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.

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[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]

[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.

[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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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: Lithuania

Reziumė

Lietuva pritaikė tipišką Pasaulio banko daugiapakopę sistemą, kurioje vis dar dominuoja einamasis finansavimas (valstybinė pensija, I pakopa) užtikrinantis pajamas vyresnio amžiaus pensijų gavėjams. Vis dėlto, II pakopos pensijų fondai, apimantys daugiau nei 92% ekonomiškai aktyvių gyventojų, tampa vis labiau svarbūs. III pakopos fondai savo ypatybėmis yra labai panašūs į II pakopos fondus, kas, kita vertus, riboja jų galimybes konkuruoti su II pakopos fondais.

Apskritai paėmus, 2018 m. abiejų pakopų pensijų fondų rezultatai net ir konservatyviuose fonduose buvo neigiami. Pensijų fondų grąža labai skyrėsi skirtingos rizikos profilių atveju. „Gyvenimo trukės“ fondai atsirado 2018 m., kartu sumažėjo ir II pakopoje taikomi mokesčiai. Tuo pačiu tęsiasi diskusijos dėl II ir III pakopų sujungimo vienoje privačioje pensijų sistemoje.

Summary

Lithuania adopted the typical World-Bank multi-pillar system, where the PAYG pillar (state pension, Pillar I) still plays the dominant role in ensuring the income for old-age pensioners. However, Pillar II pension funds are growing in importance, covering more than 92% of the economically active population. Pillar III has very similar features to the Pillar II design, which, on the other hand, limits its ability to compete its Pillar II peers.

In overall, pension funds' performance in both pillars were negative in 2018, even for the conservatively oriented funds. There were significant differences among the pension funds´ returns with different risk-return profiles. "Life-cycle" funds emerged in 2018, as well as a decrease of fees within the Pillar II. At the same time, the ongoing debate to "merge" Pillar II and Pillar III into one private pension scheme is discussed.

Introduction

Lithuania has undertaken a pension reform in 2004, which was renewed in 2013. This was the reason to establish private pension funds. Currently, the Lithuanian pension system provides three distinct sources of accumulation for retirement funds – so-called pension pillars:[210]

- **1st pillar (Pillar I)** – State social insurance funds organized as a PAYG pension scheme. State social pension is financed from social insurance contributions paid by people who are currently working.
- **2nd pension pillar (Pillar II)** – quasi-/mandatory-funded pension scheme operated by the private pension accumulation companies offering pension funds in form of personal savings scheme. The part of State social insurance fund is redirected from PAYG scheme. On top of social insurance contributions, savers are obliged to co-finance the individual retirement accounts with additional contributions tied to their salary.
- **3rd pension pillar (Pillar III)** – voluntary private funded pension scheme. Accumulation can be managed by private funds or life-insurance companies.

Lithuania's statutory social insurance pension system is financed at a general rate of 39.5% (without Social insurance for accidents at work and occupational diseases insurance), while 25.3 percentage points (22.3 p.p. + 3 p.p. employee) is paid towards the Social insurance for pensions (Pillar I).

The State social insurance pension system was reformed in 1995 introducing the insurance principle, extending the requirement for contributory years, abolishing early retirement provisions and increasing the retirement age. However, Pillar II was introduced by law in 2002 and started functioning effectively in 2004 when the first contributions of participating individuals started to flow into the pension funds.

Supplementary voluntary pension provision (Pillar III) is possible through either pension insurance or special voluntary pension funds (these started operating in 2004, although the law was adopted in 1999). The voluntary pillar can take two different forms: defined-contribution (DC), if supplemental contributions are invested into pension funds or unit-linked life insurance or defined-benefit (DB) when purchasing a classic life insurance product. Contributions to the system may be made by the individual or his employer.

Basic data on the pension system set-up in Lithuania is presented in the table below.

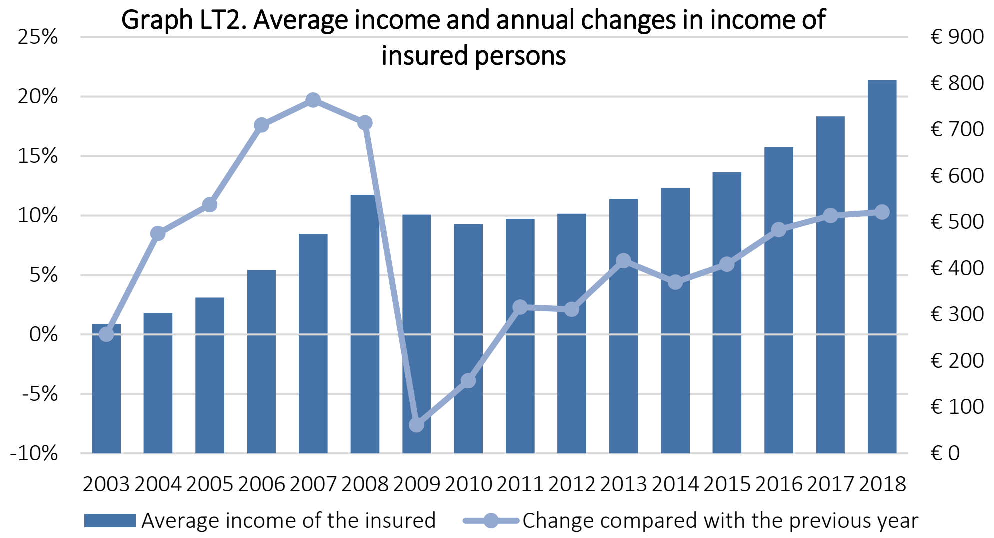
[210] BITINAS, A. (2011). Modern pension system reforms in Lithuania: Impact of crisis and ageing. Jurisprudence, 18(3), 1055–1080.

Table LT1. Multi-pillar pension system in Lithuania		
PILLAR I	PILLAR II	PILLAR III
State Pension	Funded pension	Voluntary pension
Law on State Social Insurance Pensions	Law on the Reform of the Pension System (effective till 2019); Law on Pension Accumulation	Law on the Supplementary Voluntary Pension Accumulation
State Social Insurance Fund (SoDra)	Pension accumulation companies	Pension accumulation companies
Mandatory	Quasi/Mandatory	Voluntary
Publicly-managed	Privately managed pension funds	Privately managed pension funds
PAYG	Funded	Funded
PS (Pointing System - Defined benefit scheme based on salary)	DC (Defined Contribution scheme) Individual retirement accounts	
Quick facts		
Number of old-age pensioners: 605,400	Administrators: 5	Administrators: 3
Average old-age pension: € 344.20	Funds: 26	Funds: 12
Average income (gross): € 795	AuM: € 3,118.35 mil.	AuM: € 103.86 mil.
Average replacement ratio: 39.41%	Participants: 1,317,744	Participants: 62,215
Number of insured persons: 1,420,300	Coverage ratio: 92.78%	Coverage ratio: 4.38%

Source: Own calculations 2019.

The overall coverage of Pillar II, measured as a ratio between the number of participants and the economically active population (number of insured persons in Pillar I), was almost 93% in 2018, while Pillar III covered merely 4% of the economically active population. Thus, we can expect that future pension income stream will be influenced mostly by Pillar II pensions, while Pillar III will generate an insignificant part of individuals' income during retirement.

Regarding the income level, Lithuania´s citizens have experienced relatively high rates of income increase during the last 15 years (6.85% annually), while only in 2018, the income has risen by more than 10%. However, the overall income level is well below the EU average (€795 in 2018).



<u>Source</u>: Own calculation based on SoDra, 2019.

Pillar I – State Pensions

The first pillar of the Lithuanian pension system is organized on the pay-as-you-go (PAYG) principle of redistribution, being funded on an ongoing basis, functioning on the pointing system, and taking into account the duration of the vesting period and the level of salary (insurable income) from which the contributions are paid.

The old-age pension is the main type of state social security in old age. Individuals who meet the requirements for age and for the pension social insurance record are entitled to the old-age pension, i.e.:

1) the person has reached the established old-age pension age (63.6 years for men and 62.3 years for women in 2018). Since 2012, the retirement age has been rising gradually by 2 months a year for men and 4 months a year for women until reaching the statutory retirement age of 65 for both men and women by 2026;
2) has the minimum record of pension social insurance established for old-age pension (has paid the pension social insurance contributions for at least 15 years).

The pension social insurance record is the period in which the obligatory pension social insurance payments are made or must be made either by the person themselves or on his/her behalf. Starting from 2018, the obligatory pension social insurance record requirement increased. In 2018, the mandatory record is at least 30 years and 6 months and will be increased in every subsequent year until it reaches 35 years in 2027.

A new version of the Law on Social Insurance Pensions came into force on 1 January 2018. The pension system was reformed by changing the pension calculation structure, introducing pension points and setting the indexation rules. A social insurance pension will consist of the general (GP) and individual parts (IP). The old-age pension is equal to the sum of the general and the individual parts of pension.

The general part (GP) of the old-age pension takes into account only the duration of insured period. The general part (GP) of pension is calculated according to the formula:

$$GP = \beta \times B$$

where:

β represents the ratio of the insurance record of the person and the obligatory insurance record effective in the year of the pension entitlement (for example, if the obligatory insurance record at year of retirement is 30 years and the person´s insurance record is 40 years, then the value of β is 40/30 = 1.33333); and

B represents the basic pension (in euros).

The individual part of pension is based on pension point system. Pension points system for the determination of the individual part of pension was introduced on 1 January 2018. Each insured person will receive a certain number of pension points for the amount of pension social insurance contributions paid during the year. If the amount of pension social insurance contributions deducted from the person‘s income during the year for the individual part of pension is equal to the amount of the annual pension contribution determined on the basis of the average pay (salary) during the year, the person will acquire one pension point. A larger or a smaller amount paid will result, accordingly, in a larger or smaller number of pension points. However, the total number of pension points acquired during one year may not exceed 5. The pension points acquired will be summed up and multiplied by the pension point value. The individual part of pension is calculated according to the formula:

$$IP = V \times p$$

where:

V is the number of pension points accumulated by the person during the entire working career;

p is the pension point value (in euros).

For example, if a person´s salary during the whole career (40 years) was equal to the average salary in the economy (1 point), then the person can acquire 40 x 1 point = 40 points. If the value of one pension point at moment of retirement is, for example, €10, then the individual part of old-age pension is: 40 x 10 = 400 Eur.

Old-age pensions are indexed every year. Starting from 1 January every year, the values of the basic pension, the value of pension points and the basic amount of widows'/widowers' pensions, used for the granting and determining social insurance pensions, will be indexed based on the average 7-year wage fund growth rate.

The indexing coefficient (*IC*) is calculated on the basis of the change in the wage fund during the past three years, the year for which the *IC* is being calculated, and three prospective years. The IC is applied provided that, upon its application, the pension social insurance costs in the year of indexation do not exceed social insurance revenues and the projected pension social insurance costs for the next year do not start exceeding the social insurance revenues projected. If, without indexation, the pension social insurance revenues in the year of indexation exceed the pension social insurance costs, the *IC* is calculated in such a way that the pension social insurance expenses for pension indexing would not exceed 75% of the pension social insurance contribution surplus planned for the year of indexation in case if no indexation is performed.

Indexation of pensions will not be performed if the determined *IC* is smaller than 1.01 and/or if the change in the gross domestic product at comparative prices and/or in the wage funds, expressed in percentage terms, is negative in the year for which the *IC* is being calculated and/or for next calendar year. If no indexation is performed, the values of December of previous year are applied.

In general, we can say that the Pillar I pensions will be subject to the automatic adjustment mechanism ensuring the balance of the State Social Insurance fund over the longer period.

SoDra has launched the indicative retirement calculator, where an individual can assess his projected old-age pension including the expected (projected) Pillar II savings. The calculator web site (in Lithuanian language):

http://www.sodra.lt/lt/skaiciuokles/prognozuojamos_pensijos_skaiciuokle

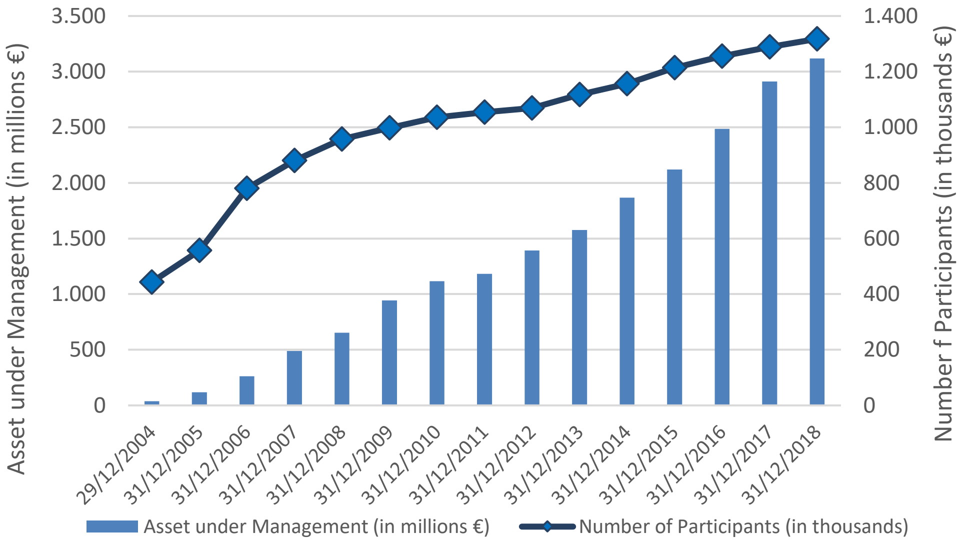
Pillar II – Funded pensions

Lithuania´s private pensions system (Pillar II) is based on the World Bank's multi-pillar model. Pillar II pension scheme can be characterized as an accumulation of a redirected part of social insurance contributions towards individual retirement accounts managed by private pension accumulation companies offering and managing private pension funds. All persons with income, from which state social insurance contributions are calculated on a mandatory basis to receive pension, and yet to reach retirement age may become fund participants. The contribution to Pillar II pension funds consists of three parts: a social-security contribution (currently paid to SoDra), salary contribution and an additional pension contribution from the State Budget.

Pillar II can be characterized as a fully funded scheme, with quasi-mandatory participation, distinct and private management of funds, based on personal accounts and on the defined contribution (DC) philosophy with no minimum return guarantees.

Since 2004, when the Pillar II was effectively launched, the number of participants as well as AuM has grown rapidly and currently, more almost 92% of working population is covered by the scheme and more than 3 billion € are managed by 5 PACs (see graph below).

Graph LT3. Pillar II – Number of participants and Assets under Management



Source: Own calculation (https://www.lb.lt/en/fs-pension-funds), 2019.

The pension contributions towards the Pillar II are part of the participant's state social insurance contribution rate. Originally, the level of contributions ("base rate") was set at final level of 5.5% of insurable income. This level should have been reached in 2007. The base rate in 2004 was 2.5%, in 2005 - 3.5%, in 2006 it was 4.5%, and since 2007 - 5.5% of the participants' income, from which the state social insurance contributions are calculated. However, it should be noted that there have been significant changes to the Pillar II set-up because of the financial crisis and the following public finance deficits. As a result, the mechanism and level of paid contributions have changed. Since 2014, the level of contributions has remained stable, while participants have been required to match redirected contributions from the social insurance with additional individual contributions and the state must match the individual contributions of savers from the state budget. Under the new system, the "base rate" for Pillar II contributions is 2%, and existing savers can make a further 1% in contributions, matched by a state subsidy of 1% of gross average wages. These both additional contribution rates rose to 2% a piece since 2016. Under Lithuania's current "maximum accumulation" scenario, Pillar II savings during the years of 2016 till 2019 are funded by the so-called "2+2+2" system: 2% of social security system contributions, with an additional 2% of additional payment from a salary of a saver, matched by a state contribution based on the previous year's average state wages.

According to SoDra, the State Social Insurance Fund, the number of Pillar II participants who signed an agreement to pay the additional contributions totaled 409,000 (35% of all Pillar II participants). The factors that contributed to relatively high sign-up numbers included the government subsidy (matching mechanism), an active public debate and an official web-based calculator allowing individuals to estimate the impact of their choice on their pensions savings. On the other hand, constant changes in the Pillar II set-up have significantly increased the inertia of savers in Lithuania. As a result, Lithuanian pension savers lack awareness of the pension system and forecasts of their future benefits. According to the Lithuania's Central Bank 2016 report, more than 50% of participants have chosen the wrong pension fund considering their remaining saving period. More than two-thirds are inert savers and choose one pension fund for their whole life. Only 2% of all participants changed their pension fund or company in 2014-2015. Active clients follow short-term results and 92% made the wrong decision during the financial crisis in 2008.

However, there are more changes that are expected to become effective in the contribution mechanism since 2019, including the auto-enrolment for persons under the age of 40 with the right to opt-out and lowering the fees for Pillar II pension funds managers. At the same time, misallocation of savings is expected to be partially solved by the introduction of "life-cycle" funds. Furthermore, discussions on the merger of Pillar II and Pillar III schemes into one private pension accumulation scheme are ongoing.

The contributions to Pillar II are recorded on individual personal pension account at selected providers (Pension Accumulation Companies). Contributions and accumulated savings are invested by the companies into managed pension funds. Pension Accumulation Companies (PACs) can manage multiple pension fund. PAC must obtain licenses from market regulator and supervisory body, which is the Bank of Lithuania.

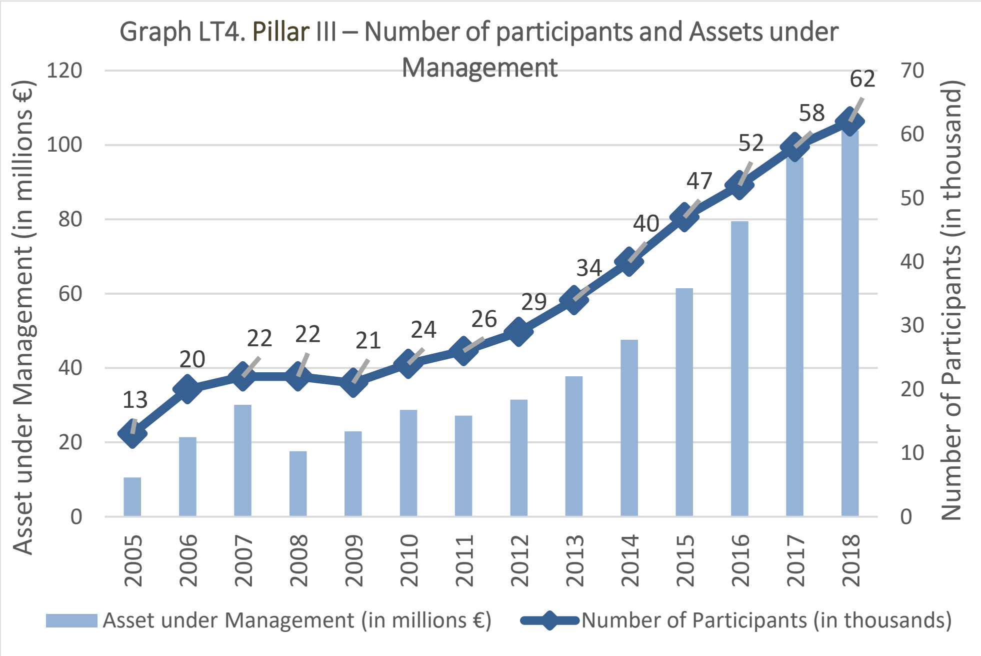
Pillar III – Voluntary private pension

Lithuania's voluntary supplementary private pensions system (Pillar III) is also based on the World Bank's multi-pillar model and effectively started in 2005. It is also a fully funded system, based on personal accounts and on the defined contribution (DC) philosophy. Pillar

III pension funds refer to supplementary voluntary pension accumulation. Funds are transferred by participants themselves or by their employers.

Even if the set-up of the pillar is very similar to the Pillar II set-up, the attractiveness of the financial products offered by supplementary pension asset managers is very low.

Number of participants (savers) and assets under management in Pillar III providers are presented in the graph below.



Source: Own calculation (https://www.lb.lt/en/fs-pension-funds), 2019.

Pillar III is organized in a way that pension providers (Voluntary Supplementary Pension Accumulation Management Companies) offer pension funds on a basis of typical mutual funds. At the end of 2018, 12 supplementary voluntary pension accumulation funds operated in Lithuania were managed by 3 managing companies. Comparing to the previous years, the market is under the significant consolidation pressure as the management companies strive to attract more clients. In 2018, assets managed by funds grew by 7.5% and amounted to €103.86 million despite the negative return. Number of participants accumulating their pension in Pillar III pension funds increased by 6.9% and amounted to close to 62,000. The average value of savings per member is only €1,680.

Pension Vehicles

Pillar II – Funded pensions

As indicated above, each provider (PAC) can offer more than one pension fund. Currently, 26 pension funds are offered by 4 management companies and 1 life insurance undertaking. 2018 brought 6 new "life-cycle" funds on the market offered by Swedbank.

Table LT5. List of Pillar II Pension Funds

Investment style of the pension plan	Pension Fund Name	Inception day
CONSERVATIVE INVESTMENT PENSION FUNDS	Aviva Europensija	15.06.2004
	Swedbank Pensija 1	14.06.2004
	Luminor pensija 1	15.06.2004
	INVL STABILO II 58+	15.06.2004
	SEB pensija 1	15.06.2004
	Swedbank Pension pay-out fund	14.06.2004
SMALL EQUITY SHARE PENSION FUNDS (UP TO 30%)	Aviva Europensija plius	15.06.2004
	Luminor pensija 2	15.06.2004
	INVL MEZZO II 53+	15.06.2004
	Swedbank Pensija 2	14.06.2004
AVERAGE EQUITY SHARE PENSION FUNDS (UP TO 30%)	Aviva Europensija ekstra	08.02.2006
	Luminor pensija 3	15.06.2004
	INVL MEDIO II 47+	24.09.2007
	SEB pensija 2	15.06.2004
	Swedbank Pensija 3	14.06.2004
	Swedbank Pensija 4	18.12.2005
EQUITY PENSION FUNDS (UP TO 100%)	Luminor pension 4	06.06.2017
	INVL EXTREMO II 16+	24.09.2007
	SEB pensija 3	27.03.2006
	Swedbank Pensija 5	04.05.2011
LIFE CYCLE FUNDS (DYNAMIC ASSET ALLOCATION STRATEGY)	**Swedbank Pensija 1961-1967**	**01.03.2018**
	Swedbank Pensija 1968-1974	**01.03.2018**
	Swedbank Pensija 1975-1981	**01.03.2018**
	Swedbank Pensija 1982-1988	**01.03.2018**
	Swedbank Pensija 1989-1995	**01.03.2018**
	Swedbank Pensija 1996-2002	**01.03.2018**

Source: Own calculation (https://www.lb.lt/en/fs-pension-funds), 2019.

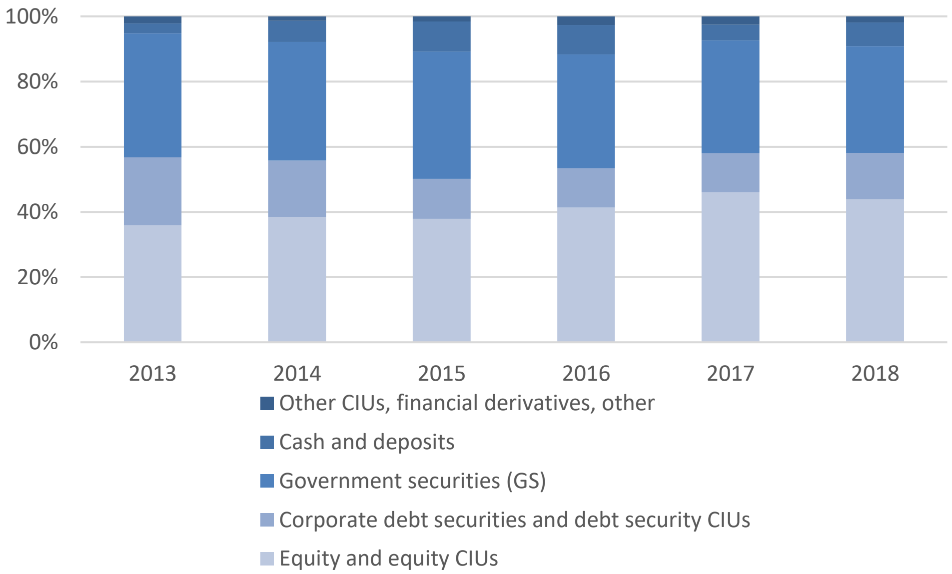
The structure of savers, assets under management and market share of four group of pension funds according their investment strategy is presented in a table below.

Table LT6. Pillar II Market share based on AuM and Number of participants				
Investment strategy	AuM	Market share	Number of Participants	Market share
Conservative	244,127,541 €	7.83%	90,578	6.87%
Small Equity share (up to 30%)	728,241,859 €	23.35%	285,617	21.67%
Average Equity share (from 30% up to 60%)	1,546,850,218 €	49.60%	637,130	48.35%
Equity (up to 100%)	542,660,698 €	17.40%	269,007	20.41%
Life Cycle Funds	56,468,332 €	1.81%	35,412	2.69%
TOTAL	**3,118,348,649 €**	**100.00%**	**1,317,744**	**100.00%**

Source: Own elaboration based on Bank of Lithuania data, 2018

There are no strict quantitative limitations on financial instruments. However, the management company has to ensure risk management principles and avoid concentration risk. The portfolio structure (data available since 2013) of Pillar II pension funds is presented in the graph below.

Graph LT7. Pillar II Portfolio structure



Source: Own calculation (https://www.lb.lt/en/fs-pension-funds), 2019.

It can be seen that dominant financial instruments in Pillar II pension funds' portfolios are the equity UCITS funds (CIUs) and government bonds. Overall, UCITS funds account for more than 56% of portfolio structures and, therefore, it can be concluded that Pillar II pension funds vehicles operate as fund-of-funds.

Pillar III – Voluntary private pensions

The Lithuanian Pillar III allows licensed asset management companies (licensing process similar to typical UCITS funds providers) to offer as many voluntary pension funds as they prefer. At its inception, there were only 5 pension funds offered by 3 providers. Currently (at the end of 2018), there are 4 providers offering 12 voluntary pension funds. The list of Pillar III pension funds is presented below.

Table LT8. List of III. Pillar Pension Funds

Investment strategy	Pension Fund Name	Inception day
BOND PENSION FUND	INVL STABILO III 58+	20.12.2004
	Luminor pensija 1 plius	07.10.2013
	SEB Pensija 1 plius	27.10.2004
MIXED INVESTMENT PENSION FUNDS	Luminor pensija 2 plius	26.10.2004
	INVL Medio III 47+	24.09.2007
	INVL Apdairus	13.05.2013
	Luminor pensija darbuotojui 1 pllius	20.11.2014
	Luminor pensija darbuotojui 2 pllius	20.11.2014
EQUITY PENSION FUNDS	Luminor pensija 3 plius	01.10.2007
	INVL Drąsus	20.12.2004
	INVL Extremo III 16+	24.09.2007
	SEB Pensija 2 plius	27.10.2004

Source: Own calculation (https://www.lb.lt/en/fs-pension-funds), 2019.

The Pillar III market is highly concentrated, where around 76% of assets were concentrated in the funds of 2 PACs. The marketshare according to the AuM and number of participants is presented in the table below.

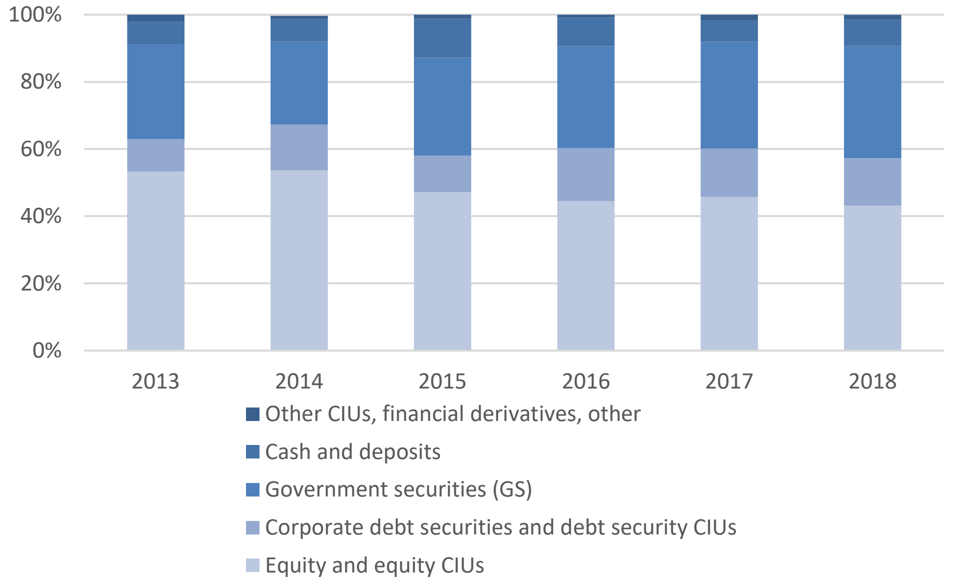
Table LT9. Pillar III Market share based on AuM and number of participants

Investment strategy	AuM	Market share	N° of Participants	Market share
Bond Pension Funds	28,054,738 €	27.01%	10,477	16.84%
Mixed Investment Pension Funds	40,248,343 €	38.75%	32,177	51.72%
Equity Pension Funds	35,553,041 €	34.23%	19,561	31.44%
TOTAL	**103,856,123 €**	**100.00%**	**62,215**	**100.00%**

Source: Own elaboration based on Bank of Lithuania data, 2019.

There are no specific quantitative limitations on financial classes or instruments. However, the investment strategy of the pension fund must include the procedure and areas for investment of pension assets, risk assessment methods, risk management principles, risk management procedures and methods used, and the strategic distribution of pension assets according to the duration and origin of the obligations relating to pension accumulation contracts. The management company must review the investment strategy of the pension fund at least every 3 years. Pillar III pension funds´ portfolio structure is presented below (data available since 2013).

Graph LT10. Pillar III Portfolio structure



Source: Own elaboration based on Bank of Lithuania data, 2019.

Similar to the Pillar II pension funds, UCITS account for almost 58% of pension funds´ portfolios, while the government bonds account for almost 32%. Pillar III pension funds can be therefore characterized as a fund-of-funds.

Charges

Pillar II – Funded pensions

Pillar II pension funds´ management companies charge mostly the asset management fee, which do not exceed 1% of AuM per year. The second type of the fee that is applied is the switching fee, which accounts for 0.05% of transferred savings. The next table compares effective charges of Pillar II pension funds in Lithuania.

Table LT11. Pillar II Pension Funds´ Fees and Charges

Pension Fund	Type of fee	Year 2018
SEB Pensija 1	Contribution fee	0.00%
	Asset management fee	0.65% of the average annual value of pension savings in the account

	Company Change fee	Up to 0.05% of transferred savings
SEB Pensija 2	Contribution fee	0.00%
	Asset management fee	1% of the average annual value of pension savings in the account
	Company Change fee	Up to 0.05% of transferred savings
SEB Pensija 3	Contribution fee	0.00%
	Asset management fee	1% of the average annual value of pension savings in the account
	Company Change fee	Up to 0.05% of transferred savings
INVL EXTREMO II 16+ PENSION FUND	Contribution fee	0.00%
	Asset management fee	0.99%
	Company Change fee	0.00%
INVL MEDIO II 47+ PENSION FUND	Contribution fee	0.00%
	Asset management fee	0.99%
	Company Change fee	0.00%
INVL MEZZO II 53+ PENSION FUND	Contribution fee	0.00%
	Asset management fee	0.99%
	Company Change fee	0.00%
INVL STABILO II 58+ PENSION FUND	Contribution fee	0.00%
	Asset management fee	0.65%
	Company Change fee	0.00%
Swedbank Pensija 1961-1967	Contribution fee	0.00%
	Asset Management Fee	0.75%
	Management company change fee	0.00%
Swedbank Pensija 1968-1974	Contribution fee	0.00%
	Asset Management Fee	0.75%
	Management company change fee	0.00%
Swedbank Pensija 1975-1981	Contribution fee	0.00%
	Asset Management Fee	0.75%
	Management company change fee	0.00%
Swedbank Pensija 1982-1988	Contribution fee	0.00%
	Asset Management Fee	0.75%
	Management company change fee	0.00%
Swedbank Pensija 1989-1995	Contribution fee	0.00%
	Asset Management Fee	0.75%
	Management company change fee	0.00%
Swedbank Pensija 1996-2002	Contribution fee	0.00%
	Asset Management Fee	0.75%
	Management company change fee	0.00%
Swedbank Pensija 1	Contribution fee	0.00%

	Asset management fee	0.65%
	Company change fee	0.05%
	Fund change fee	NONE
Swedbank Pensija 2	Contribution fee	0.00%
	Asset management fee	0.80%
	Company change fee	0.05%
	Fund change fee	NONE
Swedbank Pensija 3	Contribution fee	0.00%
	Asset management fee	0.80%
	Company change fee	0.05%
	Fund change fee	NONE
Swedbank Pensija 4	Contribution fee	0.00%
	Asset management fee	0.80%
	Company change fee	0.05%
	Fund change fee	NONE
Swedbank Pensija 5	Contribution fee	0.00%
	Asset management fee	0.80%
	Company change fee	0.05%
	Fund change fee	NONE
Swedbank Pension pay-out fund	Contribution fee	0.00%
	Asset management fee	0.40%
	Company change fee	0.05%
	Fund change fee	NONE
Aviva Europensija	Contribution fee	0.00%
	Asset Management fee	0.65%
	Company change fee	0.05%
	Fund change fee	NONE
Aviva Europensija plius	Contribution fee	0.00%
	Asset Management fee	0.80%
	Company change fee	0.05%
	Fund change fee	NONE
Aviva Europensija ekstra	Contribution fee	0.00%
	Asset Management fee	0.80%
	Company change fee	0.05%
	Fund change fee	NONE
Luminor pensija 1	Contribution fee	0.00%
	Asset Management Fee	0.65% of the average annual value of pension savings in the account
	Management company change fee	Up to 0.05% of transferred savings
Luminor pensija 2	Contribution fee	0.00%
	Asset Management Fee	0.80% of the average annual value of pension savings in the account

	Management company change fee	Up to 0.05% of transferred savings
Luminor pensija 3	Contribution fee	0.00%
	Asset Management Fee	0.80% of the average annual value of pension savings in the account
	Management company change fee	Up to 0.05% of transferred savings
Luminor pensija 4	Contribution fee	0.00%
	Asset Management Fee	0.80% of the average annual value of pension savings in the account
	Management company change fee	Up to 0.05% of transferred savings

Source: Own calculation (https://www.lb.lt/en/fs-pension-funds), 2019.

Considering the asset management fee, it can be seen that pension funds with higher risk profile have also higher fees, while the conservative funds charge lower asset management fees.

Pillar III – Voluntary private pensions

The fee structure of the Pillar III pension funds is more complex. Management companies charge various entry fees, in which case the calculation of the overall impact of fees on accumulated assets is harder to obtain. The table below compares fees of Pillar III pension funds in Lithuania.

Table LT12. Pillar II Pension Funds´ Fees and Charges

Pension Fund	Type of fee	Year 2018
SEB Pensija 1 plius	Contribution fee	2.00%
	Asset management fee	0.65 percent average annual value of funds in the pension account
	Company Change fee	0.00%
SEB Pensija 2 plius	Contribution fee	3.00%
	Asset management fee	1.00% average annual value of funds in the pension account
	Company Change fee	0.00%
INVL Drąsus	Contribution fee	0.00%
	Entry fee	0.00%
	Asset management fee	1.50%
	Performance Fee	0.00%
	Switch Fee	0.00%
	Partial Withdrawal Fee	10.00%
	Minimum investment amount	0.00%

INVL Apdairus	Contribution fee	0.00%
	Entry fee	0.00%
	Asset management fee	1.50%
	Performance Fee	0.00%
	Switch Fee	0.00%
	Partial Withdrawal Fee	10.00%
	Minimum investment amount	0.00%
INVL STABILO III 58+	Contribution fee	0.00%
	Entry fee	0.00%
	Asset management fee	1.00%
	Performance Fee	0.00%
	Switch Fee	0.00%
	Partial Withdrawal Fee	10.00%
	Minimum investment amount	0.00%
INVL Medio III 47+ Pension fund	Contribution fee	0.00%
	Entry fee	30.00%*
	Asset management fee	0.80%
	Performance Fee	0.00%
	Switch Fee	0.00%
	Partial Withdrawal Fee	10.00%
	Minimum investment amount	0.00%
INVL Extremo III 16+ Pension Fund	Contribution fee	0.00%
	Entry fee	30.00%*
	Asset management fee	0.80%
	Performance Fee	0.00%
	Switch Fee	0.00%
	Partial Withdrawal Fee	10.00%
	Minimum investment amount	-
Luminor pensija 1 plius	Contribution Fee >= 100,000 €	0.50%
	Contribution Fee 10,000.00 € - 99,999.99 €	0.70%
	Contribution Fee 1,500.00 € - 9,999.99 €	1.00%
	Contribution Fee 250.00 € - 1,499.99 €	1.50%
	Contribution Fee < 250.00 €	2.00%
	Asset Management Fee	0.89%
	Depository Fee	-
	Change of fund	free of charge
	change of management company	free of charge
	Withdrawal from pension funds	1 % of transfared savings
	Withdraval from pension fund	free of charge
Luminor pensija 2 plius	Contribution Fee >= 100,000 €	0.50%
	Contribution Fee 10,000.00 € - 99,999.99 €	0.70%
	Contribution Fee 1,500.00 € - 9,999.99 €	1.00%
	Contribution Fee 250.00 € - 1,499.99 €	1.50%
	Contribution Fee < 250.00 €	2.00%
	Asset Management Fee	1.60%

	Depository Fee	-
	Change of fund	free of charge
	Change of management company	free of charge
	Withdrawal from pension funds	1 % of transfared savings
	Withdraval from pension fund	free of charge
Luminor pensija 3 plius	Contribution Fee >= 100,000 €	0.50%
	Contribution Fee 10,000.00 € - 99,999.99 €	0.70%
	Contribution Fee 1,500.00 € - 9,999.99 €	1.00%
	Contribution Fee 250.00 € - 1,499.99 €	1.50%
	Contribution Fee < 250.00 €	2.00%
	Asset Management Fee	2.17%
	Depository Fee	-
	Change of fund	free of charge
	Change of management company	free of charge
	Withdrawal from pension funds	1 % of transfared savings
	Withdraval from pension fund	free of charge
Luminor pensija darbuotojui 1 pllius	Contribution Fee >= 100,000 €	0.50%
	Contribution Fee 10,000.00 € - 99,999.99 €	0.70%
	Contribution Fee 1,500.00 € - 9,999.99 €	1.00%
	Transfer of funds from other fundor Management company	Free of charge
	Asset Management Fee	1.39%
	Depository Fee	-
	Change of fund	free of charge
	Change of management company	free of charge
	Withdrawal from pension funds	free of charge
	Withdraval from pension fund	free of charge
Luminor pensija darbuotojui 2 plius	Contribution Fee >= 100,000 €	0.50%
	Contribution Fee 10,000.00 € - 99,999.99 €	0.70%
	Contribution Fee 1,500.00 € - 9,999.99 €	1.00%
	Transfer of funds from other fundor Management company	Free of charge
	Asset Management Fee	1.61%
	Depository Fee	-
	Change of fund	free of charge
	Change of management company	free of charge
	Withdrawal from pension funds	free of charge
	Withdraval from pension fund	free of charge

Source: Own calculations (https://www.lb.lt/en/fs-pension-funds), 2019.

** During the first 12 months after becoming a Participant, a 30% entry fee applies to pension contributions, with the total fee not to exceed € 200 during the period. This fee applies only to new Participants whose agreements took effect after the fee's introduction was announced on the website www.invl.com, and to Participants who have switched from a pension fund managed by another management company. The entry fee does not apply to Participants who have switched from one of the Management Company's other pension funds*

In most cases, additional costs, that are charged on the pension fund´s account and not directly visible to the savers are the audit fees and custodian (depository) fees. On average, they account for 0.25%, and 0.055% respectively.

Comparing the Pillar II and Pillar III pension funds´ fees, it is obvious, that even if the management and investment strategies are very similar, the fee structure and overall level of fees is higher in Pillar III.

Taxation

Pillar II – Funded pensions

Lithuania applies an "EEE" regime for the taxation of Pillar II pension accounts. Employee contributions are tax-deductible even if they are higher than required (2+2+2 system). Investment income on the level of the pension fund is tax-exempt. Pension benefits paid out during retirement are tax-exempt from a personal income tax as the old-age income is considered as a part of social system.

Pillar III – Voluntary private pensions

A similar tax regime is applied on the Pillar III savings, but there are some ceilings on contributions and withdrawals.

Regarding the contribution phase, there is a tax-refund policy, which means that the contributions of up to 25% of gross earnings, the income tax (15%) is returned. Therefore, we can conclude that the contribution phase is a "E" regime.

Positive returns on accumulated savings are tax-exempt, so the investment phase is a "E" regime.

Regarding the withdrawal (pay-out) phase, pension benefits paid from Pillar III voluntary funds can be received at any age and are levied with 15% income tax, but become tax-free if a person:

1) holds savings in a pillar III pension fund for at least 5 years and reaches the age of 55 at the time of payment of the benefit (and the pension savings agreement was concluded before 31 December 2012); or
2) holds savings in a pillar III pension fund for at least 5 years and reaches the age which is five years earlier than the threshold for the old-age pension at the time of payment of the benefit (if the pension savings agreement was concluded after 1 January 2013).

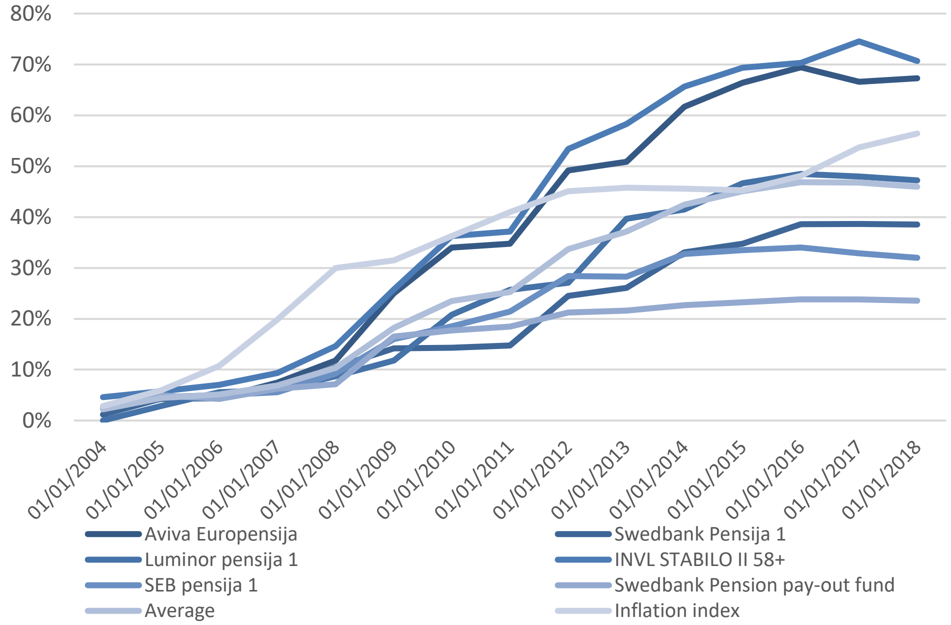
Under the optimum set-up, the "EEE" tax regime can be achieved on Pillar III savings.

Pension Returns

Pillar II – Funded pensions

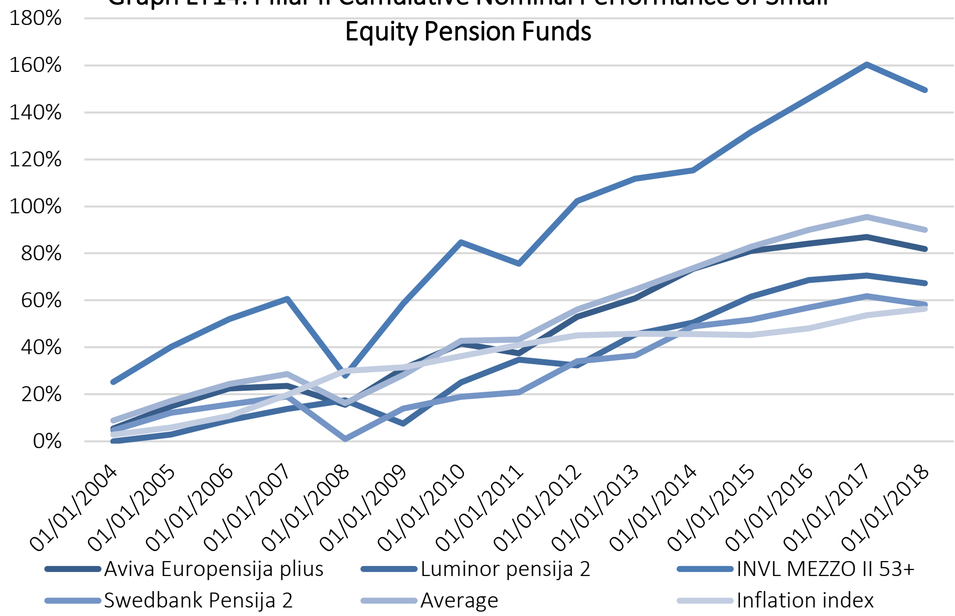
Pension returns of Pillar II pension funds differ according to the investment strategy applied. In order to see the differences among pension funds´ past performance, we present the returns according to the 4 defined groups of pension funds based on their investment strategy. Each graph below contains comparison to the inflation index.

Graph LT13. Pillar II Cumulative Nominal Performance of Conservative Pension Funds



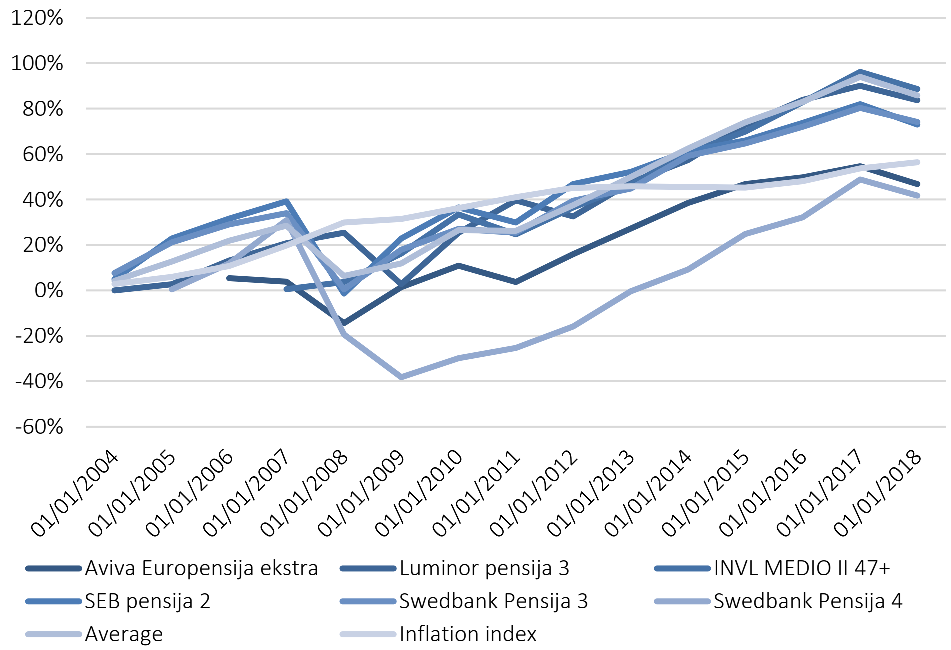
<u>Source</u>: Own elaboration based on Bank of Lithuania data, 2019

Graph LT14. Pillar II Cumulative Nominal Performance of Small Equity Pension Funds



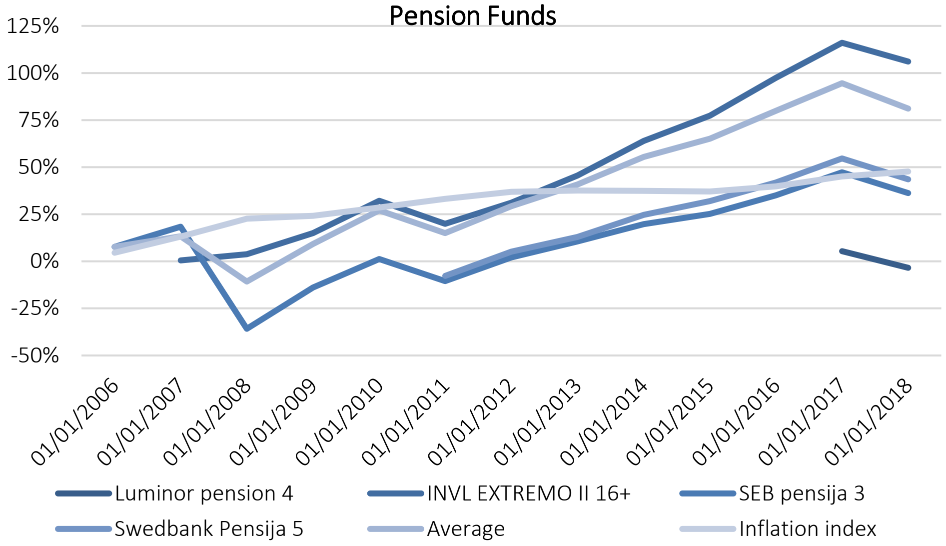
Source: Own elaboration based on Bank of Lithuania data, 2019

Graph LT15. Pillar II Cumulative Nominal Performance of Average Equity Pension Funds



Source: Own elaboration based on Bank of Lithuania data, 2019

Graph LT16. Pillar II Cumulative Nominal Performance of Equity Pension Funds



Source: Own elaboration based on Bank of Lithuania data, 2019

When comparing pension funds within each group, we see that the asset managers of INVL pension funds outperform their peers within each group. Nominal as well as real returns of Pillar II pension funds in Lithuania are presented in a summary table below.

Table LT17. Nominal and Real Returns of II. Pillar in Lithuania						
2004		4.71%			1.86%	
2005		5.49%			2.50%	
2006		4.76%			0.20%	
2007		3.72%			-4.48%	
2008		-9.16%			-17.63%	
2009		8.89%			7.72%	
2010		10.19%			6.57%	
2011	Nominal return after charges, before inflation and taxes	-1.04%	3.83%	Real return after charges and inflation and before taxes	-4.51%	0.67%
2012		8.74%			5.83%	
2013		6.24%			5.79%	
2014		6.67%			6.78%	
2015		4.92%			5.17%	
2016		4.25%			2.29%	
2017		4.01%			0.20%	
2018		-3.24%			-5.00%	

Source: Own calculation (https://www.lb.lt/en/fs-pension-funds), 2019

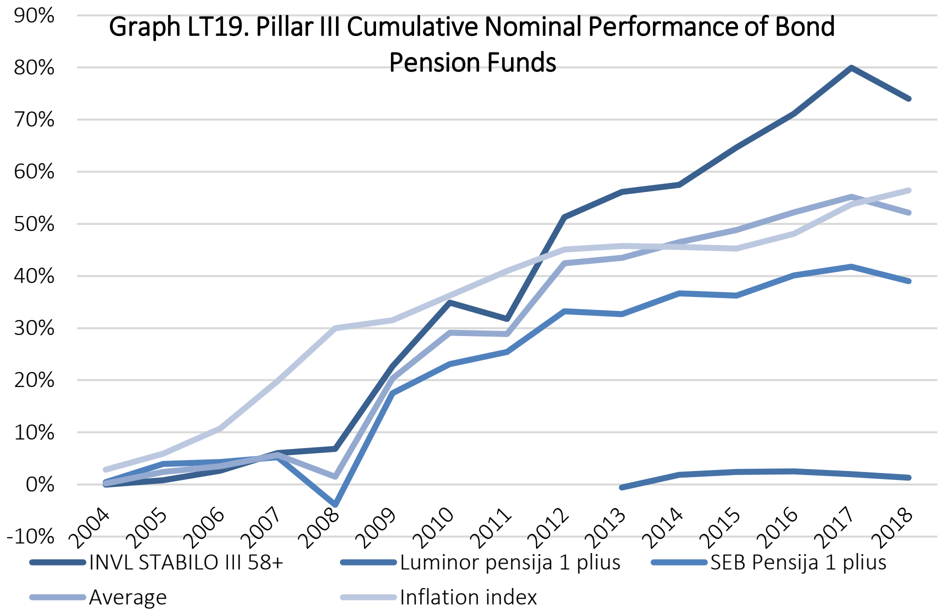
Another view on the performance is according to the holding period.

Table LT18 Performance of Pillar II Pension Funds according the holding period		
Holding Period	Net Nominal Annualized Performance	Real Net Annualized Performance
1-year	-3.24%	-5.00%
3-years	1.61%	-0.89%
5-years	3.26%	1.80%
7-year	4.45%	2.93%
10-years	4.88%	2.98%
Since inception	3.83%	0.67%

Source: Own calculation (https://www.lb.lt/en/fs-pension-funds), 2019

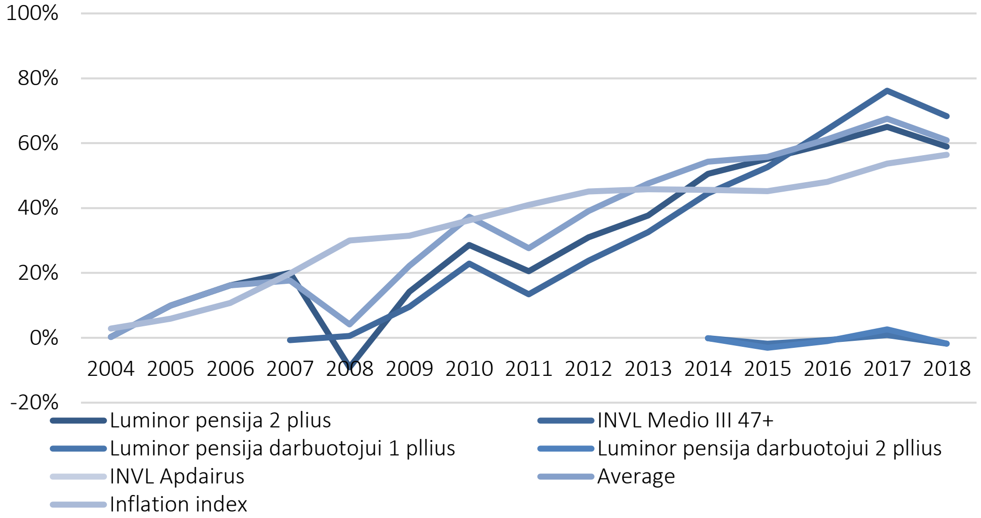
Pillar III – Voluntary private pensions

Pillar III pension funds' performance is presented according to their investment strategy, where 3 groups are formed. The graphs below present the pension funds´ performance on a nominal cumulative basis compared to inflation.



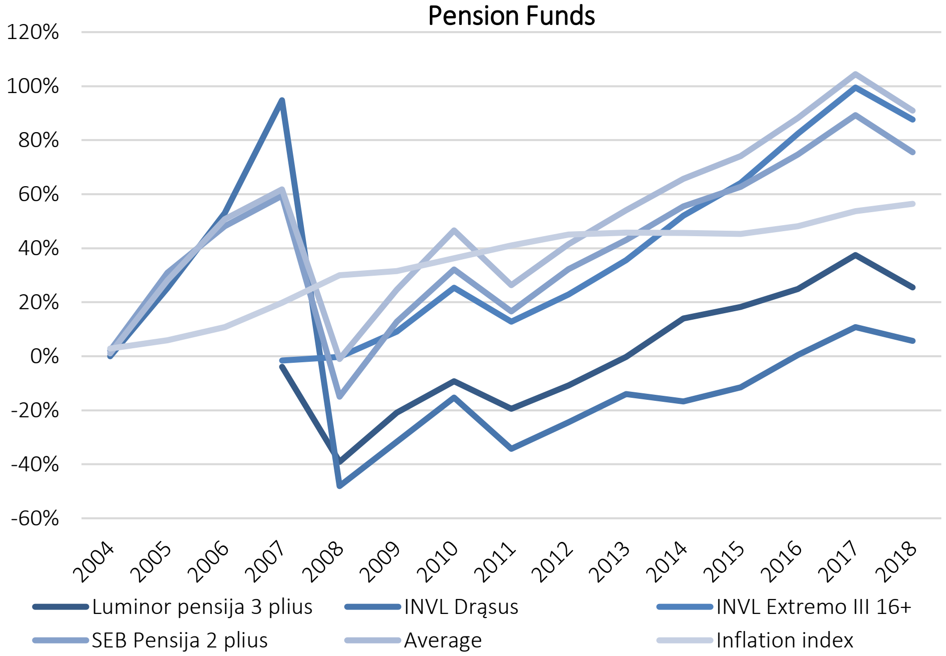
Source: Own elaboration based on Bank of Lithuania data, 2019

Graph LT20. Pillar III Cumulative Nominal Performance of Mixed Pension Funds



Source: Own elaboration based on Bank of Lithuania data, 2019

Graph LT21. Pillar III Cumulative Nominal Performance of Equity Pension Funds



Source: Own elaboration based on Bank of Lithuania data, 2019

Pillar III pension funds' performance in most cases correlate with its peers in the Pillar II. Even the names of the pension funds (in case of the INVL management company) are the same, so it indicates that the funds have the same portfolio structure and the return differences are explained by different fee structure. Again, INVL funds outperform their peers in all 3 group. However, the exception is the INVL III akciju pnsiju fondas, which achieved the lowest returns over the analyzed period and could be characterized as the most volatile pension fund as it went from almost 100% return in 2007 into negative territory of -50% a year later.

Table LT22. Nominal and Real Returns of III. Pillar in Lithuania						
2004		0.53%			-2.31%	
2005		13.52%			10.53%	
2006		8.64%			4.08%	
2007		4.51%			-3.68%	
2008		-23.27%			-31.73%	
2009		21.94%			20.77%	
2010		13.74%			10.12%	
2011	**Nominal return after charges, before inflation and taxes**	-8.73%	**3.57%**	**Real return after charges and inflation and before taxes**	-12.21%	**0.32%**
2012		10.86%			7.95%	
2013		5.88%			5.43%	
2014		5.19%			5.30%	
2015		2.86%			3.11%	
2016		5.09%			3.13%	
2017		5.40%			1.59%	
2018		-4.35%			-6.10%	

Source: Own elaboration based on Bank of Lithuania data, 2019

Again, we present the performance of Pillar III funds according to various holding period.

Table LT23 Performance of Pillar III Pension Funds according the holding period		
Holding Period	Net Nominal Annualized Performance	Real Net Annualized Performance
1-year	-4.35%	-6.10%
3-years	1.94%	-0.55%
5-years	2.77%	1.33%
7-year	4.33%	2.83%
10-years	5.47%	3.56%
Since inception	3.57%	0.32%

Conclusions

Considering the wider factors, it is safe to say that the decreasing labor force and the implementation of the automatic balancing mechanism within the PAYG pillar will lead to a lower replacement ratio generated from Pillar I pensions. Therefore, Lithuania can be seen as a strong advocate of private pension savings where the pillars will grow on importance.

Reforms in the area of PAYG scheme supported with the funded pension schemes that emerged in 2017 and should be effective by 2019 will shift the preferences of the Lithuanian savers to rely more on their private funded pension schemes.

Performance of the Pillar II as well as Pillar III pension funds can be seen as satisfactory. However, the dominance of Pillar II funds opens the question on the further changes in the Pillar III, which cannot compete to the similar and cheaper peers in Pillar II.

The latest changes in the contributory mechanism, where additional individual contributions towards Pillar II are promoted, puts more pressure on Pillar III fund managers due to the growing crowding-out effect.

There are only minor differences between the portfolio structure of pension funds within both pillars, which leads to the conclusion that a similar performance can be expected. The difference is thus generated mostly by the different fee structure, which is in favor of Pillar II funds.

Lithuania has a favorable tax treatment of private pension savings, where in both cases an "EEE" tax regime is applied.

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