.

OECD gross replacement rate - is defined as gross pension entitlement divided by gross pre-retirement earnings. It measures how effectively a pension system provides a retirement income to replace earnings, the main source of income before retirement. This indicator is measured in percentage of pre-retirement earnings by gender.

OECD net replacement rate - is defined as the individual net pension entitlement divided by net pre-retirement earnings, taking into account personal income taxes and social security contributions paid by workers and pensioners. It measures how effectively a pension system provides a retirement income to replace earnings, the main source of income before retirement. This indicator is measured in percentage of pre-retirement earnings by gender.

Old-age dependency ratio - defined as the ratio between the total number of elderly persons when they are generally economically inactive (aged 65 and above) and the number of persons of working age.[7] It is a sub-indicator of the economic dependency ratio and focuses on a country's public (state) pension system's reliance on the economically active population's pensions (or social security) contributions. It is a useful indicator to show whether a public (Pillar I) pension scheme is under pressure (when the ratio is high, or the number of retirees and the number of workers tend to be proportionate) or relaxed (when the ratio is low, or the number of retirees and the number of workers tend to be disproportionate). For example, a low old-age dependency ratio is 20%, meaning that 5 working people contribute for one retiree's pension.

Open pension funds* – are funds that support at least one plan with no restriction on membership.

Pension assets* – are all forms of investment with a value associated to a pension plan.

Pension fund administrator* – is(are) the individual(s) ultimately responsible for the operation and oversight of the pension fud.

Pension fund governance* – is the operation and oversight of a pension fund. The governing body is responsible for administration, but may employ other specialists, such as actuaries, custodians, consultants, asset managers and advisers to carry out specific operational tasks or to advise the plan administration or governing body.

Pension fund managing company* – is a type of administrator in the form of a company whose exclusive activity is the administration of pension funds.

Pension funds* – the pool of assets forming an independent legal entity that are bought with the contributions to a pension plan for the exclusive purpose of financing pension plan benefits. The plan/fund members have a legal or beneficial right or some other contractual claim against the assets of the pension fund. Pension funds take the form of either a special purpose entity with legal personality (such as a trust, foundation, or corporate entity) or a legally separated fund without legal personality managed by a dedicated provider (pension fund management company) or other financial institution on behalf of the plan/fund members.

Pension insurance contracts* – are insurance contracts that specify pension plans contributions to an insurance undertaking in exchange for which the pension plan benefits will be paid when the members reach a specified retirement age or on earlier exit of members from the plan. Most countries limit the integration of pension plans only into pension funds, as the financial vehicle of the pension plan. Other countries also consider the pension insurance contract as the financial vehicle for pension plans.

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[7] See Eurostat definition: http://ec.europa.eu/eurostat/web/products-datasets/product?code=tsdde511.

Pension plan* – is a legally binding contract having an explicit retirement objective (or – in order to satisfy tax-related conditions or contract provisions – the benefits can not be paid at all or without a significant penalty unless the beneficiary is older than a legally defined retirement age). This contract may be part of a broader employment contract, it may be set forth in the plan rules or documents, or it may be required by law. In addition to having an explicit retirement objective, pension plans may offer additional benefits, such as disability, sickness, and survivors' benefits.

Pension plan sponsor* – is an institution (e.g. company, industry/employment association) that designs, negotiates, and normally helps to administer an occupational pension plan for its employees or members.

Pension regulator* – is a governmental authority with competence over the regulation of pension systems.

Pension supervisor* – is a governmental authority with competence over the supervision of pension systems.

Personal pension plans* - Access to these plans does not have to be linked to an employment relationship. The plans are established and administered directly by a pension fund or a financial institution acting as pension provider without any intervention of employers. Individuals independently purchase and select material aspects of the arrangements. The employer may nonetheless make contributions to personal pension plans. Some personal plans may have restricted membership.

Private pension funds* – is a pension fund that is regulated under private sector law.

Private pension plans* – is a pension plan administered by an institution other than general government. Private pension plans may be administered directly by a private sector employer acting as the plan sponsor, a private pension fund or a private sector provider. Private pension plans may complement or substitute for public pension plans. In some countries, these may include plans for public sector workers.

Public pension plans* – are pensions funds that are regulated under public sector law.

Public pension plans* – are the social security and similar statutory programmes administered by the general government (that is central, state, and local governments, as well as other public sector bodies such as social security institutions). Public pension plans have been traditionally PAYG financed, but some OECD countries have partial funding of public pension liabilities or have replaced these plans by private pension plans.

Rate of return* – is the income earned by holding an asset over a specified period.

REIT(s) or Real Estate Investment Trust(s) is the most common acronym and terminology used to designate special purpose investment vehicles (in short, companies) set up to invest and commercialise immovable goods (real estate) or derived assets. Although the term comes from the U.S. legislation, in the E.U. there are many forms of REITs, depending on the country since the REIT regime is not harmonised at E.U. level.

Replacement ratio* – is the ratio of an individual's (or a given population's) (average) pension in a given time period and the (average) income in a given time period.

Service period* – is the length of time an individual has earned rights to a pension benefits.

Single employer pension funds* – are funds that pool the assets of pension plans established by a single sponsor.

Supervisory board* – is(are) the individual(s) responsible for monitoring the governing body of a pension entity.

System dependency ratio* – typically defined as the ratio of those receiving pension benefits to those accruing pension rights.

TEE system* – is a form of taxation of pension plans whereby contributions are taxed, investment income and capital gains of the pension fund are exempt, and benefits are also exempt from personal income taxation.

Trust* – is a legal scheme, whereby named people (termed trustees) hold property on behalf of other people (termed beneficiaries).

Trustee* – is a legal scheme, whereby named people (termed trustees) hold property on behalf of other people (termed beneficiaries).

UCITS – or Undertakings for Collective Investment in Transferable Securities, is the legal form under E.U. law for mutual investment funds that are open to pool and invest funds from any individual or institutional investor, and are subject to specific authorisation criteria, investment limits and rules. The advantage of UCITS is the general principle of home-state authorisation and mutual recognition that applies to this kind of financial products, meaning that a UCITS fund established and authorised in one E.U. Member State can be freely distributed in any other Member State without any further formalities (also called *E.U. fund passporting*).

Unfunded pension plans* – are plans that are financed directly from contributions from the plan sponsor or provider and/or the plan participant. Unfunded pension plans are said to be paid on a current disbursement method (also known as the pay as you go, PAYG, method). Unfunded plans may still have associated reserves to cover immediate expenses or smooth contributions within given time periods. Most OECD countries do not allow unfunded private pension plans.

Unprotected pension plan* – is a plan (personal pension plan or occupational defined contribution pension plan) where the pension plan/fund itself or the pension provider does not offer any investment return or benefit guarantees or promises covering the whole plan/fund.

Voluntary contribution – is an extra contribution paid in addition to the mandatory contribution a member can pay to the pension fund in order to increase the future pension benefits.

Voluntary occupational pension plans - The establishment of these plans is voluntary for employers (including those in which there is automatic enrolment as part of an employment contract or where the law requires employees to join plans set up on a voluntary basis by their employers). In some countries, employers can on a voluntary basis establish occupational plans that provide benefits that replace at least partly those of the social security system. These plans are classified as voluntary, even though employers must continue sponsoring these plans in order to be exempted (at least partly) from social security contributions.

Voluntary personal pension plans* – Participation in these plans is voluntary for individuals. By law individuals are not obliged to participate in a pension plan. They are not required to make pension contributions to a pension plan. Voluntary personal plans include those plans that individuals must join if they choose to replace part of their social security benefits with those from personal pension plans.

Wage indexation* – is the method with which pension benefits are adjusted taking into account changes in wages.

Waiting period* – is the length of time an individual must be employed by a particular employer before joining the employer's pension scheme.

Winding-up* – is the termination of a pension scheme by either providing (deferred) annuities for all members or by moving all its assets and liabilities into another scheme.

World Bank multi-pillar model – is the recommended design, developed by the World Bank in 1994, for States that had pension systems inadequately equipped to (currently and forthcoming) sustain a post-retirement income stream for future pensioners and alleviate the old-age poverty risk. Simpler, it is a set of guidelines for States to either enact, reform or gather legislation regulating the state pension and other forms of retirement provisions in a form that would allow an increased workers' participation, enhance efficiency for pension savings products and a better allocation of resources under the principle of solidarity between generations.

The standard design of a robust pension system would rely on five pillars:

a) the non-contributory scheme (pillar 0), through which persons who do not have an income or do not earn enough would have insured a minimum pension when reaching the standard retirement age;

b) the public mandatory, Pay-As-You-Go (PAYG) scheme (**Pillar I**), gathering and redistributing pension contributions from the working population to the retirees, while accumulating pension rights (entitlements) for the future retirees;

c) the mandatory funded and (recommended) privately managed scheme (**Pillar II**), where workers' contributions are directed to their own accumulation accounts in privately managed investment products;

d) the voluntary privately managed retirement products (**Pillar III**), composed of pension savings products to which subscription is universal, contributions and investments are deregulated and tax-incentivised;

e) the non-financial alternative aid scheme (pillar IV), through which the state can offer different forms of retirement support – such as housing or family support. Albeit the abovementioned, the report focuses on the "*main pillars*", i.e. Pillar I, II and III, since they are the most significant (and present everywhere) in the countries that have adopted the multi-pillar model.

Definitions with "*" are taken from OECD's Pensions Glossary - http://www.oecd.org/daf/fin/private-pensions/38356329.pdf.

Contributors

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Edoardo Carlucci is Research and Policy Officer at Better Finance. He obtained a bachelor's degree in Economics, Finance and Management with Law at Sapienza University of Rome. In 2014, he graduated from the ULB University with a master's degree in European Studies with Economic Specialization. He previously worked in the European Institutions and Civil Society Organizations dealing with various aspects of economic issues and policies such as EU Internal Market, EU Competition Policies, Public Procurement and SMEs.

Lubomir Christoff, PhD, ChFC is co-founder and Chairman of the Institute of Certified Financial Consultants (ICFC) in Bulgaria, the only non-governmental body in Bulgaria granting financial planning certification to individuals. Christoff was a member of the Securities Markets Stakeholder Group at ESMA (European Securities & Markets Authority). Previously he has served as an Advisor to the Executive Director of the World Bank and Chief Economist of the Bulgarian National Bank.

Michaël Deinema is Chief Commercial Officer and analyst at The Pension Rating Agency (TPRA) based in Amsterdam, The Netherlands. Before joining TPRA in 2015, Michaël worked as postdoctoral researcher and lecturer at the Social and Behavioral Sciences faculty of the University of Amsterdam. He holds a PhD degree in Spatial Sciences (Economic and Social Geography). The Pension Rating Agency (TPRA) is an independent data service firm, benchmarker and rating agency for the Dutch collective pensions sector. It was founded in 2014 as a joint venture by MoneyView, a renowned research agency which focuses on financial retail products, and the econometricians of Broiler. TPRA systematically gathers, utilizes and analyzes publicly available data on Dutch pension funds and pension schemes. It produces annual reports on operating costs, investment charges, returns, cover ratios and trustee compensations which are used by Dutch pension funds, pension service providers, life insurance companies and media outlets. TPRA also publishes The Netherlands' only comprehensive and independent Quality Rating for Pension Schemes.

Laetitia Gabaut is an economist who graduated from the Toulouse School of Economics. She joined the European Savings Institute in 2010, where she is in charge of the "Overview of Savings" publication. She has been involved in European projects related to savers' behaviour and to retirement savings.

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Aleksandra Mączyńska is the Executive Director of BETTER FINANCE. She is a member of the EC Financial Services User Group (FSUG) and she was recently appointed by EIOPA as a member of its Occupational Pensions Stakeholder Group (OPSG). Previously she worked for the Polish consumer and competition watchdog and was an expert on various EU Council Working Parties such as the WP on Financial Services and the WP on Competition.

Alessandra Manis is Research Assistant at BETTER FINANCE and holds a master's degree in law, obtained from the University of Cagliari in Italy. She completed her studies with an in-depth look at "Consumer Protection in the sale of Financial Instruments". She was admitted to the Italian Bar and has prior professional experience in the field of banking, insurance and consumer law. She worked as a junior associate in a boutique law firm boutique specialized in banking and insurance law, carrying out both contentious and non-contentious activities.

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Pension Savings: The Real Return

2019 Edition

Country Case: Poland

Streszczenie

Dodatkowy system emerytalny w Polsce, który został wprowadzony w 1999 roku, a następnie był kilkukrotnie reformowany (główne zmiany w 2004, 2012 oraz 2018 roku), jest nadal w początkowej fazie rozwoju. Obecnie składa się z czterech elementów:

- pracowniczych programów emerytalnych (PPE),
- indywidualnych kont emerytalnych (IKE) indywidualnych kont zabezpieczenia emerytalnego (IKZE) oraz pracowniczych planów kapitałowych (PPK funkcjonujących od 1 lipca 2019 r.);
- poziom uczestnictwa w grupowych i indywidualnych planach oszczędzania na starość (odpowiednio 2,6%, 5,8% i 4,3%) wskazuje, że bardzo nieliczna część Polaków zdecydowała się na oszczędzanie w oferowanych zinstytucjonalizowanych formach gromadzenia kapitału na starość.

PPE mogą być prowadzone w czterech formach: umowy z funduszem inwestycyjnym; umowy z zakładem ubezpieczeń na życie (grupowe ubezpieczenia na życie z ubezpieczeniowym funduszem kapitałowym); pracowniczego funduszu emerytalnego (PFE) lub zarzadzania zewnętrznego. Na koniec 2018 roku w PPE zgromadzono 12,8 mld zł (2,98 mld €).

PPK mogą być oferowane w formie funduszu inwestycyjnego, funduszu emerytalnego i ubezpieczeniowego funduszu kapitałowego (UFK). Ta forma dodatkowych planów emerytalnych została dopiero wprowadzona, tj. funkcjonuje od 1 lipca 2019 r.

IKE i IKZE mogą być oferowane w formie: ubezpieczenia na życie z ubezpieczeniowym funduszem kapitałowym; funduszu inwestycyjnego; rachunku papierów wartościowych w domu maklerskim; rachunku bankowego lub dobrowolnego funduszu emerytalnego (DFE). Aktywa zgromadzone na IKE i IKZE na koniec 2018 roku wyniosły odpowiednio 8,7 mld zł (2,02 mld €) oraz 2,3 mld zł (0,53 mld €).

Pracownicze programy emerytalne (PPE), pracownicze plany kapitałowe (PPK) i indywidualne konta emerytalne (IKE) funkcjonują w reżimie podatkowym TEE (podatek pobierany jest na etapie opłacania składki), podczas gdy w IKZE podatek pobierany jest na etapie wypłaty środków (reżim EET).

W analizowanym okresie (2002-2018) pracownicze fundusze emerytalne (PFE) wypracowały dość wysokie stopy zwrotu sięgające 17,41% w skali roku. Straty pojawiły się jednak w latach 2008, 2011, 2015 i 2018 w czasie załamania na rynkach finansowych. Realne stopy zwrotu uwzględniające opłaty osiągnięte w 13 z 17 lat są pozytywne. Średnia realna stopa zwrotu za cały analizowany okres wyniosła 3,88%.

Dobrowolne fundusze emerytalne (DFE) osiągnęły natomiast nadzwyczajne wyniki inwestycyjne w początkowym okresie funkcjonowania, głównie z uwagi na hossę na rynku akcji w pierwszym roku ich działalności. W 2013 roku najlepsze DFE wygenerowały nominalny zysk przekraczający 50%. Wyniki te nie zostały jednak powtórzone w kolejnych latach. W 2014 roku część DFE wykazała straty, które jednak zostały pokryte przez zyski w kolejnych latach. Średnia realna stopa zwrotu z uwzględnieniem opłat za lata 2013-2018 wyniosła 5,22%.

Summary

Starting in 1999, with significant changes introduced in 2004, 2012 and 2018, the Polish supplementary pension market is still in its early stage of operation. Pillar III, which supplements the basic, mandatory pension system, consists of four different elements:

- employee (occupational) pension programmes (*pracownicze programy emerytalne*, PPE), 2) individual retirement accounts (*indywidualne konta emerytalne*, IKE);
- individual retirement savings accounts (*indywidualne konta zabezpieczenia emerytalnego*, IKZE) and
- employee capital plans (*pracownicze plany kapitałowe*, PPK).

The coverage ratios (2.6%, 5.8% and 4.3% respectively), show that only a small part of Poles decided to secure their future in old-age by joining the occupational pension plan or purchasing individual pension products.

PPE can be offered in four forms: a contract with an asset management company (investment fund); a contract with a life insurance company (group unit-linked insurance); an employee pension fund run by the employer (*pracowniczy fundusz emerytalny*, PFE) or external management. PPE assets amounted to PLN 12.8 bln (€2.98 bln) at the end of 2018.

PPK can operate as investment funds, pension funds or o unit-linked life insurance. These plans have just started to collect money (introduced in July 2019).

IKE and IKZE can operate in the form of either: a unit-linked life insurance contract; an investment fund; an account in a brokerage house; a bank account (savings account) or a voluntary pension fund (*dobrowolny fundusz emerytalny*, DFE). The total amount of IKE assets amounted to PLN 8.7 billion (€2.02 billion) and IKZE assets amounted to PLN 2.3 billion (€0.53 billion) at the end of 2018.

PPE, PPK and IKE operate in TEE tax regime while IKZE is run in EET one.

During the period of 2002-2018 employee pension funds (PFE) showed rather positive returns up to 17.41% annually. Negative results appeared only in the years 2008, 2011, 2015 and 2018 when equity markets dropped significantly. After-charges real returns were observed in 13 of 17 years and the average return over the 17-year period is highly positive as well (3.88%).

Voluntary pensions funds (DFE) have obtained extraordinary investment results from their start in 2012. The first years of their operation coincided with the Polish financial market recovery and allowed funds to maximise rates of return from the equity portfolios. The best DFEs reported more than 50% nominal return in 2013. But such returns were impossible to achieve in next years. In 2014, some of DFE even experienced slightly negative returns that were covered by returns in the following years. The average real rate of return after charges in years 2013-2018 amounted to 5.22%.

Introduction

The old-age pension system in Poland was introduced in 1999 as a multi-tier structure consisting with three main elements:

- Pillar I - a mandatory, Pay-as-You-Go (PAYG) system;
- Pillar II - a mandatory PAYG system with a partial opt-out for funded pension funds; and
- Pillar III - voluntary, occupational and individual pension plans.

Table PL1. Multi-pillar pension system in Poland		
Pillar I	Pillar II	Pillar III
Mandatory	Mandatory[211]	Voluntary[212]
PAYG	PAYG/Funded (opt-out)	Funded
NDC	NDC/DC (opt-out)	DC
Basic benefit	Basic benefit	Complementary benefit
Publicly managed:	Publicly/Privately managed:	Privately managed:
Social Insurance Institution (ZUS)	Social Insurance Institution (ZUS); in opt-out element: Open Pension Funds (OFEs) Managed by Pension Societies (PTEs)	Pension savings managed by different financial institutions, depending on the product form, organised by an employer or an individual

Source: own elaboration based on: System emerytalny w Polsce, Izba Gospodarcza Towarzystw Emerytalnych, http://www.igte.pl/images/tabela1_system.png

Summary return table - Polish pension funds				
Polish Employee Pension Funds (PFE)				
1 year	3 years	5 years	7 years	10 years
2018	2016-2018	2014-2018	2012-2018	2009-2018
-1.47%	3.40%	2.28%	4.24%	5.01%
Voluntary Pension Funds (DFE)				
1 year	3 years	5 years	7 years	maximum
2018	2016-2018	2014-2018	2012-2018	2009-2018
-13.00%	-1.13%	-0.06%	n.a.	5.22%

Source: Table PL17

The first part of the system is contributory and is based on a Non-financial Defined Contribution (NDC) formula. The total pension contribution rate amounts to 19.52% of gross wage (Pillar I + Pillar II) and the premium is financed equally by employer and employee. Out of the total pension contribution rate, 12.22 p.p. are transferred to Pillar I (underwritten on individual accounts of the insured), and 7.3 p.p. to Pillar II. If a person has not opted out for open pension funds (OFE), the total of 7.3 p.p. is recorded on a sub-account administered by the Social Insurance Institution (NDC system). If he/she has opted out for the funded element

[211] The second pillar is still mandatory, although open pension funds (OFE) have been made voluntary since 2014 (partial opt-out for funded system).
[212] Employee capital plans (PPK) use auto-enrollment mechanism.

(open pension funds, OFE), 4.38 p.p. are recorded on a sub-account and 2.92 p.p. are allocated to an account in a chosen open pension fund.[213]

Pillar I is managed by the Social Insurance Institution (ZUS), which records quotas of contributions paid for every member on individual insurance accounts. The accounts are indexed every year by the rate of inflation and by the real growth of the social insurance contribution base. The balance of the account (pension rights) is switched into pension benefits when an insured person retires.

Pillar II of the Polish pension system consists of sub-accounts also administered by the Social Insurance Institution (NDC) and possible partial opt-out for open pension funds (*otwarte fundusze emerytalne*, OFE; funded system). An insured person who enters the labour market has the right to choose whether to join an OFE or whether to remain solely in the PAYG system. When the insured chooses to contribute to the OFE, 2.92% of his/her gross salary will be invested on financial markets. If no such decision is taken, his/her total old-age pension contribution will automatically be transferred to Social Insurance Institution (ZUS). This default option resulted in a huge decrease in OFEs´ active participation in the year 2014.

Polish open pension funds are frequently treated as typical private pension plans (OECD 2012) or even employer-arranged pension funds (Oxera 2013) when presented in global private pension funds statistics. Such an assessment is incorrect in the sense that neither the employer nor the employee can decide on the creation of the pension plan. Moreover, the law establishes the contribution level and guarantees minimum pension benefits that are paid together from the whole basic system by the public institution (ZUS). Thus, Polish OFEs are just a mechanism of temporary investing public pension system resources in financial markets (financial vehicles for the accumulation phase).

The statutory retirement age is 60 for women and 65 for men.[214] Prior to retirement the member's assets gathered in OFE (if one opted out for funded element) are transferred to

[213] Two years after the change in 2014 that made OFE's voluntary the insured could again decide about opt-out. In future "the transfer window" is open every four years.

[214] It started to increase in 2013 and was planned to reach 67 for both men and women (in 2020 for men and in 2040 for women) but this reform was cancelled three years later. Hence, since October 2017 the statutory retirement age in Poland is again 60 for women and 65 for men. It may result in a situation where the significant proportion of women will get a minimum pension when retiring at the age of 60. More in: A. Chłoń-Domińczak, P. Strzelecki, 'The minimum pension as an instrument of poverty protection in the defined contribution pension system – an example of Poland' (2013) 12(3) Journal of Pension Economics and Finance.

the sub-account administered by ZUS.[215] Pension benefits from the basic system are calculated in accordance with a Defined Contribution (DC) rule and are paid by Social Insurance Institution (ZUS).

The old-age pension from the basic system (Pillar I+II) depends solely on two components: 1) the insured person's total pension entitlements accumulated during his/her entire career (balance of NDC account and sub-account), and 2) the average life expectancy upon retirement. The gross replacement rate at retirement from the public pension system in Poland is 61.4% (projections for 2016 for an average earner).[216]

Pillar III supplements the basic, mandatory pension system and represents voluntary, additional pension savings. It consists of four different vehicles:

- employee (occupational) pension programmes (*pracownicze programy emerytalne*, PPE);
- individual retirement accounts (*indywidualne konta emerytalne*, IKE);
- individual retirement savings accounts (*indywidualne konta zabezpieczenia emerytalnego*, IKZE),
- employee capital plans (*pracownicze plany kapitałowe*, PPK).

Employee pension programmes (*pracownicze programy emerytalne*, PPE) are plans organised by employers for their employees. PPE settlement happens after an employer agrees with the representatives of the employees on the plan's operational conditions, signs the contract on asset management with a financial institution (or decides to manage assets himself) and registers a programme with the Financial Supervisory Commission (Komisja Nadzoru Finansowego, KNF). The basic contribution (up to 7% of an employee's salary) is financed by the employer but an employee must pay personal income tax on this. Participants to the programme can pay in additional contributions deducted from their net (after-tax) salaries. There is a yearly quota limit for additional contribution amounting to 4.5 times the average wage (PLN 21,442.50 - €4,985[217] - in 2019). PPE's returns are exempt from

[215] Money gathered on individual accounts in OFE is systematically transferred to the Social Insurance Institution (ZUS) during 10 years before retirement (before reaching the statutory retirement age).

[216] European Commission, *The 2018 Ageing Report: Economic and Budgetary Projections for the EU Member States (2016-2070)*, Luxembourg, 2018, https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en.

[217] For the conversion of PLN to euros, the report uses the "Euro foreign exchange reference rates" provided by the European Central Bank (the exchange rate used for the data is the one of 31st December 2018: 1 EUR = PLN 4.3014),

capital gains tax. Benefits are not taxable and can be paid as a lump sum or as a programmed withdrawal after the saver reaches 60 years. PPEs cover 425,989 employees which represents only 2.6% of the working population in Poland.

Employee capital plans (*pracownicze plany kapitałowe*, PPK) are also organised by employers but they use auto-enrollment and matching defined contribution mechanisms. They started to operate in 2019 and their full implementation is staggered in accordance to the given below dates and depending on the company size:

- since 1 July 2019 – companies employing at least 250 people;
- since 1 January 2020 – companies with at least 50 employees,
- since 1 July 2020 – companies having at least 20 employees,
- since 1 January 2021 – remaining companies, including the entities financed from state budget.

The employee contribution amounts to 2-4% of the gross salary. The minimum matching contribution financed by employer is 1.5% of the gross salary but can be higher on a voluntary basis (up to 4%). People earning 120% or less of the average income can save less, namely minimum 0.5% of the gross salary. In order to encourage individuals to save in PPK, the state budget offers the PLN 250 kick-start payment (€ 58.12) and regular annual state subsidy amounting to PLN 240 (€55.80). The employee and employer contributions are taxed while the state subsidies remain exempt from taxation both at accumulation and decumulation stage. PPK's returns are exempt from capital gains tax. Benefits can be paid as a lump sum (max. 25% of the accumulated capital) and programmed withdrawal when a saver reaches 60 years. Savings can be partially withdrawn (25% of the capital) in the case of the serious disease of the saver, his/her spouse or a child. The accumulated money can be also borrowed from the account (100% of the capital) to finance an individual commitment when taking a mortgage.

Individual retirement accounts (*indywidualne konta emerytalne*, IKE) were introduced in 2004, offering people the possibility to save individually for retirement. They are offered by various financial institutions such as asset management companies, life insurers, brokerage houses, banks and pension societies. An individual can only gather money on one retirement account at the time but is free to change the form and the institution during the accumulation phase. Contributions are paid from the net salary with a ceiling of 3 times the average wage (PLN 14,295 - €3,323.34 - in 2019). Returns are exempt from capital gains tax and the benefits are not subject to taxation. When a saver reaches 60 years of age (or 55 years, if he/she is entitled by law to retire early), money is paid in the form of a lump sum or

https://www.ecb.europa.eu/stats/policy_and_exchange_rates/euro_reference_exchange_rates/html/eurofxref-graph-pln.en.html a programmed withdrawal. At the end of 2018 only 995,651 Polish citizens had an individual retirement account (IKE) which represents 5.8% of the working population

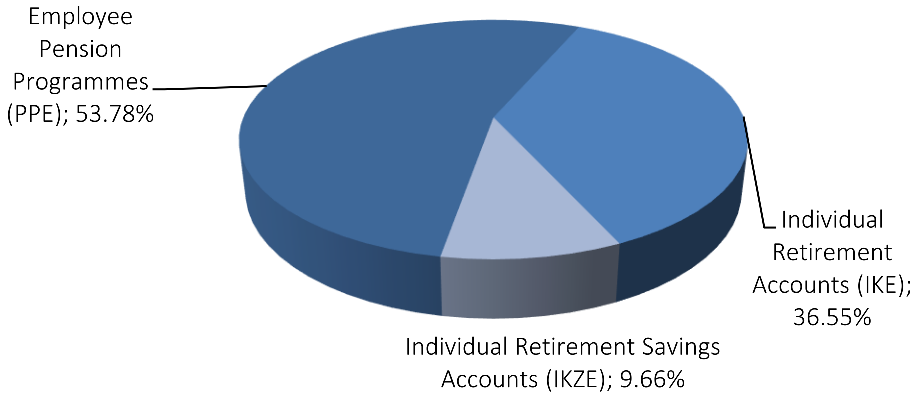
Individual retirement savings accounts (*indywidualne konta zabezpieczenia emerytalnego*, IKZE) started to operate in 2012 and are offered in the same forms as individual retirement accounts (IKE) but have other contribution ceilings and offer a different form of tax relief. Premiums paid to the account can be deducted from the personal income tax base. Contributions and returns are exempt from taxation, but the benefits are subject to taxation at a reduced rate. Savings accumulated in IKZE are paid to the individual as a lump sum or via a programmed withdrawal after the saver reaches the age of 65. The limit for IKZE contributions is 120% of the average wage (PLN 5,718 - €1,329.33 in 2019). Only about 4.3% of the Polish working population (2018) is covered by this type of supplementary old-age provision.

Table PL2. Architecture of voluntary pension system in Poland (Pillar III) at the end of 2018

Pension system element	Employee Pension Programmes (PPE)	Employee capital plans (PPK)*	Individual Retirement Accounts (IKE)	Individual Retirement Savings Accounts (IKZE)
Type of pension vehicle	· Unit-linked life insurance · Investment fund · Employee pension fund	· Unit-linked life insurance · Investment fund · Pension fund	· Unit-linked life insurance · Investment fund · Account in the brokerage house · Bank account · Voluntary pension fund	· Unit-linked life insurance · Investment fund · Account in the brokerage house · Bank account · Voluntary pension fund
AuM (PLNbln € bln	12.8	n.a.	8.7	2.3
	(2.98)	n.a.	(2.02)	(0.53)

*These vehicles started to operate in 2019.
Source: own collaboration based on: *Pracownicze programy emerytalne w 2018 roku, UKNF, Warszawa 2019*; *Indywidualne konta emerytalne oraz indywidualne konta zabezpieczenia emerytalnego w 2018 roku*, UKNF, Warszawa 2019.

Chart PL3. Market share of Polish voluntary pension system elements by assets under management as of 31 December 2018



Source: own collaboration based on: *Pracownicze programy emerytalne w 2018 roku, UKNF, Warszawa 2019*; *Indywidualne konta emerytalne oraz indywidualne konta zabezpieczenia emerytalnego w2018 roku*, UKNF, Warszawa 2019,'

The efficiency of the supplementary old-age pension system in Poland is rather satisfactory when considering the operation of voluntary pension funds (DFE) and employee pension funds (PFE, a form of PPE). Since inception they offered a positive nominal annual rate of return amounting to 8.16% and 6.36% respectively.

Pension Vehicles

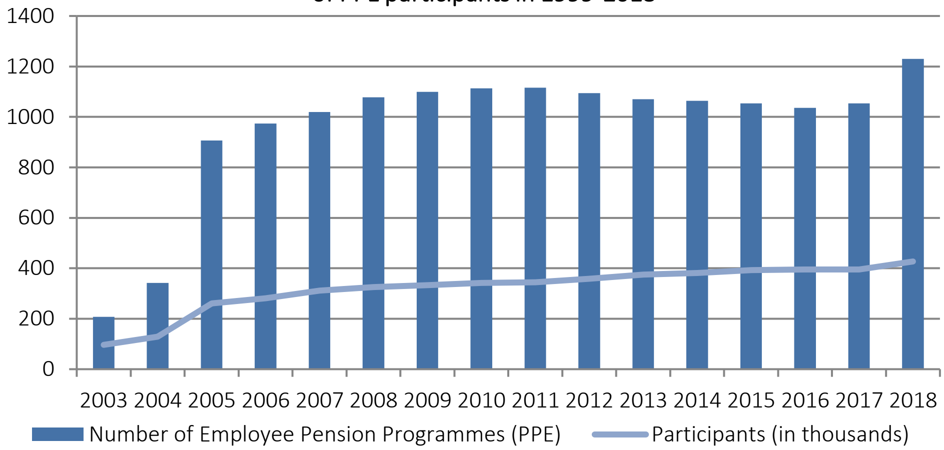
Employee pension programmes

PPEs can be offered in four forms:

- as a contract with an asset management company (investment fund);
- as a contract with a life insurance company (group unit-linked insurance);
- as an employee pension fund run by the employer; or
- through external management.

Employee pension programmes started to operate in 1999. The development of the market was very weak during the first five years of operation. Thereafter, due to changes in PPE law, many group life insurance contracts were transformed into PPEs at the end of 2004 and in 2005. In 2007, the number of programmes reached 1,000, with the size of the market remaining more or less the same since that year. There were 1,230 programmes operating in Poland at the end of 2018 (see Graph PL4 below).

Graph PL4. Number of Employee Pension Programmes and the number of PPE participants in 1999-2018



<u>Source</u>: *Pracownicze programy emerytalne w 2018 roku*, UKNF, Warszawa 2019,

The most popular forms of PPE are group unit-linked life insurances and investment funds. These two forms represent 98% of PPEs (see table below). The proportion is lower when taking into consideration the number of participants (92.2%) and the level of assets (85.9% of total PPEs' assets are invested in insurance funds and investment funds).

Table PL5. Number and assets of Employee Pension Programmes (PPE) by form of the programme in 2018

	Number of PPE	Market share (as % of PPE number)	Market share (as % of participants)	Assets (PLN million)	Market share (as % of PPE assets)
Unit-linked life insurance	623	50.7%	25.4%	3333	26.0%
Investment fund	582	47.3%	66.8%	7669	59.9%
Employee Pension Fund	25	2.0%	7.8%	1800	14.1%
Total	**1230**			**12802**	

Source: Pracownicze programy emerytalne w 2018 roku, UKNF, Warszawa 2019

The average basic contribution for the whole year paid in 2018 amounted to PLN 4,070.4 (€946.30). The average additional contribution financed by the employee amounted to PLN 1,252.60 (€291.21) on average. PPE assets amounted to PLN 12.8 bln (€2.98 bln) and the average account balance equaled PLN 31,156 (€ 7,243.22) at the end of 2018. No data is available on the average percentage level of contributions paid to the programmes.

Employee capital plans (PPK)

Employee capital plans (*pracownicze plany kapitałowe*, PPK) can be offered by life insurance companies, investment companies (asset management companies, *towarzystwa funduszy inwestycyjnych*, TFIs), general pension societies (*powszechne towarzystwa emerytalne*, PTEs) and Employee Pension Societies (*pracownicze towarzystwa emerytalne*, PrTEs) in a form of target-date funds (TDF, life cycle funds). All employees ages 18-55 are automatically enrolled in a plan but can opt out by signing a declaration.

A plan member should be assigned, and his/her contributions should be allocated to the fund with a date that is the nearest to the date when he/she reaches 60. Every provider has to offer many TDFs with target dates every 5 years. The limits of portfolio structure depend on a target date and are as follows:

- the targed date is since setting up till 20 years prior the age of 60: 60-80% shares and 20-40% bonds,
- 10-20 years prior the age of 60: 40-70% shares and 30-60% bonds,
- 5-10 years before 60: 25-50% shares and 50-75% bonds,
- 0-5 years before reaching 60: 10-30% shares, 70-90% bonds,
- since reaching 60: 0-15% shares and 85-100% bonds.

At the end of August 2019 there were 20 financial institutions (16 asset management companies, 3 general pension societies and 1 insurance company) offering ca. 170 PPK funds on the market.[218]

Individual Retirement Accounts (IKE)

According to the Polish pensions law (the Individual Pension Accounts Act of 20 April 2004), individual retirement accounts (Indywidualne Konta Emerytalne, IKE) can operate in the form of:

- a unit-linked life insurance contract;
- an investment fund;
- an account in a brokerage house;
- a bank account (savings account); or
- a voluntary pension fund.

Pension accounts are offered by life insurance companies, investment companies (asset management companies), brokerage houses, banks and pension societies. The most recent pension vehicles are voluntary pension funds that were introduced in 2012 at a time of significant changes in the statutory old-age pension system.

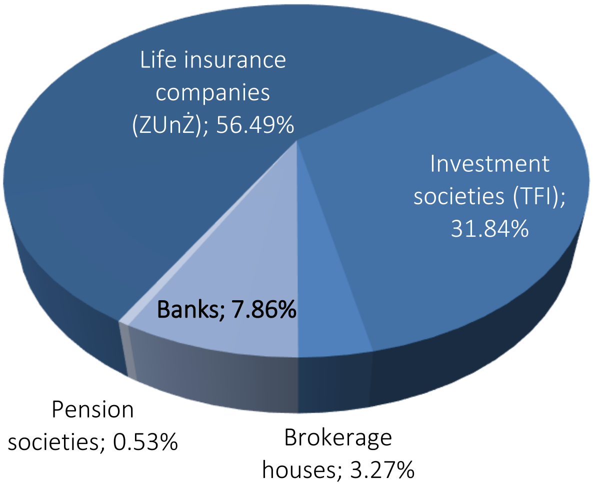
A voluntary pension fund is an entity established with the sole aim of gathering savings of IKE (or IKZE) holders. Pension assets are managed by a pension society (powszechne towarzystwo emerytalne, PTE) that also manages one of the open pension funds (OFE under Pillar II) in Poland. Assets of the funds are separated to guarantee the safety of the system, as well as due to stricter OFEs' investment regulations.

The design of IKE products usually does not vary significantly from the standard offer on financial markets. The difference relates to the tax treatment of capital gains (exclusion from capital gains tax) and contribution limits. Moreover, financial institutions cannot charge any cancellation fee when an individual transfers money or resigns after a year from opening an account.

The most popular IKE products take the form of life insurance contracts (unit-linked life insurance) and investment funds. According to official data (KNF 2019), these two forms of plans represent 87% of all IKE accounts.

218 https://www.knf.gov.pl/knf/pl/komponenty/img/wykaz_instytucje_w_PPK_26_08_2019_66864.xlsx

Chart PL6. Structure of IKE market by number of accounts and type of provider as of 31 December 2018



Source: Indywidualne konta emerytalne oraz indywidualne konta zabezpieczenia emerytalnego w 2018 roku, UKNF, Warszawa 2019

Table PL7. Number of Individual Retirement Accounts (IKE) by type of the product (2004-2018)

	Unit-linked life insurance	Investment fund	Account in the brokerage house	Bank account	Voluntary pension fund	Total
2004	110,728	50,899	6,279	7,570		**175,476**
2005	267,529	103,624	7,492	49,220		**427,865**
2006	634,577	144,322	8,156	53,208		**840,263**
2007	671,984	192,206	8,782	42,520		**915,492**
2008	633,665	173,776	9,985	36,406		**853,832**
2009	592,973	172,532	11,732	31,982		**809,219**
2010	579,090	168,664	14,564	30,148		**792,466**
2011	568,085	200,244	17,025	29,095		**814,449**
2012	557,595	188,102	20,079	47,037	479	**813,292**
2013	562,289	182,807	21,712	49,370	1,473	**817,651**
2014	573,515	174,515	22,884	51,625	1,946	**824,485**
2015	573,092	205,494	25,220	53,371	2,548	**859,725**
2016	571,111	236,278	27,615	64,031	3,580	**902,615**
2017	568,518	275,796	30,418	71,922	4,922	**951,576**
2018	562,476	316,996	32,584	78,288	5,307	**995,651**

Source: Indywidualne konta emerytalne oraz indywidualne konta zabezpieczenia emerytalnego w 2018 roku, UKNF, Warszawa 2019; previous BETTER FINANCE reports;

IKE holders do not fully use the contribution limit. The average contribution paid from 2004 to 2018 remains permanently below the statutory limit (3 times the average wage). The total amount of IKE assets amounted to PLN 8.7 billion (€2.02 billion) as of 31 December 2018. There were PLN 8,729 (€2,029) gathered on an IKE account on average.

Table PL8. Limits on contributions and average contribution paid into IKE in 2006-2018

	Contribution limit	Average contribution paid
2006	3,521	2.199
2007	3,697	1.719
2008	4,055	1.561
2009	9,579	1.850
2010	9,579	1.971
2011	10,077	1.982
2012	10,578	2.584
2013	11,139	3,130
2014	11,238	3,440
2015	11,788	3,511
2016	12,165	3,738
2017	12,789	3,843
2018	13,329	4,179

Source: Indywidualne konta emerytalne oraz indywidualne konta zabezpieczenia emerytalnego w 2018 roku, UKNF, Warszawa 2019; previous BETTER FINANCE reports

Individual Retirement Savings Accounts (IKZE)

Like individual retirement accounts, the group of IKZE products consists of:

- unit-linked life insurance;
- investment funds;
- bank accounts;
- accounts in brokerage houses; and
- voluntary pension funds.

As this part of the pension system only has a seven-year history (started in 2012), the number of participants is still at an unsatisfactory level.

Table PL9. Number of Individual Retirement Savings Accounts (IKZE) by type of the product (2012-2018)

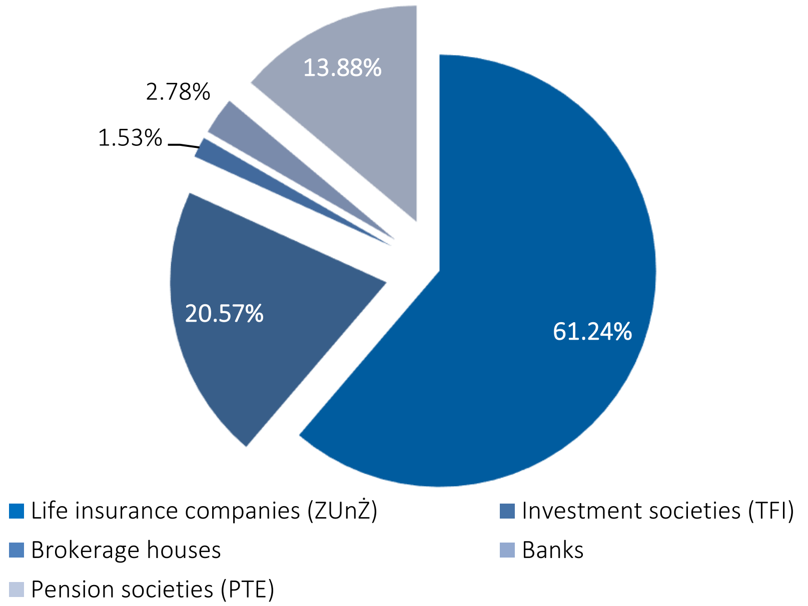
Type of the product	2012	2013	2014	2015	2016	2017	2018
Unit-linked life insurance	363,399	388,699	418,935	442,735	446,054	448,881	447,303
Investment fund	5,202	9,565	17,510	54,471	87,510	121,269	150,217
Account in the brokerage house	559	1,012	2,797	4,325	6,201	8,478	11,172
Bank account	19	33	8,105	13,735	15,585	18,114	20,311
Voluntary pension fund	127,642	97,117	80,795	82,294	87,762	94,252	101,386
Total	**496,821**	**496,426**	**528,142**	**597,560**	**643,112**	**690,994**	**730,389**

Source: *Informacje liczbowe o rynku IKZE za 2018 rok, KNF, Warszawa 2019*

By the end of 2018, around 730,389 Poles opened individual retirement savings accounts. As shown on chart PL10, the IKZE market is dominated by insurance companies that run 61% of the accounts. Brokerage houses and banks do not show a lot of interest in providing this type of old-age pension provision, although some of them put IKZE in their offers.

The savings pot of IKZE is small compared to other elements of the Polish supplementary pension system. At the end of 2018, financial institutions managed funds amounting to PLN 2.3 billion (€0.53 billion). It is worth noting that this capital was raised through contributions in just seven years. The rapid growth of IKZE market in terms of coverage and the asset value is expected in the coming years. This growth could happen as a consequence of recent changes in IKZE taxation: a higher flat-rate contribution limit that can be deducted from the tax base and benefit payments subject to a reduced income tax rate.

Chart PL10. Structure of IKZE market by number of accounts and type of provider as of 31 December 2018



<u>Source</u>: Own elaboration based on: Informacje liczbowe o rynku IKZE za 2018 rok, KNF, Warszawa 2019

Table PL11. Assets of IKZE (in thousands PLN)

Product	2012	2013	2014	2015	2016	2017	2018
Unit-linked life insurance	36,393	75,117	167,737	281,946	398,589	545,374	635,146
Investment fund	7,973	23,371	63,559	193,099	407,884	719,630	1,083,451
Account in the brokerage house	1,673	4,815	14,638	30,268	57,045	93,780	119,354
Bank account	40	98	11,624	35,081	66,600	106,702	156,208
Voluntary pension fund	6,803	15,805	37,792	79,198	147,972	240,671	320,798
Total	52,882	119,206	295,350	619,592	1,078,090	1,706,157	2,314,957

<u>Source</u>: Informacje liczbowe o rynku IKZE za 2018 rok, KNF, Warszawa 2019

Charges

The type and level of charges deducted from pension savings depend on the vehicle used and the type of programme. Lower fees are charged for group (collective) provision of an old-age pension organised by employers (PPE). Significant cost differences exist between various product types. Since no comprehensive data regarding the costs of Polish supplementary products is collected or officially published, the information provided below reflects the costs of selected (exemplary) pension products and plans functioning on the Polish market.

Employee Pension Programmes (PPE)

Data on PPE charges is hardly available. The Financial Supervisory Commission does not provide any official statistics on value or the percentage of deductions on assets of employee pension programmes. Some information can be found in the statutes of PPEs, but they describe rather the types of costs charged than the level of deductions. Employers must cover many administrative costs connected with PPE organisation (disclosure of information, collecting employees' declarations, transfer of contributions, etc.). The savings of participants are usually reduced by a management fee that varies from 0.5% p.a. to 4% p.a. of AuM and depend on the investment profile of funds chosen.

The lowest charges are applied to employee pension funds (Pracownicze Fundusze Emerytalne – PFE), which are set up by employers (in-house management of PPE) and managed by employee pension societies. For this type of pension fund, no up-front fee is deducted and a rather low management fee (0.5% - 1% p.a.) applies to assets gathered.

Employee Capital Plans (PPK)

Financial institutions offering PPK can charge management fee (max. 0.5% AuM) and success fee (max. 0.1% AuM and only if return is both positive and above the benchmark).

Individual Retirement Accounts (IKE) and Individual Retirement Savings Accounts (IKZE)

The type and level of charges depend on the type of product. There is a management fee for investment funds, voluntary pension funds and unit-linked insurances. In addition, for a unit-linked life insurance, a financial institution can charge an up-front fee, use different "buy and sell" prices for investment units (spread) and deduct other administrative fees from the pension savings accounts (such as conversion fees and fees) for changes in premium allocation in case changes occur more frequently than stipulated in the terms of the contract. Charges that are not connected with asset management and the administration of savings accounts cannot be deducted from IKZE (i.e. life insurance companies cannot deduct the cost of insurance from the retirement account). The accumulation of pension savings through direct investments (accounts in brokerage houses) is subject to fees which depend on the type of transaction and the level of activity on financial markets (trading fees and charges). Banks do not charge any fees for the IKZEs they offer (apart from a cancellation fee).

All financial institutions offering individual retirement accounts (IKE) can charge a cancellation fee (also called a transfer fee) when a member decides to transfer savings to a programme offered by another financial entity during the first year of the contract. No cancellation fee can be deducted from the account when a saver resigns from the services of a given institution after 12 months and transfers money to another plan provider.

The tables below show the level of fees charged in individual retirement accounts (IKE) and individual retirement savings accounts (IKZE) offered by life insurance companies, investment societies and pension societies.

Table PL12. Charges in IKE nad IKZE by type of provider

Type of financial institution	Up-front fee	Management fee (% of AuM)	Transfer fee
Life insurance companies	0% - 8%	0-4.5	10-50% of assets
Asset management companies	0% - 5.5%	0.8-4.0; success fee 0-30% of the return above the benchmark	0-PLN 500
Pension societies	0%-53.4%; quota limit may be applicable	0.6-3.5; success fee 0-20.0% of the return above the benchmark	10-50% of assets; min. PLN 50

Source: own elaboration based on www.analizy.pl

Taxation

Employee pension programmes (PPE)

Basic contributions financed by employers are subject to personal income tax, which is deducted from the employee's salary. Additional contributions paid by employer from the net salary are treated the same way (contributions paid from after-tax wage). Returns and benefits are not taxed ("TEE" regime).

Employee Capital Plans (PPK)

The employee and employer contribution is taxed. State kick-off payment and regular annual subsidies as well as investment returns and benefits are exempt. Therefore, it is a TEE regime with a state subsidy.

Individual Retirement Accounts (IKE)

Contribution is taxed as it is paid by a saver from his/her net income. An individual can pay up to three times the average wage annually. There is a tax relief for capital gains. Benefits are not taxable (“TEE” regime).

Individual Retirement Savings Accounts (IKZE)

Contributions to IKZE are deductible from the income tax base. In 2012 and 2013 there was an upper limit of contribution amounting to 4% of the person’s annual salary in the previous year. Due to the most recent changes in the pension system, the given limit was replaced with a flat-rate limit in 2014. Every individual can pay up to 120% of the average salary into an account. Returns are not subject to taxation, but benefits are taxed with a reduced flat-rate income tax (10%). This part of the **supplementary pension system is the only one that follows the EET tax regime.**

Pension Returns

Asset allocation

Employee Pension Programmes (PPE)

Polish law does not impose any strict investment limits on voluntary pension savings accounts (IKE, IKZE, most forms of PPE, PPK) except for occupational pension programmes offered in the form of employees’ pension fund (types of asset classes are described by law). Every financial institution that offers IKE or IKZE provides information on investment policy in the statute of the fund. Since many existing plans offer PPE participants the possibility to invest in funds from a broad group of investment funds operating in the market (not only the funds dedicated exclusively to pension savings), it is impossible to indicate how the portfolios of most PPEs look like. PPKs are a target-date funds what means that the general asset allocation (bonds vs shares) depends on the target date of the fund.

The tables below present the investment portfolio of employee pension funds, which are the only types of occupational pension products with official and separate statistics on asset allocation.

Table PL13. Portfolio of employees' pension funds (PFE) in years 2010-2018 (as % of assets)

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Shares	14.19	14.90	19.49	29.86	33.00	34.09	29.62	32.91	30.77
Gov. bonds	1.48	2.14	1.53	2.01	1.05	2.27	63.00	64.31	67.22
Investment funds units	24.30	33.13	37.53	49.83	61.64	63.64	0	0	0
Bank deposits	58.78	48.90	40.91	17.91	4.30	0.00	6.70	1.86	1.62
Other investments	1.25	0.92	0.54	0.39	0.01	0.00	0.68	0.92	0
AuM (in PLN mln)	**1,543**	**1,559**	**1,873**	**2,039**	**1,75**	**1,797**	**1,767**	**1,857**	**1,740.38**

Source: Biuletyn Kwartalny. Rynek PFE 4/2018, KNF, Warszawa 2019

Individual Retirement Accounts (IKE) and Individual Retirement Savings Accounts (IKZE)

There are no available statistics that allow for the identification of the asset allocation within Individual Saving Accounts (IKE) and Individual Retirement Savings Accounts (IKZE) offered as insurance contracts, investment funds and accounts in brokerage houses. It is because an individual can buy units of many investment funds (or financial instruments) that are also offered as non-IKE and non-IKZE products. Since no separate statistics for pension and non-pension assets of a given fund are disclosed, it is impossible to indicate either which funds create the portfolios of IKE and IKZE holders nor what the rates of returns obtained by this group of savers are.

The only form of IKE and IKZE that is strictly separated from other funds and is dedicated solely to pension savings is a voluntary pension fund. These vehicles started operating in 2012. The table below shows the DFE's investment portfolios in years 2014-2018.

Table PL14. Portfolio of voluntary pension funds (DFE) offered as Individual Retirement Saving Accounts (IKZE) and Individual Retirement Accounts (IKE) in 2014-2018, as % of DFE assets

Provider	Year	Shares	Gov. Bonds	Non-gov. Bonds	Other	Assets under management (in PLN mln)	Market share (as % of total DFEs' assets)
Allianz Polska DFE	**2014**	33.46%	32.43%	21.81%	12.30%	3.72	6.25%
	2015	35.12%	29.39%	28.60%	6.90%	5.60	5.28%
	2016	31.84%	22.54%	37.07%	8.54%	8.30	4.40%
	2017	53.62%	5.86%	34.17%	6.35%	11.90	3.87%
	2018	42.49%	17.33%	34.65%	5.53%	13,7	3.48%
DFE Pekao*	**2014**	43.83%	40.45%	2.86%	12.86%	13.18	22.16%
	2015	52.90%	30.95%	1.93%	14.21%	28.50	26.89%
	2016	57.41%	32.73%	4.78%	5.08%	52.20	27.65%
	2017	50.99%	43.12%	0.19%	5.70%	82.70	26.87%
DFE Pocztylion Plus	**2014**	24.62%	67.55%	0.00%	7.83%	0.55	0.92%
	2015	26.26%	67.64%	6.11%	0.00%	0.80	0.75%

	2016	34.83%	59.31%	0.00%	5.86%	1.10	0.58%
	2017	35.25%	55.08%	1.70%	7.97%	1.50	0.49%
	2018	35.38%	54.83%	1.00%	8.79%	2.5	0.64%
DFE PZU	2014	66.82%	13.94%	2.40%	16.84%	9.08	15.27%
	2015	73.26%	13.58%	1.45%	11.70%	14.80	13.96%
	2016	74.79%	17.64%	0.77%	6.80%	27.00	14.30%
	2017	72.84%	16.78%	0.42%	9.96%	47.80	15.53%
	2018	69.28%	9.55%	7.01%	14.16%	175.7	44.64%
ING DFE	2014	63.74%	0.00%	12.35%	23.92%	5.92	9.95%
Nordea DFE(D)	2014	37.44%	35.32%	10.44%	16.81%	1.63	2.74%
NN DFE	2015	57.45%	4.49%	10.50%	27.57%	15.20	14.34%
	2016	50.51%	18.75%	6.85%	23.89%	36.70	19.44%
	2017	56.36%	35.58%	0.01%	8.05%	0.30	0.10%
	2018	69.28%	9.55%	7.01%	14.16%	175.7	44.64%
MetLife Amplico DFE	2014	39.46%	40.26%	0.00%	20.27%	19.11	32.13%
	2015	61.24%	32.92%	0.00%	5.84%	24.20	22.83%
	2016	59.60%	32.60%	0.00%	7.80%	28.50	15.10%
	2017	56.99%	22.13%	12.91%	7.97%	73.50	23.88%
	2018	49.69%	43.78%	0.66%	5.87%	30.8	7.83%
PKO DFE	2014	35.29%	53.04%	0.00%	11.67%	6.29	10.57%
	2015	35.84%	51.51%	0.00%	12.65%	16.80	15.85%
	2016	26.26%	58.34%	0.00%	15.40%	34.80	18.43%
	2017	41.48%	48.64%	0.00%	9.88%	56.30	18.29%
	2018	37.75%	48.14%	1.44%	12.67%	69.8	17.73%
Generali DFE	2015	37.44%	48.61%	0.00%	13.95%	0.10	0.09%
	2016	68.60%	29.87%	0.00%	1.53%	0.20	0.11%
	2017	56.36%	35.58%	0.01%	8.05%	0.30	0.10%
	2018	43.4%	48.54%	0.04%	8.02%	0.5	0.13%

** Liquidated in 2018.*

Source: own elaboration based on http://www.analizy.pl.

Pension returns

The investment efficiency of supplementary pension products is almost impossible to assess due to the lack of necessary data published by financial institutions. In Poland there is no obligation to disclose rates of return to pension accounts holders. Generally, owners of savings accounts are informed about contributions paid, the value of investment units and the balance of their accounts at the end of the reporting period. But they are not informed neither about their pension accounts real efficiency nor the total cost ratio deducted from their individual retirement accounts. No data concerning the investment efficiency of supplementary pension products is submitted to the Financial Supervisory Commission or published in official statistics.

Due to the shortage of detailed statistics the assessment of the efficiency of pension product investments is possible only for the vehicles dedicated solely to PPE, IKE or IKZE, namely employee pension funds (PFE) and voluntary pension funds (DFE).

As the management fee is deducted from fund assets on a regular basis and the value of a fund unit is calculated based on net assets, the nominal rates of return indicated below take into account the levels of management costs. The only fee that must be included when calculating after-charges returns is the upfront-fee deducted from contributions paid into accounts.

During the period of 2002-2018 employee pension funds (PFE) showed rather positive returns up to 17.41% annually. Negative results appeared only in the years 2008, 2011, 2015 and 2018 when equity markets dropped significantly. After-charges real returns observed in 13 of 17 years and the average return in the 17-year period is highly positive as well. These satisfactory results were obtained due to proper portfolio construction, high quality of management and low costs.

Table PL15. Nominal and real after-charges returns of Employee Pension Funds in 2002-2018 (in %)

	PFE NESTLÉ POLSKA	PFE SŁONECZNA JESIEŃ	PFE ORANGE POLSKA	PFE UNILEVER POLSKA	PFE "NOWY ŚWIAT"	PFE DIAMENT	Nominal net return*	Inflation (HICP)	Real net return*
2002			11.35%		9.76%	-21.05%	7.88%	0.81%	**7.02%**
2003			10.28%		10.44%	8.71%	10.14%	1.73%	**8.26%**
2004	11.25%		12.30%	14.24%	13.64%		12.59%	4.32%	**7.93%**
2005	12.53%		14.82%	12.93%	13.81%		14.50%	0.75%	**13.65%**
2006	12.41%	10.60%	15.40%	13,41%	15.25%		14.99%	1.37%	**13.43%**
2007	5.10%	4.52%	6.10%	5.77%	6.23%		5.94%	4.30%	**1.58%**
2008	-10.10%	-11.33%	-13.54%	-6.34%	-13.86%		-13.14%	3.30%	**-15.91%**
2009	13.33%	14.83%	15.78%	12.74%	17.41%		15.85%	3.88%	**11.52%**
2010	9.98%	9.60%	10.33%	9.75%	10.52%		10.22%	2.85%	**7.16%**
2011	-5.05%	-3.10%	-4.75%	-3.59%	-5.20%		-4.51%	4.59%	**-8.70%**
2012	15.82%	13.60%	14.96%	15.01%	14.15%		14.57%	2.14%	**12.17%**
2013	5.19%	5.21%	3.45%	4.56%	5.71%		4.28%	0.60%	**3.66%**
2014	4.42%		3.91%	4.92%	2.56%		3.65%	-0.70%	**4.37%**
2015	-1.24%		-2.74%	-0.97%	-1.35%		-2.31%	-0.40%	**-1.92%**
2016			3.18%	4.88%	3.93%		3.44%	0.90%	**2.51%**
2017			8.24%	5.87%	8.88%		8.53%	1.69%	**6.67%**
2018			**-1.12%**		**-2.69%**			0.88%	**-2.33%**
Average 2002-2018	**5.84%**	**5.15%**	**6.03%**	**6.51%**	**6.11%**	**-7.36%**	**5.88%**	**1.93%**	**3.88%**

Source: own elaboration based on Eurostat (HICP; 2015=100; [prc_hicp_midx] for Poland) and Dane miesięczne PFE - maj 2019 r., UKNF, Warszawa 2019; *Weighted.

Voluntary pensions funds (DFE) have obtained extraordinary investment results from their start in 2012. The first years of their operation coincided with the time of the Polish financial market recovery and allowed the funds to maximise rates of return from the equity portfolios. The best DFEs reported more than 50% nominal return in 2013. But such returns were impossible to achieve in next years. In 2014, some of DFE even experienced slightly negative returns that were covered by returns in the following years. The worst investment returns were achieved in 2018 when all DFE made losses. The average real rate of return after charges in years 2013-2018 amounted to 5.22%.

Table PL16. Nominal and real returns of voluntary pension funds (DFE) in 2013-2018 (in %)

	2013	2014	2015	2016	2017	2018	Annual average 2013-2018
Allianz Polska DFE	7.80	2.03	-0.33	5.81	9.33	-8.32	**2.54**
DFE Pekao*	16.32	1.27	3.26	4.85	6.78		**6.37**
DFE Pocztylion Plus	6.93	-2.22	2.56	3.60	-0.98	-4.77	**0.77**
DFE PZU	32.75	3.64	9.07	16.19	14.67	-9.90	**10.31**
NN DFE	59.13	-0.73	16.21	13.26	9.01	-8.61	**12.90**
MetLife Amplico DFE	56.70	6.09	-1.89	3.76	6.65	-16.61	**7.05**
PKO DFE	16.87	2.54	-0.88	5.74	8.63	-8.51	**3.77**
Weighted nominal return before charges and inflation	40.57	3.15	3.90	8.14	8.92	-9.75	**8.16**
Weighted nominal return after charges**, before inflation	36.94	0.64	1.36	5.49	6.18	-12.28	**5.42**
Inflation (HICP)	0.60	-0.70	-0.40	-0.90	1.69	0.88	**0.19**
Weighted real return after charges	36.12	1.34	1.77	6.45	4.42	-13.04	**5.22**

* Liquidated in 2018.

**Returns after charges were calculated with an assumption that an individual pays one contribution of PLN 2.000 at the beginning of the year.

Source: own elaboration based on: www.analizy.pl; Harmonised index of consumer prices (HICP), Eurostat, http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=prc_hicp_midx&lang=en

Table PL17. Nominal and Real Returns of Pillar III pension funds in Poland by product category

A. Employee Pension Funds (PFE)						
2000	Weighted nominal return after charges, before inflation	-	Weighted real return after charges and inflation and before taxes	-	17-year nominal annual average (2002-2018)	5.88%
2001		-		-		
2002		7.9%		7.0%		
2003		10.1%		8.3%		
2004		12.6%		7.9%		
2005		14.5%		13.6%		
2006		15.0%		13.4%		
2007		5.9%		1.6%		
2008		-13.1%		-15.9%		
2009		15.8%		11.5%	17-year real annual average (2002-2018)	3.88%
2010		10.2%		7.2%		
2011		-4.5%		-8.7%		
2012		14.6%		12.2%		
2013		4.3%		3.7%		
2014		3.6%		4.4%		
2015		-2.3%		-1.9%		
2016		3.4%		2.5%		
2017		8.5%		6.7%		
2018		-1.47%		-2.3%		
B. Voluntary Pension Funds (DFE)						
2000	Weighted nominal return after charges, before inflation	-	Weighted real return after charges and inflation	-	6-year real annual average (2013-2018)	5.42%
2001		-		-		
2002		-		-		
2003		-		-		
2004		-		-		
2005		-		-		
2006		-		-		
2007		-		-		
2008		-		-		
2009		-		-		
2010		-		-	6-year nominal annual average (2013-2018)	5.22%
2011		-		-		
2012		-		-		
2013		36.9%		36.1%		
2014		0.6%		1.3%		
2015		1.4%		1.8%		
2016		5.5%		6.4%		
2017		6.2%		4.4%		
2018		-12.3%		-13.0%		

Note: "-" means data not available

Source: Tables PL11 and PL12.

Conclusions

Starting in 1999, with individual supplementary elements introduced in 2004, 2012 and 2019, the Polish supplementary pension market is still in its early stage of operation. The coverage ratios (2.6%, 5.8% and 4.3% respectively), show that only a tiny part of Poles decided to secure their future in old age by joining the occupational pension plan or purchasing individual pension products. This could be because of low financial awareness, insufficient level of wealth or just the lack of information and low transparency of pension products.

The official information concerning supplementary pension products in Poland is limited. Financial institutions do not have any obligation to disclose rates of return, either nominal or real, nor after-charges. Published data includes the total number of programmes or accounts by types of financial institution and total assets invested in pension products. The Financial Supervisory Commission (KNF) collects additional detailed data about the market (the number of accounts and pension assets managed by every financial institution) but does not disclose the data even for research purposes.

Moreover, no comparable tables on charges, investment portfolios and rates of return are prepared or made accessible to the public on a regular basis. Certain product details must be put in the fund statutes or in the terms of a contract, but they are hardly comparable between providers. The Polish supplementary pension market is highly opaque, especially in terms of costs and returns.

Among a wide variety of pension vehicles, there are only a few products with sufficient official statistics to assess their investment efficiency: employee pension funds (PFE) managed by employees' pension societies and voluntary pension funds (DFE) managed by general pension societies (PTE). Other products are more complex due to the fact that supplementary pension savings are reported together with non-pension pots. That makes it impossible to analyse the portfolio allocations and rates of return for individual pension products separately.

After-charges returns in the "youngest" pension products offered as a form of voluntary pension fund (DFE) were extremely high in 2013, both in nominal and real terms. The second series of products analysed, namely employee pensions funds (PFE), delivered significant profits as well, with the annual average real return of 3.88%. But other pension vehicles may turn out not to be so beneficial, especially when a wide variety of fees and charges are deducted from contributions which are paid to the accounts.

To sum up, the disclosure policy in supplementary pension products in Poland is not saver oriented. Individuals are entrusting their money to the institutions, but they are not getting clear information on charges and investment returns. Keeping in mind the pure DC character of pension vehicles and the lack of any guarantees, this is a huge risk for savers. All this may lead to significant failures on the pension market in its very early stages of development. In the future, some changes in the law should be introduced, such as **imposing an obligation** on financial institutions **to disclose rates of return** to pension accounts holders. Moreover, there is **an urgent need for a full list or even ranking of supplementary pension products**, both occupational and individual ones, published by independent body. This would help individuals make well-informed decisions and avoid buying inappropriate retirement products.[219]

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[219] Especially, taking into consideration very limited official information concerning supplementary pension products, as well as the extent of mis-selling of e.g. unit-linked insurances that took place in Poland and the subsequent enforcement action (as the sector's self-regulation failed) https://uokik.gov.pl/news.php?news_id=12776.

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