PENSION SAVINGS The Real Return 2019 Edition

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 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	Standard & Poor Dow Jones' Indices Research Report on Active Management
Scorecard	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 employee".³

² See European Commission, 'Investment Funds' (28 August 2019)

https://ec.europa.eu/info/business-economy-euro/growth-and-investment/investmentfunds 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 preretirement 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 preretirement 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: <u>http://ec.europa.eu/eurostat/web/products-</u> <u>datasets/product?code=tsdde511</u>.



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.

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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 indepth 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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Grégoire Naacke has been appointed in July 2019 as the new director of the European Savings Institute ("Observatoire de l'Épargne Européenne"), a non-profit organisation promoting and coordinating data and research on European savings. He was previously Head of Operations at the World Federation of Exchanges and worked as an economist both at the European Savings Institute and World Federation of Exchanges for more than 10 years.

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Petersburg (Masters). Before Joining the BETTER FINANCE team, Lina completed a master's degree at the Brussels School of International Studies in International Law focused on international bank' capital requirements.

Guillaume Prache is the Managing Director of BETTER FINANCE. He is a member of the EIOPA (European Insurance and Occupational Pensions Authority) Occupational Pensions Stakeholder Group, of the EBA (European Banking Authority) Stakeholder Group, and former chair of the ESMA (European Securities & Markets Authority) Securities and Markets Stakeholder Group.

Joanna Rutecka-Góra is associate professor at the Warsaw School of Economics where she conducts research on old-age pension systems, insurance markets and consumer protection on financial markets. She cooperated with the Polish Financial Ombudsman and was an advisor to the President of the Polish Chamber of Pension Funds. She is an active member of the Polish Association of Social Policy, the Polish Pension Group SGH and the European Network for Research on Supplementary Pensions.

Ján Šebo is Vice-Dean at Matej Bel University in Slovakia and Consultant at the Institute of Savings and Investment. He is a member of the Financial Services User Group of the European Commission and of the European Insurance and Occupational Pensions Authority's Occupational Pensions Stakeholder Group. He focuses on pension systems' research and professionally consults on the design and implementation of private pension schemes.

Dr. Thomas Url is an economist at the Austrian Institute of Economic Research (WIFO) and lecturer at the University of Vienna. He graduated at the University of Graz and attended the post graduate course in economics at the Institute for Advanced Studies (Vienna). His main research areas are risk management and funded pension systems, European monetary and economic union as well as various topics in applied econometrics.

Stefan Dragos Voicu is Research & Policy Officer at BETTER FINANCE, having a thorough background in Romanian, French and EU law. He specialises in Financial Services Regulation and Capital Markets Research, with a focus on packaged investment products (mutual funds and insurances), retirement provision and market infrastructure. He coordinates four BETTER FINANCE Working Groups on Pensions, Insurances, Packaged Investments and Audit & Reporting, and is a member of the EIOPA Expert Practitioner Panel on PEPP.

Aiste Vysniauskaite joined BETTER FINANCE a Communications Assistant after finishing her Master studies in Media Culture in Maastricht university where she analysed the new media practices and their effects on society. At BETTER FINANCE she contributes to making videos and podcasts, particularly in terms of content creation. Aiste has a bachelor's degree in Political Science and is passionate about digital communication and FinTech.



Pension Savings: The Real Return 2019 Edition

Executive Summary

Real net returns, before taxes

How much did pension plans earn on average?

The main question this report seeks to answer is how much, on average, was the pension saver left with after charges and inflation were deducted from his benefits at the end of different periods? The aggregate summary return tables show, based on Pillars (II – occupational; III – voluntary/individual) the annual average rate of return on investments made by pension plans in each country based on 5 periods: 1 (last) year; 3 (last) years; 7 (last) years; 10 (last) years and since the start of the reporting period available (differs from one country to another).

These standardised periods eliminate inception and market timing bias, allowing to "purely" compare performances between different pension schemes.

Aggrega reti	Aggregate summary return table <u>Pillar II</u>								
	1 ye 2018	ear 2017	3 ye 2016- 2018	ars 2015- 2017	7 ye 2012- 2018	ars 2011- 2017	10 y 2009- 2018	years 2008- 2017	whole reporting period*
Austria	-0.08%	3.72%	-0.39%	2.68%	2.09%	2.21%	2%	0.97%%	. 0.9%
Belgium	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bulgaria	-8%	3.9%	-0.42%	2.87%	2.05%	2.61%	1.40%	-1.72%	-1.83%
Denmark	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Estonia	-5.79%	3.76%	-1.64%	1.21%	1.39%	0.97%	1.83%	-1.29%	-0.01%
France	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Germany	n.a.	2.16%	n.a.	2.44%	n.a.	2.55%	n.a.	2.31%	2.23%
Italy	-3.60%	1.90%	0.05%	2.21%	3.15%	2.98%	2.71%	1.75%	0.54%
Latvia	-6.64%	1.07%	-1.88%	0.84%	1.58%	1.67%	2.60%	1.22%	-0.46%
Lithuania	-5.00%	0.20%	-0.89%	2.53%	2.93%	3.01%	2.98%	1.53%	0.67%
Netherlands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Poland	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Romania	-1.96%	1.67%	1.16%	3.40%	4.55%	4.85%	5.14%	5.35%	4.64%
Slovakia	-3.52%	0.77%	0.15%	1.80%	0.72%	0.85%	0.28%	-0.47%	-0.41%
Spain	-4.42%	1.77%	-0.41%	2.10%	3.15%	3.47%	2.69%	1.85%	0.41%
Sweden	-4.2%	8.44%	4.09%	8.02%	9.08%	9.04%	n.a.	n.a.	7.29%
UK	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Source: BETTER FINANCE own composition; *whole reporting period differs between countries;



Sweden Pillar I: 2018 - -5.62%; 2016-2018 – 4.60%; 2012-2018 – 10.19%; 2009-2018 – 9.75%; whole reporting period – 3.85%.

Voluntary/individual pension plans falling into the third pension pillar have more investment flexibility, showing better returns on each period than in Pillar II (occupational pensions). On average, individual private pension arrangements earned x% per year since 2009.

Agg	regate summ return table	ary				<u>Pillar III</u>			
	1 year		3 years 2016- 2015-		7 years 2012- 2011-		10 years 2009- 2008-		whole reporting
	2018	2017	2018	2017	2018	2017	2018	2017	period*
Austria	0.01%	0.91%	1.31%	2.04%	1.75%	1.63%	1.74%	1.66%	2.16%
Belgium	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bulgaria	-7.66%	5.24%	1.03%	4.60%	3.34%	3.87%	2.46%	-1.40%	-0.33%
Denmark	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Estonia	-9.83%	6.54%	-1.91%	2.57%	2.27%	1.90%	3.32%	4.40%	0.64%
France*	-2.60%	1.22%	-0.12%	1.49%	1.42%	1.57%	1.42%	1.42%	1.30%
Germany	n.a.	1%/1.1%	n.a.	1.7%/1.8%	n.a.	2%/2.1%	n.a.	2.3%/2.3%	2.2%/2.2%
Italy	-3.50%	1.10%	-0.08%	2.04%	2.35%	2.20%	2.10%	1.23%	0.78%
Latvia	-5.19%	1.46%	-1.78%	1.52%	1.73%	1.91%	n.a.	n.a.	0.65%
Lithuania	-6.10%	1.59%	-0.55%	2.61%	2.83%	1.84%	3.56%	0.31%	0.32%
Netherlands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Poland	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Romania	-3.68%	1.38%	0.19%	2.35%	3.61%	3.93%	3.73%	3.63%	2.27%
Slovakia	-5.54%	2.55%	0%	1.44%	0.86%	0.65%	0.14%	n.a.	0.14%
Spain	-5.71%	1.34%	-1.41%	0.99%	2.16%	2.49%	1.46%	1.22%	0.39%
Sweden	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
UK	na	na	na	na	na	na	na	na	na

Source: BETTER FINANCE own composition; *whole reporting period differs between countries; *after tax

Unfortunately, due to unavailability of data breakdown, in some country cases (UK, Netherlands, Belgium, Denmark, Poland) we weren't able to calculate the annual reav average returns by Pillar. Nevertheless, the results by retirement provision vehicle are available in Graph 17 and Table 18 in the *General Report* and on an annual basis (nominal, net and real net return) in each country case).

Note: In few pension systems analysed in the report the data available on retirement provision vehicles has a "clear cut" between Pillar II and Pillar III (such as Romania or Slovakia). In the other, where pension savings products may be used for both Pillars, the categorisation is more difficult since return data is not separated as such. However, for reasons of simplicity and coparability, the authorts of the report have put all efforts in correctly assigning each product according to the pillar it is or should be used for.



Taxation

What happens with investment returns after charges and inflation are deducted?

Charges, investment strategies and inflation influence earnings, but the actual sum the pension saver will be able to withdraw and spend at retirement will be highly dependent on the *taxation regime*. In other words, when and how much do savers lose of their pensions due to taxes?

The actual taxation rates (in %) are highlighted in Table GR10 and in the *Taxes* sub-section of each individual country case. However, the purpose of the "pillar"-system is to stimulate pension savings by giving tax incentives (exemptions, lower taxes, deductibility, subsidises etc).

The table below shows whether the three pension saving steps (<u>contribution</u> – *what you pay for your pension*; <u>returns</u> – *what your investments earn*; and <u>pay-outs</u> – *what you will withdraw*) are **exempt (E)** or **taxed (T)** in each country under review.

	Taxation to pension savings						
	Contrib	outions	Ret	urns	Pay	-outs	
	Pillar II	Pillar III	Pillar II	Pillar III	Pillar II	Pillar III	
Austria	E	Е	Е	Е	Т	Т	
Belgium	Е	Е	E	Е	Т	т	
Bulgaria	E	E	E	E	E	E	
Denmark*	Т	Т	Т	Т	Т	т	
Estonia	Е	E	Е	Е	Т	т	
France	Е	Е	Т	Т	Т	т	
Germany	Т	Т	Е	Т	Т	Т	
Italy	E	Е	Т	т	Т	т	
Latvia	E	Е	Е	Е	Т	Т	
Lithuania	E	Е	E	Е	E	Е	
Netherlands	E	Е	Е	E	Т	т	
Poland	т	E/T	Е	Е	E	E/T	
Romania	E	Е	Е	Е	Т	т	
Slovakia*	E	Е	Е	Е	Е	т	
Spain*	E	Е	Е	Е	Т	т	
Sweden	E	Е	Т	Т	Т	т	
UK	E	E	Е	E	Т	Т	

*There are rules and exceptions based on the type of pension vehicle. For details, see the relevant country case; <u>Source</u>: BETTER FINANCE own composition



Pension plan types

Who bears the risk of adequate pensions at retirement?

Back in the day, the level of pension (*benefit*) would be pre-defined by the provider of the pension plan, usually based on a formula that used some standard variables for each saver (income, inflation, average salaries etc). As such, the pension plan provider borne the risk of obtaining the necessary resources (money) to pay-out this *defined benefit* pension for the saver starting with retirement age.

Nowadays, most private pension plans (Pillar II and III) use a *defined contribution* rule. This means that the saver only knows how much he can pay for his future pension, but the actual amount and income level at retirement will depend on external factors and will be subject to capital markets fluctuations, just as any other investment. In other words, the risk of obtaining an adequate pension at retirement depends on the investment decisions made by the saver, where the provider is only obliged to pay-out the *real net returns*, before tax, earned during the investment period.

	Pension scheme type (<i>who bears the risk?</i>)						
	Provider (defined benefit) Saver (defined contribution)						
	Pillar II	Pillar III	Pillar II	Pillar III			
Austria	Х		Х	Х			
Belgium	Х	Х	Х	Х			
Bulgaria			Х	Х			
Denmark	Х	Х	Х	Х			
Estonia			Х	Х			
France	Х		Х	Х			
Germany	Х		х	Х			
Italy			Х	Х			
Latvia			Х	Х			
Lithuania			Х	Х			
Netherlands	Х		х	Х			
Poland			Х	Х			
Romania			х	Х			
Slovakia			Х	Х			
Spain	Х		Х	Х			
Sweden	Х		Х	Х			
UK	Х		х	х			

Source: BETTER FINANCE own composition;

For more details on how this information unfolds, what factors influence pension savings and how Governments tax pension earnings, read the following chapter or the individual country case corresponding to your domicile.



Highlights 2019 Key Trends

- The two global bull markets (equities and bonds) from 2010 to 2017 have stopped in 2018, in particular for equities. On aggregate, with the exception of Austria, Pillar II and III have recorded negative returns in 2018, ranging from 0.01% (Austria) to -9.83% (Estonia);
- Moreover, some fees have increased, despite the negative yields and performance;
- Worryingly, on the full reporting period, the average returns of pension plans (occupational and personal) is either close to 0% or negative on long-term investment horizons.
- Also, a major concern for BETTER FINANCE: the current low interest rate environment (and even negative for many new bond issues nowadays) can only worsen further the pension adequacy for EU pension savers: providers must simplify pension savings products, gain economies of scale and lower their fees.
- Taxation also constitutes a heavy drag on real returns for pension savers, since the fiscal contributions can be very high even if the real return is negative (France, personal pension funds);
- The future PEPP could represent a great window of opportunity to stimulate more savings in personal pension plans, promote an efficient, safe⁸ and low-cost product that will achieve its target of providing a sufficient return at retirement, to improve the net pension replacement rate and, ultimately, achieve pension adequacy;
- The success of the PEPP lies firstly in the hands of EIOPA, which must submit regulatory technical standards that will ensure simplicity, efficiency and a risk scale adapted to its long time horizon, and secondly with Member States, who must work to welcome it, in particular on the tax side.

⁸ Which at least takes into account the cumulative effect of inflation throughout the lifecycle of the product.



Pension Savings: The Real Return 2019 Edition

General Report

One can supervise only what one can measure: Why is this long-term savings performance report (unfortunately) unique?

I. INTRODUCTION

In June 2013, BETTER FINANCE published a research report entitled "<u>Private Pensions: The</u> <u>Real Return</u>"⁹ which evaluated the return of private pension products after charges, after inflation ("real" returns) and – where possible – after taxation in Denmark, France and Spain,

In September 2014, BETTER FINANCE published the second edition of the "<u>Pension Savings:</u> <u>The Real Return</u>"¹⁰ report, which included data updates for the three countries covered in the initial study, as well as new in-depth evaluations of pension savings for five new countries: Belgium, Germany, Italy, Poland and the United Kingdom.

The 2015, 2016, 2017 and 2018 editions added 9 (step-by-step) more countries in the report and updated the figures for those already existing. This year's edition (seventh in a row) expands once more the geographic scope to include Austria. The report is based on the most recent data available at the time of print and includes a wider range of available pension vehicles with the aim of encompassing all savings products actually used by EU citizens to save for retirement. Furthermore, overviews on recent trends in the respective long-term savings and pension markets are provided.

The entire series of research reports has illustrated over the years that real returns of retirement savings have been, and still are, very low once charges, inflation and taxes are deducted. Measuring all these elements is especially important in a low interest rate environment because the real return for savers can be substantially negative.

⁹ Link for the print version available here:

http://www.betterfinance.eu/fileadmin/user_upload/documents/Research_Reports/en/Pe nsion_Study_EN_website.pdf.

¹⁰ Link for the print version available here: <u>http://www.oee.fr/files/betterfinance_pensions_report_2014.pdf</u>.



One of the worst European retail services market

Investment and private pension products are persistently among the worst performing retail services markets of all throughout the European Union according to the European Commission's consumer markets scorecards¹¹.

As stated by the European Commission in a 2013 staff working document, "the crisis has increased savers' distrust in financial institutions and markets"¹². The Commission also pointed out that "other reasons for not saving long-term are the often-poor performance of financial intermediaries to deliver reasonable return and costs of intermediation"¹³.

Pension savings also appear to be one of the few retail services where neither the customers nor the public supervisors are properly informed about the real net performance of the services rendered to them.

Why pension returns are critical for pension savings

Public Authorities involved in pension saving issues typically stress only two requisites for pension savings to achieve "pension adequacy" (i.e. pension income replacing a large part of the income before retirement):

- a) the need to start saving as early as possible;
- b) the need to save a significant portion of one's income before retirment activity income: "to support a reasonable level of income in retirement, 10%- 15% of an average annual salary needs to be saved".¹⁴

For example, according to the OECD, *"In light of the challenges facing pension systems, the only long-term solution for achieving higher retirement income is to contribute more and for longer periods "*¹⁵.

lex.europa.eu/LexUriServ/LexUriServ.do?uri=SWD:2013:0076:FIN:EN:PDF.

¹¹ Consumer Markets Scoreboard 2018 – Making markets work for consumers, European Commission, 2018, https://ec.europa.eu/info/publications/consumer-markets-scoreboard_en.

¹² Commission Staff Working Document "Long-Term Financing of the European Economy" accompanying the Green Paper on Long Investment, European Commission, 25 March 2013, page 10: http://eur-

¹³ European Commission - Staff Working Document on long term financing of the EU economy (2013)

¹⁴ World Economic Forum White Paper: 'We'll live to 100 – How can we afford it?' May 2017

¹⁵ OECD Pensions Outlook 2016 (Editorial, page 10, 2016)



BETTER FINANCE has continuously begged to disagree, something which is reiterated in this year's report. Indeed, saving earlier and more is not enough. A third and even more crucial requisite is missing: the need to get a positive and decent long-term return (a real net return: after inflation and fees and commissions).

BETTER FINANCE'a first wide-coverage report on pension savings (the 2014 Report)¹⁶ was also the first in our series where we highlighted that pension savings products' returns are poor compared to their benchmarks (or capital markets in a broader view), mainly due to the high levels of fees or charges that eat into saver's returns. The subsequent five editions, including this one, have confirmed our initial findings over and over again.

A simple example will illustrate why saving "more and for longer periods" is not sufficient, and too often even detrimental.

Assuming no inflation, saving 10% of the activity income for 30 years (as recommended by Public Authorities, 25-year life expectancy at retirement, and impact of fees, commissions tax excluded, the table below shows that unless long term net returns are significantly positive (in the upper single digits), saving early and significantly will not provide a decent replacement income through retirement.

Table GR1. Annual returns vs. replacement income					
Annual net return	Replacement income				
negative 1%	10%				
Zero	12%				
2%	17%				
8%	49%				
	INANCE 2018				

Traditionally, the target of pension systems has been twofold:

- first, to cover or to reduce the risk of old-age poverty; .
- second, to provide an income that, after deduction of those necessary costs that . working life bears, can support a living standard similar to the pre-retirement one.

These two factors, which compose the *pension adequacy* indicator, should amount to a pension equal to 70%-80% of late working life gross salary.

Nevertheless, this indicator became harder and harder to achieve since the population has been ageing in the past decades, determining the pension downturn spiral: higher pension

¹⁶ BETTER FINANCE, Pension Savings: The Real Return (2014 edition).



contributions need to be collected in order to support accrued pension rights (as in any PAYG system); subsequently, current workers accumulate even higher future pension rights.

This has determined the shift from the full reliance on the public scheme of redistribution and pension rights accumulation (tax-funded defined-benefit) to a more capital markets funded system, where the main pension income stream should (and does) come from pension savings products. Long-termism carries on inflationary risk, which unfortunately has always been present. In addition, pension performances are also subject to tax, which eats into the future retirement income. Therefore, an accurate "*real*" look-through of pension savings is needed to combat low gross positive returns, which in *real* terms sometimes prove negative.

The actual performance of this market is unknown to clients and to public supervisors

Since one of the big problems of the pensions market in the EU is lack of data on real net performances, the data availability issue is also inherent in this report. Nevertheless, this research report aims to improve transparency on the real returns of long-term and pension savings in Europe as even though savers are in dire need of such comprehensive information, the time being it is not provided either Public Authorities or any other independent bodies. Our work corresponds with the European Commission's current "Action" to improve the transparency of performance and fees in this area (as part of its Capital Markets Union – CMU - Action Plan) and the current tasks the ESAs are undertaking in the area of personal pension products with respect to past performance and costs comparison.

Indeed, apart from the OECD (the Organisation for Economic Co-operation and Development) publications on the real return of certain "pension funds"¹⁷, the contributors to this research report could not find any other more complete or more recent published comprehensive series of net real pension savings returns for EU countries.

From a peer analysis point of view, the data reported by the OECD¹⁸ are unfortunately quite incomplete:

• The most recent OECD publication on pension returns, "Pension Markets in Focus 2019", provides ten-year returns maximum, which is quite a short time frame for such long-term products, and also the ending time of up to July 2018 is is only "preliminary" data.

¹⁷ http://www.oecd.org/finance/private-pensions/oecdpensionsoutlook2012.htm and http://www.oecd.org/daf/fin/private-pensions/Pension-Markets-in-Focus-2015.pdf

¹⁸ Namely the OECD "Pension Markets in Focus 2017" (1, 5 and 10 year data).



- Only nine of the seventeen EU countries covered by BETTER FINANCE are reported by OECD for its 10 year data; seven are missing including the biggest ones except the UK and Italy: Bulgaria, France, Germany, Poland, Romania, Spain and Sweden.
- A part of occupational pension products, and most if not all individual pension products are missing as well, as OECD performance data include only "pension funds" stricto sensu, and exclude all "pension insurance contracts and funds managed as part of financial institutions (often banks or investment companies), such as the Individual Retirement Accounts (IRAs) in the United States";
- It is questionable that the OECD was able to capture all expenses borne by pension savers entry fees for example because the OECD relies mostly on reporting by national authorities and, typically, this is not something covered by them;
- Finally, OECD figures are all before taxes, except for Italy.

The European Supervisory Authorities (ESAs) published in January 2019 (at the request of the European Commission) the three reports on costs and past performance of retail investment products in the EU. BETTER FINANCE analysed these reports and found out that of the European Insurance and Occupational Pensions Authority (EIOPA) analysed only 21% of the EU life-insurance market and only this 21% is reflected in the cost and past performance computations in the report. What is worse, personal pension products (PPPs) were not covered at all.

Guillaume Prache, Managing Director of BETTER FINANCE, highlighted:

"It is a disappointment to observe that, after 4 years from the launch of the CMU project, the EU supervisor on insurances is still blind when it comes life-insurance products' past performance and costs."

Moreover, as if the failure of public authorities to report on this significant market was not enough, savvy retail savers have been deprived of the possibility to do it themselves. EU law has eliminated all disclosures on the past performance of investment funds and on their benchmarks in the Key Information Document (KID) in its "PRIIPs" delegated act of 8 March 2017. This severe stepback in transparency and comparability is completely inconsistent ith the CMU initiative, and it will bereave EU savers from knowing if the investment products have made any money or not in the past and if they had met their manager's investment objectives or not. It will also prevent independent researchers such as BETTER FINANCE to continue monitoring individual products' returns in the future.



All in all, it seems that the European financial supervisors do not know the actual performance of the services they are supposed to regulate and supervise.

Information on the returns of long term and pension savings is deteriorating

This report shows that it is not an impossible, but a very challenging task for an independent expert centre such as BETTER FINANCE to collect the data necessary for this research since quite a lot of data are simply not available at an aggregate and country level, especially for earlier years. Moreover, the complexity of the taxation of pension savings in EU countries makes it extremely difficult to compute after tax returns.

Once more, in 2018, we find that information on long term and pension savings returns is actually not improving but on the contrary deteriorating:

- <u>Insufficient information</u>: for example, the Belgian insurance trade organisation Assuralia does not report anymore the returns of insurance-regulated « Branch 21 » occupational and personal pension products since 2014 (and never did for the « Branch 23 products), and the national supervisor FSMA does not do it either.
- <u>Late information</u>: at the time of printing, still a lot of 2018 return data have not been released by the national trade organisations or other providers. OECD has published preliminary data for December 2018, but on a limited number of jurisdictions and only for pension funds (and since in many countries pension funds are anyway not the most popular vehicle, this constitutes a large information gap).
- <u>Unchecked information</u>: the principal source remain the national trade organisations, but their methodology is most often not disclosed, return data do not seem to be checked or audited by any independent party, and sometimes the are only based on sample surveys covering just a portion of the products.

BETTER FINANCE's Report Coverage

In contrast, the present report documents a principal component of, and reason for, the generalised level of distrust of EU citizens in capital markets, namely the *frequent poor performance of private pension products, once inflation, charges and (when possible) taxes are deducted from nominal returns,* when compared to the relevant capital market benchmarks.

Totaling 17 E.U. Member States under review (in particular Austria, Belgium, Bulgaria, Estonia, Germany, Italy, Latvia, Lithuania, Poland, Romania, Slovakia, Sweden, The Netherlands and the United Kingdom) the BETTER FINANCE research now covers 87% of the



E.U. population.¹⁹ It also extends the period of time covered in order to now measure performance over the 19-years (2000 to 2018), in as far as data was available.

It is the ambition and challenge of this research initiated by BETTER FINANCE and its partners to collect, analyse and report on the actual past performance of long-term and pension savings products for the customer.

Our first report in 2013 established the methodology that is also used for this muchexpanded 2019 edition.

The net real return of pension saving products should be:

- the long-term return (at least covering two full economic and stock market cycles, since even long-term returns are very sensitive to entry and exit dates);
- net of all fees, commissions and charges borne directly or indirectly by the customer;
- net of inflation (since for long-term products only the real return matters; that is the right approach taken by OECD as mentioned above);
- when possible, net of taxes borne by the customer (in the USA it has been mandatory for decades to disclose the past performance of mutual funds after tax in the summary of the prospectus).

We have chosen a period covering the last 19 years because pension savings returns should be measured over a long-term horizon, and because it includes two market upturns (2003-2006 and 2009-2017) and two downturns (post dot com bubble of 2001-2003 and the 2008 financial crisis). It is on this period that we based our analysis in as far as data were available. Since the choice of the time reference has a material impact on real returns, we have paid special attention to our choice of period to cover in order to keep our research objective.

The countries under review can be divided into four categories:

- At one end, we find countries like the Netherlands, Denmark, Sweden and the United Kingdom, where pension products' assets represent far more than the annual GDP and where the real return of private pensions is of crucial importance;
- At the opposite end, we find countries like Italy and Spain, Bulgaria, Romania, or France, where pensions mainly depend on the quality and sustainability of the pay-as-you-go (PAYG) schemes;

¹⁹ As of January 1st, 2018 – Eurostat, 'Population change - Demographic balance and crude rates at national level [demo_gind]' <u>http://appsso.eurostat.ec.europa.eu/nui/show.do</u>.

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- The remaining countries, except for Sweden, are in an intermediate position, where the standard of life of retirees depends both on the sustainability of PAYG systems and the returns of private savings;
- Sweden is an original case where the pillar I mandatory pension is now, for a small part, funded instead of PAYG.

Table GR2. Retirement provision vehicles' assets							
Pension F	unds' assets (2	018)	All retirement vehicles' assets (2018				
	% of GDP	in € mil	% of GDP	in € mil			
Austria	5.54%	21,404		n.a			
Belgium	7.28%	32,778		n.a			
Bulgaria	12.52%	6,908	12.52%	6,908			
Denmark	45.37%	135,323	199.03%	593,673			
Estonia	15.36%	3,940	16.88%	4,331			
France	0.71%	16,629		n.a			
Germany	6.73%	225,195		n.a			
Italy	7.63%	134,000	9.85%	173,000			
Latvia	1.56%	462	13.78%	4,070			
Lithuania	7.14%	3,222	7.14%	3,222			
Netherlands	171.01%	1,323,711		n.a			
Poland	7.48%	37,153		n.a			
Romania	5.25%	10,645	5.25%	10,645			
Slovak Republic	11.66%	10,514	11.66%	10,514			
Spain	8.78%	106,045	12.53%	151,371			
Sweden	4.05%	18,924	90.61%	423,077			
United Kingdom	104.48%	2,501,026		n.a			

Source : OECD Data (2018), Eurostat

While in some countries the level of accumulated assets in pension funds is almost the same (and predominant to) the total value of pension vehicles (such as Italy, Bulgaria or Romania), in others it can be seen that the total funded retirement products are even four times higher than pension funds (Denmark – 199% of GDP).

Performance: capital markets are not a proxy for retail investments

Our experience and findings clearly confirm that capital market performances have unfortunately very little to do with the performances of the actual savings products distributed to EU citizens. This is particularly true for long-term and pension savings. The main reason is the fact that most EU citizens do not invest the majority of their savings



directly into capital market products (such as equities and bonds), but into "packaged products" (such as investment funds, life insurance contracts and pension products).

The European Supervisory Authorities (ESAs) have a legal duty to collect, analyse and report data on "consumer trends" in their respective fields (Article 9(1) of the European Regulations establishing the three ESAs). As such, the European Securities and Markets Authority's (ESMA) approach of mistaking capital market returns for retail investment ones is unfortunately widespread in available public research.

ESMA included "retail investor" portfolio returns in past "*Trends, Risks and Vulnerabilities*" reports, but these data were actually capital markets performance data, not retail investments performance ones, based on the 5-year average monthly returns on a portfolio composed of:

- 47% stocks (Stoxx600: large and mid-cap European equities),
- 42% deposits (1-year Euribor),
- and 11% bonds (Barclays Euro Aggregate 7-10Y).

However, in practice the situation differs from the approach taken by ESMA. European households are mostly invested in life insurances and pension funds – probably since these are traditional pension savings vehicles for Pillar II in which, in many jurisdictions, enrolment is mandatory.



Chart GR3. EU28 households portfolios

Source: BETTER FINANCE CMU Assessment Report 2019

The financial balance sheets of EU households differ from the typical "*retail investor portfolio*" proxied by ESMA. Instead holdings of 47% stocks and 11% bonds, the average EU citizen holds, in fact, merey 2% in bonds and 19% in stocks, the latter of which is given in



majority by private equity representing ownership of own companies or enterprises, not from quoted shares (equity listed at a stock exchange).

One could then argue that insurance and pension products have similar returns to a mixed portfolio of equities and bonds, since those are indeed the main underlying investment components of insurance and pension "packaged" products. This is actually how ESMA came up with its "retail investor" portfolio return computation. But this was no more than a "leap of faith", ignoring such realities as fees and commissions charged on retail products, portfolio turnover rates, manager's risks, etc. Charges alone totally invalidate this approach.

Table GR4 and Graph GR5 below show two striking – but unfortunately not uncommon – real examples of this largely ignored reality: capital market performance is not a valid proxy for retail investment performance and the main reasons for this are the fees and commissions charged directly or indirectly to retail customers. The European Commission itself publicly stressed this fact.²⁰

Table GR4. Real case of a Belgian life insurance (branch 23)						
Capital markets vs. Belgian individual pension insurance 2000-2018*						
performance						
Capital markets (benchmark index**) performance						
Nominal performance	224%					
Real performance (before tax)						
Pension insurance performance (same benchmark**)						
Nominal performance	48%					
Real performance (before tax) 1.25						
<u>Source</u> : BETTER FINANCE; Morningstar public website; *to end	of 2018;					
** Benchmark is composed of 50% bonds (LP06TREU) and 50% equity (1999-2006						
M2WD and 2007-2017 AW01):						

The real case above illustrates a unit-linked life insurance product (Pillar III in Belgium). The pension product's nominal return amounted to just a half of its corresponding capital market benchmark's return.

²⁰ European Commission -Staff Working Document on long-term financing of the EU economy (2013).



The real case above illustrates an investment fund domiciled in France, a so-called retail CAC 40 "index" fund²¹. As it can be easily observed, the fund actually under-performed the relevant equity index by 78 p.p. after 19 years of existence (loss of 29% instead of a +49% profit), with the performance gap fully attributable to fees. The fund has also massively destroyed the real value of its clients' savings, as inflation has been almost twice as high as its nominal performance. It is quite surprising that with such a huge return gap vis-à-vis its benchmark, this fund is still allowed to portray itself as an "index-tracking" one, and that no warning is to be found on the Key Information Document (KIID) of the fund.

Another issue for European savers revealed in Graph GR5 is the use by investment product providers of narrow (large cap only or "blue chip") equity indexes instead of broader ones, although they claim the former to represent "the equity markets" as a whole. This practice has proven detrimental both:

- to investors as this graph shows (the French large cap equity market underperformed the actual global French equity market by 31 percentage points over the last 18 years: +60% versus +91%);
- and to European SMEs since a lot of investment inflows are thus directed to large caps only, instead of broader instruments including mid and small caps.

Most pension products recently improved but underperformed

However, our research findings show that most long-term and pension savings products did not, on average, return anything close to those of capital markets, and in too many cases

²¹ Wrapped in an insurance contract as suggested by the distributor.



even destroying the real value for European pension savers (i.e. provided a negative return after inflation).

Capital market returns have been improving in recent years thanks to a long period of bullish capital markets (from 2011 onwards, both for bonds and for equities). Of course, the latter do not take any fees and commissions into account. Indeed, the attribution of performance shows that the level of fees and commissions has been the main factor explaining long-term and pension savings' returns in Europe. Nevertheless, we analyse in the following sub-section the main *drivers for pension returns*.

Pension returns drivers

The underperformance (compared to a benchmark) of most pension vehicles can be explained by several return <u>drivers</u>.

Inflation has declined in recent years in a majority of countries, thus reducing the gap between nominal and real performance. However, inflation over a full contribution period (40 years), a modest inflation rate can eat even more than 50% of nominal returns.

Other drivers for pension returns include:

- the asset allocation of pension products,
- the performance of capital markets into which pension products are invested,
- the asset managers' skills in terms of picking securities and market timing,
- the fees and commissions charged by asset managers and other financial intermediaries, to a great extent on net real returns of private pensions,
- ultimately by inflation and tax burden.

There are striking differences between the asset allocation of pension funds across countries and products. Mutual funds have gained a larger share in the United Kingdom in the past couple of years, tending to replace direct holdings of shares, whose weight fell from 57% to 20% between 2001 and 2014.

Equities dominate only in Poland and, more recently, in Latvia. Bonds dominate in most countries lately, on average representing 45% of assets. The countries where pension funds are most heavily invested in debt securities (bills and bonds) are Romania (71% in 2018), Slovakia (68% in 2018), Denmark (59%) and Belgium (47%).

The equity allocation since 2015 (at least) has remained almost constant – what has changed, at least based on the OECD data, is the increase of capital allocation in mutual investment funds, which may provide diversification or higher yield prospects, but charge fees, which eat into the return of pensions, and does not directly fuel the economy, such as equities.



The decrease in government bond interest rates since 1999 have had a positive impact on outstanding assets, especially in countries where this asset class dominates, but it reduces the capacity to offer a good remuneration on new investment flows. The downside, starting with 2019, is that yields for sovereign bonds have started to turn negative.

Concerning the recent *positive capital markets returns (1999 – 2017)*, this trend ended for both equities and bonds in 2018. Until then, returns have been good, but started to already decline. Since the beginning of the 21st century, capital market returns have been positive (moderately for equities while strongly for bonds):

- By 2018, on a nominal basis (before taking inflation into account), world stock markets have grown in value (in €) by 84%,²² where the US stock market has grown by 98%²³ and the European ones by 57%;²⁴
- On a real basis (net of inflation), European stock market (MSCI Europe GR) returned to positive cumulated performances by 2013, and once again reached significant levels by 2017 (+32%) but dropped in 2018 to reach +11.25%.

It is important to note, however, that in some European countries the end of bullish market has been felt, with good performances losing height and some falling on the negative side. Several large cap markets also continue to struggle with negative returns (CAC 40 - -2.84% after inflation or IBEX 35 -3.86% after inflation), and at the European level, the very narrow "Stoxx 50" index is still in negative territory after inflation (-1.01%) but includes only 50 European stocks.

Fees and commissions substantially reduce the performances of pension products, especially for personal "packaged" pension products, and for unit-linked life-insurance in particular. Charges are often complex, opaque and far from being harmonised between different pension providers and products. Some countries have started to impose overall caps on fees for some pension products (UK, Romania, Latvia).

Finally, taxes also reduce the performance of investments. The general model applied to pension products is deferred taxation, with contributions being deducted from taxable income and instead taxed as pension pay outs. The accumulated capital can be withdrawn at least partially at retirement as a lump-sum, which is often not taxable. Our calculations of net returns are based on the most favourable case, i.e. assuming that the saver withdraws the maximum lump-sum possible.

²² As measured by MSCI All Country World Index (ACWI) Gross Returns denominated in €.

 $^{^{23}}$ As measured by the MSCI USA Gross Returns Index, calculated in ${\ensuremath{\varepsilon}}$.

²⁴ As measured by the MSCI Europe Gross Returns Index, denominated in €.



European Pension returns outlook

The previous sub-sections generically analysed pensions' poor performances and their drivers in comparison with capital market returns.

Looking forward, the overall mid-term outlook for the adequacy of European pension savings in 2019 is worrying when one analyses it for each of these main return drivers:

- a) It is unlikely that the European bond markets will come any closer to the extraordinary returns of the last 19 years (as we are already seeing stagnation or even signs of a downward trend), due to the continuous fall of interest rates, currently at rock-bottom levels.
- b) The negative impact of this foreseeable trend in bond returns on pensions' returns will be reinforced by a higher proportion of bonds in pension products' portfolios in recent years.
- c) Fees and commissions do not show any significant downward trend, and the transparency of cost disclosures is not improving.
- d) It seems unlikely that inflation just like interest rates will go down any further, and the consequences of the "non-conventional" monetary policies of central banks on possible market "bubbles" are still unchartered.
- e) Taxes on long-term and pension savings do not show any significant downward trend either.

The pan-European Personal Pension (PEPP) product

In an attempt to revitalise voluntary pension savings, the EU engaged in a project to create an EU quality label for personal retirement products that would increase the confidence and trust of EU savers into the financial industry and efficientise investments. Named the pan-European Personal Pension product (PEPP), it is designed as a voluntary/personal pension product (pillar III), it should be:

- portable, allowing the PEPP saver to move across Europe and either continue contributing to his PEPP or switch to a new national sub-account without fees;
- simple, transparent and cost-efficient, embedding proper long-term risk-mitigation techniques; and
- benefiting of tax-incentives in a harmonised manner.

The last two objectives have not been attained. First, as taxation is still sovereign competence of EU Member States, agreeing on the same tax rates for the PEPP was impossible due mainly to the strong resilience of national Governments.



Second, any proper retirement plan and pension system embed a default investment option that sastisfies a minimum, standardised requirements for savers who do not make an active choice. These requirements concern the risk level, capital protection, and costs.

With regards to the risk level, there was no harmonisation. The basic PEPP allows product manufacturers to use three risk-mitigation techniques (capital protection, life cycling or establishing reserves) without any further detail.

What is more, the capital protection is a "scam" enshrined by EU law. The fact that EU savers would be informed that their capital (meaning accumulated contributions) would be protected, but after the deduction of fees and without taking into account inflation, is highly misleading.²⁵



Source: BETTER FINANCE PEPP Level 2 position paper

Pension products are by essence long-term and have the longest investment horizon, usually until reaching retirement age, which on average implies 20-30 years of investments. The cumulative effect of inflation, assuming a modest inflation rate, in 40 years would decrease the value of savings by 56%.

²⁵ See BETTER FINANCE YouTube Video on the "PEPP Capital Protection SCAM".




Source: BETTER FINANCE PEPP Level 2 position paper

BETTER FINANCE again highlights and warns about the "money illusion" and how detrimental is to consider pension savings in nominal terms, rather than in **real** terms, i.e. adjusting by inflation.

Hopefully the retirement provision industry will create a standard practice to offer the basic PEPP capital protecting with an inflation indexation feature.

II. COUNTRY PROFILES

Tables GR8 (A and B) include some key characteristics of the pension systems in the countries under review in this research report.

Table GR8 highlights a couple of key indicators for the sustainability of a pension system, i.e. the *old-age dependency ratio*, the *net replacement ratio* of pre-retirement income, the *population ageing trend*, the *public pension* part of the *final retirement income (net pension replacement ratio*) and the *net equity ofhouseholds* for life insurance and pension fund entitlements. The aim is ultimately to highlight the importance of the market for private pension products and the need for better returns, as the former are designed to fulfil the social purpose of Pillar II and Pillar III schemes, i.e. covering the risk of poverty in old-age. The rationale is quite simple: if the public pension system is strong and sustainable on the long-term, the need to save more in private pension products will be lower.



Table GR8(A). EUROPEAN UNION (at the end of 2017)								
Net equity of households in pension	5 5/1	Net equity of households in pension	200/					
funds reserves (in € bln)	5,541	funds reserves as % of GDP	5070					
Net equity of households in life	12 220	Net equity of households in life	96.6%					
insurance reserves (in € bln)	13,330	insurance reserves as % of GDP	00.070					
Active population	240.5 m	Old-Age dependency ratio, old (% of	20.5%					
	240.J III	working population	50.570					
Population againg trend	0/	Projected old-age dependency ratio by	38 7%					
ropulation ageing trend	70	2030	50.770					
Net pension replacement rates, Men, % of pre-retirement earnings, 201670.6%								

Table GR(B). C	Country Pr	ofiles (at the end of 2017/2018)	
Austria			
Net equity of households in pension funds reserves (in € bln)	55	Net equity of households in pension funds reserves as % of GDP	14.8%
Net equity of households in life insurance reserves (in € bln)	79	Net equity of households in life insurance reserves as % of GDP	21.6%
Active population	4.5 mil*	Old-Age dependency ratio, old (% of working population)*	27.9%
Population ageing trend	22%	Projected old-age dependency ratio by 2030*	36.5%
Net pension replacement rates, Men, 9	% of pre-re	etirement earnings, 2016	91.8%
Belgium			
Net equity of households in pension funds reserves (in € bn)*	95	Net equity of households in pension funds reserves as % of GDP*	21%
Net equity of households in life insurance reserves (in € bn)*	195	Net equity of households in life insurance reserves as % of GDP*	43.5%
Active population	5 mil*	Old- Age dependency ratio, old (% of working- age population)*	29.1%
Population ageing trend	21%	Projected old-age dependency ratio by 2030*	36.4%
Net pension replacement rates, Men, 9	% of pre-re	etirement earnings, 2016	66.1%
Bulgaria			
Net equity of households in pension funds reserves (in € bn)	7	Net equity of households in pension funds reserves as % of GDP	12.7%
Net equity of households in life insurance reserves (in € bn)	0.7	Net equity of households in life insurance reserves as % of GDP	1.3%
Active population	3.2 mil*	Age dependency ratio, old (% of working-age population)*	32.5%
Population ageing trend	20%	Projected old-age dependency ratio by 2030*	39.4%
Net pension replacement rates, Men, 9	% of pre-re	etirement earnings, 2016	88.9%
Denmark			
Net equity of households in pension funds reserves (in € bn)*	187	Net equity of households in pension funds reserves as % of GDP*	62.7%



Net equity of households in life insurance reserves (in € bn)*	263	Net equity of households in life insurance reserves as % of GDP*	88.7%
Active population*	2.9 mil	Age dependency ratio, old (% of working-age population)*	30.1%
Population ageing trend	16%	Projected old-age dependency ratio by 2030*	36.3%
Net pension replacement rates, Men,	% of pre-r	etirement earnings, 2016	80.2%
Estonia			
Net equity of households in pension funds reserves (in € bn)	3.6	Net equity of households in pension funds reserves as % of GDP	15.3%
Net equity of households in life insurance reserves (in € bn)	0.5	Net equity of households in life insurance reserves as % of GDP	2%
Active population*	0.7 mil	Age dependency ratio, old (% of working-age population)*	30.6%
Population ageing trend	-5%	Projected old-age dependency ratio by 2030*	37.5%
Net pension replacement rates, Men,	% of pre-r	etirement earnings, 2016	57.3%
France			
Net equity of households in pension funds reserves (in € bn)	n.a.	Net equity of households in pension funds reserves as % of GDP	n.a.
Net equity of households in life insurance reserves (in € bn)	1,932	Net equity of households in life insurance reserves as % of GDP	84.3%
Active population*	28.7 mil	Age dependency ratio, old (% of working-age population)*	31.6%
Population ageing trend	24%	Projected old-age dependency ratio by 2030*	39.9%%
Net pension replacement rates, Men,	% of pre-r	etirement earnings, 2016	60.5%
Germany			
Net equity of households in pension funds reserves (in € bn)	846	Net equity of households in pension funds reserves as % of GDP	26%
Net equity of households in life insurance reserves (in € bn)	979.8	Net equity of households in life insurance reserves as % of GDP	29.9%
Active population*	42.1 mil	Age dependency ratio, old (% of working-age population)*	30.8%
Population ageing trend	23%	Projected old-age dependency ratio by 2030*	42.7%
Net pension replacement rates, Men,	% of pre-r	etirement earnings, 2016	50.5%
Italy			
Net equity of households in pension funds reserves (in € bn)	212	Net equity of households in pension funds reserves as % of GDP	12.3%
Net equity of households in life insurance reserves (in € bn)	714	Net equity of households in life insurance reserves as % of GDP	42%
Active population*	25.3 mil	Age dependency ratio, old (% of working-age population)*	35.2%

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Population ageing trend	23.8%	Projected old-age dependency ratio by 2030*	44.9
Net pension replacement rates, Men,	% of pre-re	etirement earnings, 2016	93.2%
Latvia			
Net equity of households in pension funds reserves (in € bn)	4	Net equity of households in pension funds reserves as % of GDP	13.8%
Net equity of households in life insurance reserves (in € bn)	0.39	Net equity of households in life insurance reserves as % of GDP	1.5%
Active population*	0.9 mil	Age dependency ratio, old (% of working-age population)	31.4%
Population ageing trend	29%	Projected old-age dependency ratio by 2030	41.4%
Net pension replacement rates, Men,	% of pre-re	etirement earnings, 2016	59.5%
Lithuania			
Net equity of households in pension funds reserves (in € bn)	3.01	Net equity of households in pension funds reserves as % of GDP	7.1%
Net equity of households in life insurance reserves (in € bn)	0.84	Net equity of households in life insurance reserves as % of GDP	2%
Active population*	1.4 mil	Age dependency ratio, old (% of working-age population)*	30.1%
Population ageing trend	40%	Projected old-age dependency ratio by 2030*	44.2%
Net pension replacement rates, Men,	% of pre-re	etirement earnings, 2016	71.2%
Netherlands			
Net equity of households in pension funds reserves (in € bn)*	1,498	Net equity of households in pension funds reserves as % of GDP*	193.5%
Net equity of households in life insurance reserves (in € bn)*	144	Net equity of households in life insurance reserves as % of GDP*	18.7%
Active population*	9.1 mil	Age dependency ratio, old (% of working-age population)*	29%
Population ageing trend	28%	Projected old-age dependency ratio by 2030*	39%
Net pension replacement rates, Men,	% of pre-re	etirement earnings, 2016	100.6%
Poland			
Net equity of households in pension funds reserves (in € bn)*	42	Net equity of households in pension funds reserves as % of GDP*	8.5%
Net equity of households in life insurance reserves (in € bn)*	16.5	Net equity of households in life insurance reserves as % of GDP*	3.4%
Active population*	16.8 mil	Age dependency ratio, old (% of working-age population)*	25.3%
Population ageing trend	43%	Projected old-age dependency ratio by 2030*	36.3%



Net pension replacement rates, Men, % of pre-retirement earnings, 2016 3					
Romania					
Net equity of households in pension funds reserves (in € bn) *	11	Net equity of households in pension funds reserves as % of GDP*	5.3%		
Net equity of households in life insurance reserves (in € bn) *	1.8	Net equity of households in life insurance reserves as % of GDP*	0.9%		
Active population*	8.8 mil	Age dependency ratio, old (% of working-age population)*	27.5%		
Population ageing trend by 2030	25%	Projected old-age dependency ratio by 2030*	37.6%		
Net pension replacement rates, Men, S	% of pre-r	etirement earnings, 2016	51.6%		
Slovakia					
Net equity of households in pension funds reserves (in € bn)	9.5	Net equity of households in pension funds reserves as % of GDP	11%		
Net equity of households in life insurance reserves (in € bn)	4.8	Net equity of households in life insurance reserves as % of GDP	6%		
Active population	2.7 mil*	Age dependency ratio, old (% of working-age population)*	22.5%		
Population ageing trend	44%	Projected old-age dependency ratio by 2030*	32.8%		
Net pension replacement rates, Men, 9	% of pre-r	etirement earnings, 2016	83.8%		
Spain					
Net equity of households in pension funds reserves (in € bn)	169	Net equity of households in pension funds reserves as % of GDP	15%		
Net equity of households in life insurance reserves (in € bn)	161	Net equity of households in life insurance reserves as % of GDP	14%		
Active population	22.6 mil*	Age dependency ratio, old (% of working-age population)*	29.2%		
Population ageing trend		Projected old-age dependency ratio by 2030*	37.9%		
Net pension replacement rates, Men, 9	% of pre-r	etirement earnings, 2016	81.8%		
Sweden					
Net equity of households in pension funds reserves (in € bn)*	397	Net equity of households in pension funds reserves as % of GDP*	85.1%		
Net equity of households in life insurance reserves (in € bn) *	102.5	Net equity of households in life insurance reserves as % of GDP*	22%		
Active population*	5.3 mil	Age dependency ratio, old (% of working-age population)*	31.7%		
Population ageing trend	7.3%	Projected old-age dependency ratio by 2030*	33.1%		
Net pension replacement rates, Men, 9	% of pre-r	etirement earnings, 2016	54.9%		



United Kingdom			
Net equity of households in pension funds reserves (in € bn) *	3,421	Net equity of households in pension funds reserves as % of GDP*	144.7%
Net equity of households in life insurance reserves (in € bn)*	764	Net equity of households in life insurance reserves as % of GDP*	32.3%
Active population*	32.4 mil	Age dependency ratio, old (% of working- age population)*	28.6%
Population ageing trend	18%	Projected old-age dependency ratio by 2030*	33.7%
Net pension replacement rates, Men, %	of pre-ret	irement earnings, 2016	29%

Source: Eurostat; OECD; own composition; *2018 figures;

Old-age dependency ratio

the old-age-dependency ratio is 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 $age:^{26}$

- When the ratio is low (like in Slovakia with 22.5% or Poland with 25.3%, corresponding to less than 1 pensioner to 4 workers), it means that the pressure on the state pension is low;
- When the old-age dependency ratio is high, it means that the burden on PAYG schemes is significant:
 - in the short term, because they need to collect more in order to pay for current pension obligations;
 - o in the long term, because pension rights generally will increase proportionally with the amount of paid contributions during employment. $^{\rm 27}$

Population ageing trend

An ageing population means that the number of retirees increases relative to the number of workers. The effect is that the same pension contributions need to pay for a higher number of pensioners, which can make it difficult for the state pension to ensure an adequate level of retirement income stream.

https://data.worldbank.org/indicator/SP.POP.DPND.OL.

²⁶ Eurostat definition: http://ec.europa.eu/eurostat/web/products-

datasets/product?code=tsdde511.

 $^{^{\}rm 27}$ All data are taken from the World Bank statistics – The World Bank, Age dependency ratio, old (% of working-age population)

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Projected old-age dependency ratio

If currently the old-age dependency ratio is, on average, 1-to-3, by 2030 this level will, for most countries in this Report, be close to 50%, or every state pension will depend on the level of contributions of almost two working-age individuals. These assumptions will be translated, as for the *old-age dependency ratio*, into a higher pressure on public pension schemes (Pillar I).

Net equity of households in pension fund and life insurance reserves

The net equity of households in pension funds and reserves of life insurances are a classification of financial accounts that represent the value of technical (mathematical) provisions insurance and pension fund providers hold to pay future pension liabilities (entitlements), based on actuarial estimations.²⁸ They reflect the savings that contributors to pension funds and life insurances have accumulated for their retirement income. These indicators are expressed in the table above (Table GR7). Both in their nominal value (*in* \in *billion*) and as a percentage of the GDP for 2018. Therefore:

- a high value-to-GDP rate of net equity of households reflects well established privately funded systems, indicating a lower dependency on state pensions;
- a low value-to-GDP shows either that the private system is relatively new (as in Romania or Bulgaria) or that households do not contribute too much to pension funds and life insurances, relying more on state pensions.

Net replacement ratio

The purpose of multi-pillar pension systems is to provide a net pre-retirement replacement ratio that ensures pension adequacy. Pension schemes, life insurance contracts and PAYG systems are combined differently in each country to build the overall financial income of retirees.²⁹ The public (mandatory) basis is illustrated in the net pension replacement rate from public pension systems. These replacement rates are highest in the Netherlands (above 100%), closely followed by Italy (93%) and still solid in Slovakia (84%) and Bulgaria (89%).

https://www.imf.org/external/np/sta/ueps/2003/030303.pdf; International Monetary Fund, 'Monetary and Financial Statistics Manual' (2000) IMF, 34.

²⁸ See OECD, 'Net Equity of Households in Life Insurance Reserves and in Pension Funds' OECD Glossary of Statistical Terms – <u>https://stats.oecd.org/glossary/detail.asp?ID=1754</u>; see also Francois Lequiller, 'International Differences in the Recording of General Government Pension Schemes in the National Accounts' Contribution to the IMF EDG on the Treatment of Pension Schemes in Macroeconomic Statistics, 3 -

²⁹ Looking only at financial sources of pension income; property-related income is not in the scope of this study.



OECD reports the lower pre-retirement income replacement ratios for Romania (52%), Germany (50%) and Poland (39%).³⁰

A limitation of the present report is that it does not take into account real estate as an asset for retirement. The proportion of households owning their residences varies greatly from one country to another. For example, it was especially low in Germany, where a majority of households rent their residences and where home loan and savings contracts have consequently been introduced as the most recent state-subsidised pension savings scheme. For the time being, returns on pension savings are all the more important since a majority of retirees cannot rely on their residential property to ensure a decent minimum standard of life.

However, residential property is not necessarily the best asset for retirement: indeed, it is an illiquid asset and it often does not fit the needs of the elderly in the absence of a broad use of reverse mortgages. The house might become too large or unsuitable in case of dependency. In that case, financial assets might be preferable, on the condition that they provide a good performance.

III. RETURN ATTRIBUTION

Inflation

For several of the countries analysed in this research report, inflation rates were significant and consequently had a severe impact on returns in real terms over the periods in review. One has to keep in mind that even for those countries with moderate inflation, the compound effect over long periods, as applicable for the case of retirement savings, can lead to considerable losses in purchasing power.

³⁰ OECD Data, Net pension replacement rates - <u>https://data.oecd.org/pension/net-pension-replacement-rates.htm</u>.

⁴³ | Page



Table GR9(A). Inflation in Eurozone Member States (in %)											
Year	AUSTRIA	BELGIUM	ESTONIA	FRANCE	GERMANY	ІТАLҮ	ΙΑΤΛΙΑ	LITHUANIA	NETHERLANDS	SLOVAKIA	SPAIN
2000	1.8%	2.7%	3.9%	1.8%	1.4%	2.6%	2.6%	1.1%	2.3%	12.2%	3.5%
2001	1.8%	2.4%	5.6%	1.8%	1.9%	2.3%	2.5%	1.5%	5.1%	7.2%	2.8%
2002	1.7%	1.5%	3.6%	1.9%	1.4%	2.6%	2.0%	0.3%	3.9%	3.5%	3.6%
2003	1.3%	1.5%	1.4%	2.2%	1.0%	2.8%	2.9%	-1.1%	2.2%	8.4%	3.1%
2004	2.5%	1.9%	3.0%	2.3%	1.8%	2.2%	6.2%	1.2%	1.4%	7.5%	3.1%
2005	1.5%	2.5%	4.1%	1.9%	1.9%	2.2%	6.9%	2.7%	1.5%	2.8%	3.4%
2006	1.6%	2.3%	4.4%	1.9%	1.9%	2.3%	6.6%	3.8%	1.7%	4.3%	3.6%
2007	3.5%	1.8%	6.7%	1.6%	2.3%	2.0%	10.1%	5.8%	1.6%	1.9%	2.9%
2008	1.5%	4.5%	10.6%	3.2%	2.7%	3.6%	15.3%	11.1%	2.2%	3.9%	4.1%
2009	1.1%	0.0%	0.2%	0.1%	0.2%	0.8%	3.3%	4.2%	1.0%	0.9%	-0.2%
2010	2.2%	2.3%	2.7%	1.7%	1.2%	1.6%	-1.2%	1.2%	0.9%	0.7%	2.1%
2011	3.4%	3.4%	5.1%	2.3%	2.5%	2.9%	4.2%	4.1%	2.5%	4.1%	3.0%
2012	2.9%	2.6%	4.2%	2.2%	2.1%	3.3%	2.3%	3.2%	2.8%	3.7%	2.4%
2013	2.0%	1.2%	3.2%	1.0%	1.6%	1.3%	0.0%	1.2%	2.6%	1.5%	1.5%
2014	0.8%	0.5%	0.5%	0.6%	0.8%	0.2%	0.7%	0.2%	0.3%	-0.1%	-0.2%
2015	1.1%	0.6%	0.1%	0.1%	0.1%	0.1%	0.2%	-0.7%	0.2%	-0.3%	-0.6%
2016	1.6%	1.8%	0.8%	0.3%	0.4%	-0.1%	0.1%	0.7%	0.1%	-0.5%	-0.3%
2017	2.3%	2.2%	3.7%	1.2%	1.7%	1.4%	2.9%	3.7%	1.3%	1.4%	2.0%
2018	1.7%	2.2%	3.3%	1.9%	1.7%	1.2%	2.5%	1.8%	1.8%	1.9%	1.2%
AAVG	1.9%	2.0%	3.5%	1.6%	1.5%	1.8%	3.6%	2.5%	1.8%	3.1%	2.1%

Table 0	GR9(B). EU28 In	flation
2000	2001	2002
1.9%	2.2%	2.1%
2003	2004	2005
2.0%	2.0%	2.2%
2006	2007	2008
2.2%	2.3%	3.7%
2009	2010	2011
1.0%	2.1%	3.1%
2012	2013	2014
2.6%	1.5%	0.5%
2015	2016	2017
0.0%	0.2%	1.7%
2018	An	nual average
1.63%		2%

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Table	GR9(C). In	flation in	non-Euroz	one Mem	ber States	s (in %)
Year	BULGARIA	DENMARK	POLAND	ROMANIA	SWEDEN	Ν
2000	10.3%	2.8%	10.1%	45.7%	1.3%	0.8%
2001	7.4%	2.3%	5.4%	34.5%	2.7%	1.2%
2002	5.8%	2.4%	1.9%	22.5%	1.9%	1.2%
2003	2.3%	1.8%	0.7%	15.3%	2.3%	1.3%
2004	6.2%	1.0%	3.7%	11.9%	1.0%	1.3%
2005	6.0%	1.8%	2.2%	9.1%	0.8%	2.1%
2006	7.4%	1.8%	1.2%	6.6%	1.5%	2.3%
2007	7.6%	1.7%	2.6%	4.9%	1.7%	2.4%
2008	11.9%	3.6%	4.2%	7.9%	3.4%	3.5%
2009	2.5%	1.0%	4.0%	5.6%	1.9%	2.2%
2010	3.0%	2.2%	2.7%	6.1%	1.9%	3.2%
2011	3.4%	2.7%	3.9%	5.8%	1.4%	4.5%
2012	2.4%	2.4%	3.6%	3.4%	0.9%	2.9%
2013	0.4%	0.5%	0.8%	3.2%	0.4%	2.5%
2014	-1.6%	0.4%	0.1%	1.4%	0.2%	1.5%
2015	-1.1%	0.2%	-0.7%	-0.4%	0.7%	0.0%
2016	-1.3%	0.0%	-0.2%	-1.1%	1.1%	0.7%
2017	1.2%	1.1%	1.6%	1.1%	1.9%	2.7%
2018	2.3%	0.7%	0.9%	3%	2.2%	2.1%
	3.8%	1 5%	2 3%	8 3%	1.6%	2 1%

<u>Source</u>: Eurostat HICP monthly index (2015=100, prc_hicp_aind), annual averages (AAVG) are calculated by BETTER FINANCE.

Over the last 19 years, from 2000 to 2018, the highest annual average inflation rates could be observed in Eastern European countries. By far the most important loss of purchasing power was recorded in Romania with an annualised average of 8.3%. Especially in the early 2000s, Romania suffered from high double-digit inflation rates of 45% in 2000 and 35% in 2001, and it took until 2005 to see it drop under 10%. The other countries that witnessed double-digit inflation rates were Bulgaria (2000, 2008), Poland and Slovakia (2000) and Latvia (2007, 2008), as well as Lithuania (2008) although it remained below 15%. The countries with the lowest average inflation rate were Denmark and Germany at 1.5%, closely followed by France and Sweden (at 1.6% each).

Aiming to maintain inflation rates below but close to 2%, the European Central Bank undertook considerable monetary policy efforts to bring the rates back to the desired levels.



Table GR10. Public sector deficit and debt (in %)									
	Public Se	ector Defi	icit as a %	of GDP	Public Debt as a % of GDP				
	2015	2016	2017	2018	2015	2016	2017	2018	
Austria	-1.0%	-1.6%	-0.8%	0.1%	84.7%	83.0%	78.2%	73.2%	
Belgium	-2.5%	-2.6%	-1.0%	-0.7%	106.0%	105.9%	103.1%	102.0%	
Bulgaria	-1.6%	0.0%	0.9%	2.0%	26.0%	29.5%	25.4%	22.6%	
Denmark	-1.3%	-0.9%	1.0%	0.5%	39.5%	37.8%	36.4%	34.1%	
Estonia	0.1%	0.3%	-0.3%	-0.6%	10.1%	9.5%	9.0%	8.4%	
France	-3.6%	-3.4%	-2.6%	-2.5%	95.6%	96.3%	97.0%	98.4%	
Germany	0.7%	0.8%	1.3%	1.7%	71.2%	68.3%	64.1%	60.9%	
Italy	-2.7%	-2.4%	-2.3%	-2.1%	132.1%	132.6%	131.8%	132.2%	
Latvia	-1.3%	0.0%	-0.5%	-1.0%	36.5%	40.5%	40.1%	35.9%	
Lithuania	-0.2%	0.3%	0.5%	0.7%	42.6%	40.1%	39.7%	34.2%	
Netherlands	-2.1%	0.4%	1.1%	1.5%	64.5%	61.8%	56.7%	52.4%	
Poland	-2.6%	-2.4%	-1.7%	-0.4%	50.2%	53.8%	50.6%	48.9%	
Romania	-0.8%	-3.0%	-2.9%	-3.0%	37.3%	37.2%	35.0%	35.0%	
Slovakia	-2.7%	-1.7%	-1.0%	-0.7%	52.5%	51.9%	50.9%	48.9%	
Spain	-5.1%	-4.5%	-3.1%	-2.5%	99.8%	99.4%	98.3%	97.1%	
Sweden	0.3%	0.9%	1.3%	0.9%	44.7%	41.2%	40.6%	38.8%	
UK	-4.3%	-3.0%	-1.9%	-1.5%	88.0%	85.4%	87.7%	86.8%	

Source: Eurostat: (1) Public Sector Deficit as a % of GDP; (2) Public Debt as a % GDP -

In 2018, a budgetary surplus was observable in Austria, Bulgaria, Denmark, Germany, Lithuania, Netherlands and Sweden. Germany, in particular, recorded its fifth consecutive year with a surplus, although at a lower rate compared to last years (+0.9%). Romania recorded the highest public deficit at -3.0% of GDP, in line this year with the Maastricht Treaty requirement³¹ ("-3% ratio of the planned or actual government deficit to gross domestic product at market prices").

When it comes to the second criterion of the Maastricht Treaty concerning the theoretical ceiling of *"60% for the ratio of government debt to gross domestic product at market prices"*³², eleven countries had an outstanding level of debt below this threshold while seven countries, all of them from Western Europe, surpassed it.

Asset Mix

In the 2018 version, BETTER FINANCE attempted to present the asset allocation in pension funds in all countries in scope of the analysis using the data from the analysis of individual country cases. However, this was not possible since sufficient data is not publicly available from national regulators or representative/professional associations. Therefore, countries in

 ³¹ Article 1 of the Protocol No. 12 on the excessive deficit procedure of the Treaty on European Union, OJ C 115, 9.5.2008, p. 279–280.
 ³² Ibid.



the table below (GR1(A)) indicated with an asterisk continue to report OECD Data, while the 10ther countries are based on data from this report itself.

There are striking differences between pension funds' asset allocations across European countries as shown by the following table: 33

Table GR	11(A). F	Pension funds	s' asset allo	cation, [in	% of to	tal assets]
Country	Year	Cash and deposits	Bills and bonds	Equities	Other	Data source
Austria	2005 2016 2017 2018	6% 9% 7% 8%	53% 46% 44% 45%	37% 33% 35% 33%	4% 12% 14% 14%	OECD Data
Belgium	2005 2010 2015 2016 2017 2018	10% 7% 4% N/A 5% 6%	25% 43% 44% N/A 45% 47%	36% 38% 42% N/A 43% 41%	29% 13% 10% <i>N/A</i> 7% 5%	OECD Data
Bulgaria	2015 2016 2017 2018	12% 15% 7% 10%	56% 55% 61% 10%	28% 26% 29% 30%	3% 3% 3% 50%	BF Pensions Report Data
Denmark	2005 2010 2015 2016 2017 2018	1% 0% 0% 1% 0%	57% 70% 63% 62% 59% 59%	29% 16% 18% 17% 19% 21%	14% 14% 19% 21% 21% 19%	OECD Data
Estonia	2005 2010 2015 2016 2017 2018	7% 9% 20% 23% 4% 3%	44% 17% 22% 18% 46% 48%	48% 70% 58% 59% 49% 48%	2% 4% 0% 0% 0% 1%	BF Pensions Report Data
Germany*	2005 2010 2015 2016 2017 2018	4% 2% 4% 4% 4% 4%	46% 46% 54% 51% 50% 49%	12% 5% 5% 6% 6% 5%	38% 46% 38% 39% 40% 42%	OECD Data
Italy	2005 2010	5% 6%	37% 58%	10% 12%	6% 24%	OECD Data COVIP

³³ We could not find any available data for France.



	2015 2016 2017 2018	5% 7% 6% 6%	63% 58% 45% 45%	17% 18% 21% 19%	16% 17% 28% 30%	OECD Data
Latvia	2015 2016 2017 2018	19% 13% 7% 6%	46% 47% 43% 42%	35% 39% 49% 51%	1% 1% 1% 1%	BF Pensions Report Data
Lithuania	2015 2016 2017 2018	12% 9% 6% 7%	40% 46% 46% 47%	47% 45% 46% 44%*	1% 1% 2% 2%	BF Pensions Report Data
NL	2005 2010 2015 2016 2017 2018	2% 2% 3% 2% 3% 3%	41% 42% 46% 45% 48% 51%	46% 35% 38% 39% 46% 44%	11% 20% 13% 14% 2% 2%	OECD Data
Poland	2005 2010 2015 2016 2017 2018	4% 3% 7% 6% 6%	63% 59% 10% 9% 9% 9%	32% 36% 82% 83% 85% 85%	0% 1% 0% 1% 0% 0%	*OECD Data
Romania	2010 2015 2016 2017 2018	7% 5% 7% 9% 8%	80% 72% 70% 68% 71%	12% 19% 19% 20% 18%	1% 4% 4% 3%	BF Pensions Report Data
Slovakia	2005 2010 2015 2016 2017 2018	51% 46% 16% 11% 13% 13%	11% 50% 73% 75% 68% 68%	5% 4% 11% 15% 19% 18%	0% 0% 0% 0% 0%	BF Pensions Report Data
Spain	2005 2010 2015 2016 2017 2018	5% 19% 17% 15% 11% 10%	64% 58% 62% 64% 47% 48%	21% 12% 11% 14% 13% 13%	10% 11% 9% 7% 29% 29%	*OECD Data
Sweden	2005 2010 2015 2016	1% 3% 2% N/A	58% 72% 67% N/A	34% 18% 18% <i>N/A</i>	7% 7% 13% N/A	OECD Data

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AVG 2	018	6%	45%	31%	17%	
	2018	2%	30%	9%	59%	
	2017	2%	28%	13%	57%	
UK	2016	4%	43%	22%	31%	UECD Data
	2015	2%	34%	20%	43%	
	2010	4%	29%	31%	37%	
	2005	3%	23%	48%	27%	
	2018	N/A	N/A	N/A	N/A	
	2017	N/A	N/A	N/A	N/A	

Sources: OECD Pension Funds in Figures - 2016, 2017, 2018; BF Pensions Report (2018);

Asset allocation data in this table include both direct investments in cash and deposits, bills and bonds (both sovereign and corporate), equities and indirect investments through collective investment schemes (investment funds such as UCITS³⁴ or AIF³⁵). The "other" category comprises assets, such as loans, land and buildings, real estate investment trusts (REITS), hedge funds, derivatives, commodities and precious metals, insurance contracts, money market instruments, private equity funds and other structured (unallocated) products.

On average in 2018, most pension funds employed a conservative/defensive investment strategy, investing almost a half (45%) of the capital in debt securities (bills and bonds). Equity (and, at times, shares or units in collective investment schemes, such as UCITS) have the second largest share in pension funds' asset allocation, with an average of 31%.

However, there are high deviations from the average:

- In countries such as Germany, Spain or UK, the equity allocation is of small significance (5%, 13%, and 9%);
- In countries such as Poland and Latvia, most assets are invested in equity (more than a half);

The evolution of asset allocation in European pension funds has evolved over the last four years to more capital invested in collective investment schemes, mainly UCITS.

Table	Table GR11(B). Evolution of average asset allocation in pension funds				
	Cash & Deposits	Bonds	Equity	Other	
2015	8%	50%	30%	11%	
2016	9%	49%	31%	11%	
2017	6%	47%	33%	14%	
2018	6%	45%	31%	17%	

³⁴ "UCITS" stands for Undertakings for Collective Investment in Transferable Securities, which is the most common legal form mutual funds in the EU take, in particular because of the *passporting rights*.

³⁵ "AIFs" stand for Alternative Investment Funds, which are all the non-UCITS funds.



2015-2018	7%	48%	31%	13%
Courses own computat	ions based on Table	CP10(A)		

<u>Source</u>: own computations based on Table GR10(A).

In countries such as the United Kingdom, almost half of the "other" assets category includes shares and units in collective investment schemes, while in others – such as Slovakia – the vast majority of other investments are in mutual fund schemes.

We could observe a slight decrease of investments in debt securities (bills and bonds) from an average of 50% in 2015 to 45% in 2018, compensated by an increase in other assets (such as CIUs) and equities.

From a data availability point of view, we could not find a breakdown of assets under management for Swedish pension funds, neither in the OECD database, nor in the individual country case report, but we were able to obtain a breakdown by type of fund in the premium pension system.

After the state-managed default investment fund (AP7 Safa), the highest share of Assets under Management (AuM) was held by equity funds, administering over \in 39 billion at the end of 2018. The default investment option, AP7 Safa, is "*a blend of the AP7 Equity Fund and AP7 Fixed Income Fund*".³⁶

So far, we were not able to obtain information on ESG-factored investments to correspond with the current reporting standards.

For most countries, the period 2005-2017 showed a decrease in equities and an increase in public debt in the asset allocation of pension funds, partially due to unrealised capital gains generated by the historical decrease of interest rates.³⁷

Asset performance

Equity markets

Equity returns are of a volatile nature in the short-term and hence need to be observed with a long-term perspective in mind. The real return calculations in this report date back to 31/12/1999 at the earliest, so we take a look at how equity markets performed over that same period. Overall, the 21st century began with one of the most severe bear markets in history and faced, in conjunction with the downward cycle of 2007-2008, two longer-lasting upward cycles from 2003-2006 and 2009-2017. Data in the table below is calculated based on gross performances (*nominal return*), then adjusted by inflation (*return net of inflation*).

³⁶ https://www.ap7.se/english/ap7-sa%CC%8Afa/.

³⁷ A decrease in market interest rates translates into an increase in the mark-to-market value of fixed interest debt products held by investors.



Table GR12. Historical Returns on Equity Markets, yearly average				
Country	Period	Nominal Return	Return net of inflation	Source
Belgium	(2000-2018)	-0.2%	-2.34%	BEL 20 (^BFX)
Bulgaria*	(2009-2018)	9.15%	8.0%	BSE-Sofia SOFIX Bulgaria
Denmark	(2000-2018)	10.22%	8.64%	FTSE Denmark TR EUR
Estonia	(2000-2018)	12.4%	7.99%	Tallinn SE General (OMXTGI)
Europe (EU28)	(2000-2018)	-0.74%	-2.84%	STXE 600 PR.EUR (^STOXX)
France	(2000-2018)	-1.21%	-2.84%	CAC 40 (^FCHI)
Germany	(2000-2018)	2.22%	0.67%	DAX PERFORMANCE-INDEX (^GDAXI)
Italy	(2000-2018)	-4.34%	-6.34%	FTSE MIB Index (FTSEMIB.MI?P=FTSEMIB.MI)
Latvia	(2001-2018)	10.43%	5.72%	OMX Riga Index (OMXRGI)
Lithuania**	(2001-2018)	11.1%	7.3%	Vilnius SE General (OMXVGI)_EUR
Netherlands	(2000-2018)	-1.67%	-3.7%	AEX-INDEX (^AEX)
Poland	(2000-2018)	6.11%	3.5%	WIG
Romania	(2000-2018)	10.35%	0.16%	BET® (BUCHAREST EXCHANGE TRADING)
Slovakia	(2000-2018)	8.00%	4.96%	SAX
Spain	(2000-2018)	-1.62%	-3.86%	IBEX 35. (^IBEX)
Sweden	(2000-2018)	-0.10%	-1.77%	OMX Stockholm 30 Index (^OMX)
UK	(2000-2018)	-2.05%	-4.18%	FTSE 100 (^FTSE?P=FTSE)
EMU	(2000-2018)	-2.66%	-4.47%	ESTX 50 PR.EUR (^STOXX50E) - 50 large blue chip companies in the Eurozone

<u>Sources</u>: MSCI Indices (Gross Returns), Eurostat, Morningstar, Finance Yahoo, Investing.com, Bucharest Stock Exchange; Bratislava Stock Exchange; NASDAQ Nordic OMX Villnius, Talinn, Riga, Eurostat HICP annual average

Since not all equity indexes (MSCI) have data available for the entire 19-year period, it is difficult to perfectly compare the performances of the same stock market indicators between all the countries in the same timeframe.

The best performing equity markets in nominal terms were Estonia (12.4% annually), Lithuania (11.1%) and Romania (10.35%), whereas the worst performers were Italian equities (-4.64% p.a.), followed by equities representative of the Economic and Monetary Union (EMU) - -2.66% per year.

In real terms, inflation has had a strong effect in some cases: in Romania, the 167% profit in nominal terms over the last 19 years transformed in a merely 3% in real terms. This is one of the most powerful examples of the "money illusion" and the cumulative effects of inflation



overt the long term. The worst results, after adjustment for inflation, were recorded also in Italy and EMU (-6.34% per year and -4.47% per year).

However, the equity indices used in Table GR12 are narrow, large cap only indices, usually including only a few tens of stocks each, and excluding all mid and small cap equities. Broader indices are required to better reflect the returns of the whole of equity markets in Europe. Those include mid and small capitalisations, which have massively outperformed the "blue chips" over the last 18 years. As a result, the broader country equity market returns were much higher (for example the real return of the French broader equity market shown in Graph FR I has been very positive). But these broader country equity indices are unfortunately less known and often available only for recent years in Europe.

When looking at the cumulated results at European level, as well as in the individual countries where we developed this analysis (see French, German, Spanish and UK country cases), broad stock market indices performed much better than the better known and much narrower large cap or "blue chip" indices (Stoxx Europe 50, FTSE 100, DAX 30, IBEX 35, CAC 40).

The following graph shows a comparison of the broad STOXX All Europe Total Market index which includes 1,466 European stocks (as of 23 June 2017)³⁸ and the much narrower Stoxx Europe 50.



Graph GR13. Cumulative performance of Wide Index vs narrow index

Source: BETTER FINANCE; Eurostat; STOXX

At European level, the difference at the end of our 19-year period is an astonishing 50% in favour of the broader stock market index in nominal terms. And whereas the performance

³⁸ <u>https://www.stoxx.com/index-details?symbol=TE1P</u>. There was no data available for year of 2000. The performance of the narrower MSCI Europe TR (Net) index (446 components as of 31 May 2017) for that year was taken as a proxy instead.



of the narrow index (17% nominal) was heavily outmatched by inflation (45%) over the last 19 years, the broader European stock market recorded a positive real performance with a cumulated gain of 15%.

Government bond markets

As already mentioned above, it is important to note that a decrease in interest rates translates into an increase in the mark-to-market value of bonds which had a positive impact on outstanding debt assets of pension funds. On the other hand, the capacity to provide good remuneration through new bond issuances is hereby reduced.

The following table indicates the returns of thirteen major European bond markets for the period 2008-2018:

Table G	R14. Historical Return	s on Bond Markets, yearly	average
Country	Year	Nominal Return	Real Return
Belgium	(2008-2018)	4.91%	3.04%
Denmark	(2008-2018)	4.73%	3.53%
Germany	(2008-2018)	4.25%	2.94%
Spain	(2008-2018)	5.20%	3.93%
France	(2008-2018)	4.63%	3.39%
Italy	(2008-2018)	4.85%	3.44%
Lithuania	(2008-2018)	7.32%	4.78%
Netherlands	(2008-2018)	4.54%	3.11%
Romania	(2008-2018)	n.a.	n.a.
Slovakia	(2008-2018)	n.a.	n.a.
Sweden	(2008-2018)	3.38%	1.96%
United Kingdom	(2008-2018)	3.71%	1.34%
EMU	(2008-2018)	4.46%	3.13%

<u>Sources</u>: MorningstarDirect, Eurostat HICP annual average

The European government bond markets all showed steady nominal average returns over the past 11 years, ranging between 3.38% (Sweden) and 7.32% (Lithuania). Real average returns ranged even closer together, with the highest in Lithuania at 4.78% and Spain (3.93%) and the lowest in the UK (1.34%) and Sweden (1.96%) per year. While equity markets usually perform better in the long run, as of 2019 sovereign bonds have started to turn negative as they are perceived more safe or secure over the long-term.

The following graph shows the long-term cumulated returns of European bonds as a whole - that is both government and corporate bonds - as measured by the Barclays Pan-European TR index:





Source: Eurostat; Bloomberg website; own computations

Over the last 19 years, European bonds as a whole enjoyed a very positive nominal return which was significantly higher than the return of European equities, and due to the continuous fall of bond interest rates over the period under review. It is difficult to foresee a continuation of this past trend given the very low level of interest rates reached today. However, in 2016-2018 this index continued to stagnate, growing from 129.1% to 129.86% in nominal terms.

Graph GR14 shows that this period has indeed been particularly favourable to bonds as an asset class as illustrated by the considerable outperformance of European inflation over time.

Portfolio Manager / Advisor Competence

The initial BETTER FINANCE study highlighted that in almost all categories of investment funds, a majority of funds under-performed their benchmarks. Investment funds play an important role in today's asset allocation of pension vehicles, thus it is interesting to compare investment fund performances to benchmarks.

The Standard & Poor's annual "SPIVA" report measures the proportion of active funds that have beaten their benchmark. The results from the latest SPIVA Europe Scorecard for yearend 2018 are shown in the following table:



Table GR16. Percentage of European Equity Funds Beating their Benchmarks						
Fund Category	Comparison Index	1-year (2018)	3-year (2016- 2018)	5-year (2014- 2018)	10-year (2009- 2018)	10y AVG
	Percentages calc	ulated in I	Euro			
Europe Equity	S&P Europe 350	14	14	20	13	
Eurozone Equity	S&P Eurozone BMI	23	10	11	9	
France Equity	S&P France BMI	2	5	15	13	
Germany Equity	S&P Germany BMI	26	23	18	18	16
Italy Equity	S&P Italy BMI	25	40	37	35	
Spain Equity	S&P Spain BMI	31	28	22	22	
Netherlands Equity	S&P Netherlands BMI	0	0	9	7	
	Percentages calculated	l in local d	currencies	5		
U.K. Equity	S&P United Kingdom BMI	27	20	31	27	
Denmark Equity	S&P Denmark BMI	16	66	39	15	10
Poland Equity	S&P Poland BMI	7	2	6	9	10
Sweden Equity	S&P Sweden BMI	38	36	45	21	

<u>Sources</u>: S&P Dow Jones Indices LLC, Morningstar; BETTER FINANCE own Computations - SPIVA Europe Scoreboard, Year-End 2018, Report 1, page 4 (<u>https://us.spindices.com/spiva/#/reports</u>); Outperformance is based on equal-weighted fund counts. Index performance based on total return.

The latest findings for the year of 2018 once again reveal that a large majority of funds (83%) do not outperform their respective benchmark on the past 10 years. For funds investing in European equities, only 13% were able to outperform their benchmark, the S&P Europe 350. The worst results on a country basis were recorded for funds investing in the Netherlands equity, Poland and Eurozone, where 7%, respectively 9% of the equity funds delivered a cumulative profit over the past 10 years above that of their benchmark. What's worse, it seems that none of the funds investing in NL equities were able to outperform the comparison index in 2018 or in the period 2016-2018.

The best performers by number were in Italy (35%) and UK (27%) between 2009-2018. In Germany and the UK only 18% and 12% outperformed the respective country index. Funds investing in the Nordic countries compared better. While 21% of funds investing in Swedish equity beat their benchmark almost no funds investing in Danish equities outperformed the respective country index (3%).

For retirement savings products, consistent positive long-term returns are of particular importance. However definitive conclusions cannot be drawn from these calculations because they relate to a period that is too short, including no more than two cyclical periods: equity markets fell sharply in 2008 and 2009, then they recovered progressively until the end of 2017, with short sub-periods of decline in most countries. Prior research found that investment funds tend to outperform their benchmarks in a bearish market while they



underperform in a bullish market, as also shown by the outperformance rate in 2018 compared to 2008-2017. $^{\rm 39}$

For a longer time horizon and especially in the case of retirement savings, a recent study⁴⁰ provides relevant results for UK personal pension funds operated by 35 providers over a 30-year period (1980-2009). Big providers performed better than their prospectus benchmarks, but they underperformed treasury bills over the period of a fund's lifespan. Similarly, specialisation of portfolio managers in the investment universe is shown to deliver superior average annual returns but does not show superior long-term performances. More generally, they found that short-term performances based on arithmetic annual averages are not relevant indicators of the long-term performance calculated as geometric compounded returns similar to the methodology used in the present study. The authors also showed that younger funds perform better than older ones, which are under lower competitive pressure given the cost of leaving a fund to join a better performing one.

A research report published by BETTER FINANCE in 2019 analysed the drivers of over- or underperformance of the comparison or benchmark index of EU Equity Retail Investment funds domiciled in France, Belgium and Luxemburg. While only 2 funds out of 2,086 managed to consistently deliver overperformance on a period between 2008-2017 (10 years), the rest that managed to beat their market seem to have did it by coincidence or luck.⁴¹

In attempting to give an explanation to the latter, the analysis deployed showed that fees are the most negative factor for fund (over)performance or – in other words – "the more you pay, the less you get".⁴² More information on fees and charges is given in the following section.

IV. INVESTMENT CHARGES

Findings of the initial study by BETTER FINANCE on the opacity and weight of charges did not change dramatically over the successive research reports. Charges are often very complex and far from being harmonised for different pension providers. Consequently, this makes it difficult for consumers to understand and entirely capture the magnitude of charges on their pension product. Generally speaking, charges are heavier on personal pension products than

 ⁴¹ BETTER FINANCE, Study on the Correlation between Cost and Performance of EU Equity Retail Funds (June 2019) <u>https://betterfinance.eu/wp-content/uploads/BETTER1.pdf</u>.
 ⁴² Press Release, "New research by BETTER FINANCE on the Correlation between Costs and Performance of EU Retail Equity Funds without a doubt establishes a negative correlation between returns and fees" <u>https://betterfinance.eu/publication/the-more-you-pay-the-less-you-are-likely-to-get/</u>.

³⁹ IODS (2014) : Study on the Performance and Efficiency of the EU Asset Management Industry, a study for the European Commission (Internal Market and Services DG) and the Financial Services User Group (FSUG), August 2014

⁴⁰ Anastasia Petraki and Anna Zalewska (April 2014), "With whom and in what is it better to save? Personal pensions in the UK", working paper of the Centre for Market and Public Organisation, University of Bristol.



on occupational pension funds, as employers are in better position to negotiate with competing providers than individuals are.

To tackle this complexity, some pension providers - for example, some auto-enrolment schemes in the United Kingdom – set up fixed costs per member, but this penalises low paid workers. A report of the Office of Fair Trading (2013) highlighted the lack of transparency and comparability in terms of fees charged to members of UK pension funds: various fees are added to the Annual Management Charges (AMC) on the basis of which pension fund providers usually promote their services. The dispersion of charges has also been found to be very significant, depending, amongst others, on the type (personal plans are more heavily charged than occupational ones) and the size of the funds.

Following the OFT study, the Department for Work and Pensions issued a regulation which took effect on 6 April 2015⁴³. The default schemes used by employers to meet their automatic enrolment duties are subject to a 0.75% cap on AMCs. The cap applies to most charges, excluding transaction costs. Moreover, an audit was conducted on schemes being "at risk of being poor value for money". It found that about one third of surveyed schemes had AMCs superior to 1% and that a significant number of savers would have to pay exit fees superior to 10% in case they wanted to switch to a better performing fund. Moreover, starting from October 2017, existing early exit charges in occupational pension schemes cannot exceed 1% of the member's benefits and no new early exit charges can be imposed on members who joined that scheme after 10 October 2017.

While not necessarily as advanced as in the United Kingdom, the introduction of transparent, limited and comparable charges is the subject of debates in several of the investigated countries.

V. Taxation

One of the key elements of a pension system, as designed by the World Bank's conceptual framework of 1994,⁴⁴ is to incentivise savings and private investments by giving fiscal advantages, either as deferred taxation, exemptions or tax reductions.

Pension taxation concerns three stages: contributions, investment returns and payments (benefit drawdowns).

The general model applied to pension products is usually deferred taxation: contributions are deducted from the taxable income and pensions (payouts) are taxed within the framework of income tax or, usually, at a more favourable rate. Some countries are currently

⁴³ https://www.legislation.gov.uk/ukpga/2015/8/contents/enacted

⁴⁴ World Bank, 'Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth' (1994) 10, <u>http://documents.worldbank.org/curated/en/973571468174557899/pdf/multipage.pdf</u>.



in the middle of a transitional phase comprising proportionate deferred taxation which will lead to entire deferred taxation in the future.

The so-called EET regime, "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"⁴⁵, is predominant in the countries covered by this research report. There are only a few exceptions, like in Poland, where the reverse rule is applied: contributions are paid from the taxable income while pensions are tax-free (the only exception from the TEE regime are IKZEs – individual pension savings accounts). Pensions in Denmark are taxed at all three stages with contributions to occupational pensions being partially deductible as the only exception. Furthermore, in Bulgaria and for the funded pensions in Slovakia, one can even observe EEE regimes with no pension taxation at all within defined tax exemption limits. In other countries, such as France or Poland, specific conditions apply in order to be tax-exempt or not.

Usually, the accumulated capital can be withdrawn by the saver as a lump sum at retirement age, at least partially. Our calculations of returns net of taxation (where available) are based on the most favourable taxation case and assume that the saver withdraws the maximum lump sum possible.

Savings products used as retirement provision, but which are not strictly pension products, might benefit from a favourable tax treatment. This is the case of life insurance in France but successive increases of the rate of "social contributions" on the nominal income tend to diminish the returns of the investment.

An overview of the main taxation rules applied on a country basis can be found in the following table:

Table	GR17. Overview of Main Taxation Rules Applied in the Country Reports
Austria	• EET regime – generally, only payments are taxed; o direct commitments, occupational pension funds and group insurance have tax-exempt contributions, tax-exempt capital accumulation, and (income) taxed benefits;
	o life insurance contributions are subject to insurance tax (4%), investment returns are exempt and payments are taxed ("TET" regime); o premium subsidised products carry a premium based on the contribution, the capital accumulation phase is tax-exempt, and benefits are also tax free if they are converted into an annuity ("TEE" regime).
Belgium	• EET regime - only withdrawals/payments are taxed; o Contributions are tax deductible up to prescribed limits; o Employees pay generally 2% solidarity tax and 3.55% INAMI tax on benefits; o Pillar II: Taxation in pay-out phase depending on origin of contribution, local taxes to be added;
	o Pillar III: Taxation in pay-out phase at the age of 60, local taxes to be added.

⁴⁵ OECD definition: <u>https://stats.oecd.org/glossary/detail.asp?ID=5225</u>



Bulgaria	• EEE regime;
	o Annual contributions of up to 10% of annual taxable income is tax free;
Denmark	• TTT regime (combination of ETT and TTE);
	o Annuities, periodic instalments, and lump-sum pensions under the form of <i>kapitalpension</i> are income tax deferred and follow an ETT regime; o Lump-sum pensions under the form of <i>alderopsparing</i> are taxed TTE:
Estonia	• EET regime for taxation:
	o Contributions paid towards the pension schemes are tax-exempt. o Returns achieved by respective pension funds are tax-exempt. o Benefits paid out during the retirement are subject to the income tax regime.
France	• ETT regime;
	o PERP, Prefon, Corem, CRH contributions are income tax deductible; o Contributions to some DC pension plans (PERCO and PERP) are income tax deductible but no deductibility from social levies. No tax deductibility for life insurance contracts; o taxation of employers' contributions to corporate savings plans (PEE and PERCO) and defined contribution plans ("Article 83") increased from 8% to 20%.
	o the minimum tax rate on life insurance income is now 23%
	o pay-outs are taxed in the retirement phase (sometimes with tax reductions).
Germany	 EET regime, taxation divides retirement savings into three groups: o Statutory pension insurance and the Rürup pension: deferred taxation; contributions up to a deduction cap are exempted from taxation and generally subject to tax in its entirety during the pay-out phase. o Standard pension insurance or life insurance products: contributions to the products come from taxed income; benefits are taxed at the personal income tax rate on the corresponding earnings in the retirement phase o Occupational pensions and the Riester pension: deferred taxation; contributions up to a deduction cap are exempted from taxation and generally subject to tax in its entirety during the pay-out phase.
Italy	• ETT regime, contributions are tax deductible up to prescribed limits; o Accruals are taxed at 20% (12.5% on income derived from public bonds) in
	the capital accumulation phase; EU equities & investment funds are tax-exempt o Taxation in the pay-out phase varies from 9-15%.
Latvia	• EET regime; o Pillar II – Contributions are personal income tax deductible item and therefore the contributions are not subject to additional personal taxation; Income or profits of the fund are not subject to Latvian corporate income tax at the fund level; a general principle for all investment and savings-based schemes to levy the income taxation on the final beneficiary.



	o Pillar III – Voluntary private pensions are generally taxed as Pillar II, however there are deduction limits in the contribution phase: payments (contributions) made to funds shall be deducted from the sum amount of annual taxable income, provided that such payments do not exceed 10 % of the person's annual taxable income.
Lithuania	• EEE regime; o Employee contributions are tax-deductible even if they are higher than required; for pillar III, there is a tax-refund policy during the contribution phase, which means that the contributions of up to 25% of gross earnings, the income tax (15%) is returned;
Poland	• TEE regime for Employees Pension Programs (PPE) and Individual Retirement Accounts (IKE); EET for Individual Retirement Savings Accounts (IKZE); o benefits are taxed with a reduced flat-rate income tax (10%)
Romania	• EET regime applies for both mandatory and voluntary pensions; o for funded pensions (Pillar II), pension benefits paid out during retirement will be subject to a personal income tax (10% tax rate) above a certain level (€460 in 2018); the social security contributions have been removed as of 2018 and are supported completely from the consolidated state budget. o for voluntary private pensions (Pillar III), contributions are tax deductible up to a deduction limit, investment income is tax exempted and benefits are subject to the personal income tax.
Slovakia	 Funded pensions are usually not taxed (EEE regime); Supplementary pensions follow the EET regime with several exceptions and specifications.
Spain	 EET regime, contributions are tax deductible up to prescribed limits; No taxation in the capital accumulation phase; Pay-outs are taxed differently depending whether they take the form of an annuity or the form of a lump sum payment.
Sweden	• EET regime for public pensions; ETT regime for private pensions; o Employers can partially deduct contributions to the second pillar; returns are subject to an annual standard rate tax based on the value of the account and the government-borrowing rate o Investment return is subject to tax rate on standard earnings at 15%; o in Pillar III, until 2016 there was a tax deduction of SEK 1,800 per year available; returns are subject to an annual standard rate tax based on the value of the account and the government-borrowing rate
The Netherlands	 EET regime; Contributions paid into pension funds are tax deductible; Taxation is applied in the pay-out phase at the personal income tax rate.
United Kingdom	 EET regime; Allowances and tax relief on contributions with test against lifetime allowance

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• Pay-outs are taxed as income, there are three marginal rates in the UK at the moment.

Source: BETTER FINANCE own composition

VI. RETURNS OVERVIEW

The objective of this research report is a global overview of the real return of private pensions in the 17 EU countries under review. The net returns after fees, commissions, inflation and taxes are critical to protect the purchasing power of the income of pension savers when they retire. Unfortunately, information on these real returns is scarce, hence this research report provides a global and coherent approach, making use of all individual and historical data available in order to augment transparency and deliver simulations on real performances for EU pension savers.

The BETTER FINANCE report now provides for almost 20 years of performance disclosure for retirement provision products. Unfortunately, over the long run, real returns were on average quite low and below those of capital markets (equities and bonds). In the context of negative interest rates and decreasing yields on capital markets, the pensions outlook looks grim.

One has to keep in mind that the diversity of the European pension landscape and the lack of available data complicate the drawing of straightforward conclusions. For instance, most pension funds for the countries under review are offered as defined-contribution plans while those in Germany, as of now, and the majority of those in Belgium are offered as definedbenefit plans. Although the aim of comparability would be to present all results in a harmonised manner (either Pillar II vs Pillar III or on product categories - investment funds vs insurance products), complete data for all is not reported, neither for the full reporting period, nor are the concepts (Pillars, occupational vs supplementary plans) so common in all E.U. Member States. Therefore, for ease of reference, the names of the pension vehicles have been used in Graphs 17 (A, B and C) and Table 18 as presented in each individual country case.Over the longest reporting period (19-years, 2000-2018), the top performers continued to be the Dutch pension funds, recording a real net return (before taxes) of 2.52% p.a. or 60% profit, with a steep gap to the second best performing, French capital guaranteed lifeinsurance contracts, which returned 1.1% p.a. (or 23% - after tax). However, during 2000-2017, the UK pension funds outperformed the Dutch ones, gaining 3.06% p.a. compared to 2.85% in the Netherlands.

Out of the 20 pension vehicles on which we report performances over at least 18 years (Graph 17(A)):

• eight (40%) have recorded cumulative negative returns, ranging from -29% to -6.8% cumulatively;



• other vehicles (25%) reported less than 1% real net return per year, equalling to less than 21% profits over the past 19 years.

Considering that an EU capital markets-representative benchmark (50% European Equities – 50% European bonds) recorded 53% real profits before taxes (2.26% p.a.), only isolated pension vehicles (German pension insurances, Dutch and UK pension funds) managed to beat the market over the long-term.

On shorter reporting time frames (2002-2018 - Graph 17(B)) performances were much higher, with 54% of pension vehicles achieving at least 2% p.a.

In general, we could observe significant performance differences in each country case either between pillars or between types of pension vehicles:

- in Romania, Pillar II mandatory pension funds recorded more than twice than Pillar III pensions;
- in Austria, pension funds profited 27 p.p. less than life-insurance contracts;
- in Italy, PIP with profits had positive returns over the past 11 years, while unit-linked PIP recored a a loss (on average) of -2.2%; or
- in France, where capital guaranteed insurance products gained 1.1% p.a. and unitlinked insurance lost 1.7% p.a.;

These poor or even negative real returns have led public authorities in some Member States to take measures in order to ensure transparency and cap the fees charged by certain pension providers (in countries such as the UK, Romania and Latvia). The issue is crucial, especially in countries like the United Kingdom where the standard of living of retirees is heavily dependent on pre-funded pension schemes. The following tables detail the long-term real returns of the main long-term and pension saving product categories in the 17 European countries analysed. The categorisation in Graphs GR17(A), (B), (C) AND (D) is by the starting reporting year available in this report.

Italy and the United Kingdom are two opposite examples of policy options chosen by governments to tackle the imbalances of pension systems. In Italy, an ambitious reform was implemented (as of 2011) by Minister Elsa Fornero under the Monti government in order to secure the public PAYG system, despite very unfavourable demographic trends. As such, the poor returns of the personal pension plans will have a limited impact on the replacement rates of retirees' income, the downside being the heavier reliance on the public pension scheme. However, the newly formed coalition (2018) put forward plans to undo the reform, reduce the standard retirement age and eliminate several conditions for full pension entitlement. Under the current law, the State's expenditure on pensions will rise to 16.2% of GDP by 2040.

By contrast, pensions in the UK are more heavily dependent on pre-funded schemes. As such, the total value of pension assets as % of the 2018 GDP reached 105%, which is modest



compared to the Netherlands or Denmark, but four times higher than the average (pension fund assets 25% of GDP) in the 17 countries in scope of this Report. The Government has implemented "auto-enrolment" to extend the benefits of pension funds to most employees. There, the excessive charges borne by pension fund members have led public authorities to take measures in order to improve transparency and to limit the fees charged by pension providers.

In overall, the 19-year period provides around zero returns in real terms for pension funds, but still positive after inflation and charges are taken into account.

Note: In Bulgaria, data on professional pension funds (occupational and voluntary) was no longer available for the 2018 update. However, universal and personal pension funds, albeit the very favourable EEE formula, recorded a steep decrease in 2018. From an annual average of 0.5% on 16 years (2002-2017) to -1.83% on 17 years (2002-2018) due to the negative performance of -8% in 2018. The same happened to Pillar III funds (-7.66% in 2018), which dropped from the previous 1.7% to -0.33%. In addition, in Denmark the supervisor started to report based on hybrid-DC and DB pension vehicles, therefore the latest consolidated data goes back to 2016.



Graph GR17(A). ANNUALISED REAL RETURNS OF PENSION SAVINGS - AFTER CHARGES & INFLATION - BEFORE/AFTER TAX - FROM 2000/01



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Graph GR17(B). ANNUALISED REAL RETURNS OF PENSION SAVINGS - AFTER CHARGES & INFLATION - BEFORE TAX - FROM 2002



-3% -2% -1% 0% 1% 2% 3% 4% 5% 6% 7%

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Source: BETTER FINANCE research; *Money-Weight



Graph GR17(C). ANNUALISED REAL RETURNS OF PENSION SAVINGS - AFTER CHARGES & INFLATION - BEFORE TAX - LATER STARTING DATES



Source: BETTER FINANCE research; *Earlier return breakdown not available

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The following table groups the pension vehicles available and reported on by country and presents the average returns on the whole available reporting period.

Table G	R18. Yearly Real Returns of Private Pension Products
Δustria	Pension funds, 2002- 2018: +0.90%
Austria	Life-insurances, 2002-2018: +2.16%
	Pension Funds (IORP [1]), 2000-2017: +1.09%
Belgium	"Assurance Groupe" (Branch 21), 2002-2014: + 2.00%
DelBlatti	Pension Savings Funds, 2000-2018: -1.65%
	Life Insurance, Guaranteed, 2002-2014: +1.63%
	Universal Pension Funds, 2002-2018: +0.07%*
Bulgaria	Professional pension funds (2001-2017): +1.70%*
	Voluntary Pension Funds, 2004-2018: -0.27%*
Denmark	Pension plans Hybrid DC with guarantee 2016-2018: +3.22%
	Pension plans DC without guarantee 2016-2018: +2.93%
Estonia	Mandatory Pension Funds, 2003-2018: -0.01%
Lotonia	Supplementary Pension Funds, 2003-2018: +0.64%
	Life Insurance, Capital guaranteed, 2000-2018: +1.10%*
France	Life Insurance, Unit-linked, 2000-2018: -1.70%*
	Corporate savings plans, 2000-2018: +0.40%
	A.O.P.P.[1], 2002-2017: +1.70%*
Germany	Riester Pension Insurance, 2005-2017: +1.80%*
Germany	Rürup Pension Insurance, 2005-2017: +1.18%*
	Pension Insurances, 2000-2017: +2.81%*
	Closed Pension Funds, 2000-2018: +0.70%
Italy	Open Pension Funds, 2000-2018: -0.37%
itary	PIP with Profits, 2008-2018: +0.90%
	PIP Unit-Linked, 2008-2018: -0.2%
Latvia	State Funded Pension Funds, 2003-2018: -0.72%
Latvia	Voluntary Private Pension, 2011-2018: +0.65%
Lithuania	Occupational pensions 2004-2018: +0.67%
Litildania	Supplementary pensions 2004-2018: +0.32%
Poland	Employee Pension Funds, 2002-2018: +3.84%
FUIdHU	Voluntary Pension Funds, 2013-2018: +5.42%
Romania	Pillar II Funded Pensions, 2008-2018: +4.64%
Nomania	Voluntary Pension Funds, 2007-2018: +2.27%
Slovakia	Pillar II Pension Funds, 2005-2018: -0.41%
JIUVANIA	Supplementary Pension Funds, 2008-2017: +0.14%
Spain	Associate Plans, 2000-2018: +0.57%
Spain	Occupational Plans, 2000-2018: +0.35%
Sweden	AP7 fund, default option: 2000-2018: +5.70%
Sweden	Premium pension, other funds: 2000-2018: +2.9%
The Netherlands	Pension Funds, 2000 - 2018: +2.52%
memerianus	Life Insurance, 2000 - 2018: +0.07%
United Kingdom	Pension Funds, 2000-2017: +3.06%
*After tax	



Source: Own Research, Better Finance Research

Occupational pension funds as per the definition and scope of the EU "Institutions for Occupational Retirement Provision Directive" (IORP); [1] A.O.P.P. stands for Autonomous Occupational Pension Funds.

[1] The returns on private pension products in Denmark cannot be calculated on average since the Danish Supervisory Authority started to report the returns for two categories: *hybrid defined-contribution* (DC) with guarantee and *defined-contribution* (DC) with no guarantee. Therefore, averages as of 2016 cannot be calculated.

VII. POLICY RECOMMENDATIONS

<u>Non-toxic, transparent, comparable and simple long term and pension savings</u> <u>products</u>

Unfortunately, again this year, most of the BETTER FINANCE's 2017 and 2018 recommendations remain valid for the 2019 edition of the Report.

1. Provide simple, intelligible and comparable reporting on pension products across the EU.

Although the European Supervisory Authorities' (ESAs) first reports on *costs and performance* of retail investment products are a step forward in the right direction (a 2015 "CMU"⁴⁶ Action proposed by BETTER FINANCE), many products – in particular in life insurance and pension areas– escape the remit of supervision and reporting.

For the seventh year in a row, BETTER FINANCE and its research contributors continue to struggle to get information on actual charges, asset allocation and performance. While in some cases the timing of reporting can be improved (made earlier), in many others there is no available information on large categories of pension products.

Therefore, national supervisory authorities must improve disclosure and report on the costs and net past performance (at least) of all the long term and pension saving products in their scope.

These improvements must be made in easily accessible and understandable formats, such as web-comparison tools, mobile applications or annual reports addressed to the retail saver. Pension products must not be understood *stricto sensu* (only those

⁴⁶ Capital Markets Union.



labelled as such) but organically, meaning all those products that are actually used by savers for retirement provision purposes (for instance even bank savings accounts sometimes).

2. Tell the EU citizen the whole truth

Disclosing the net asset value (NAV) is not enough, neither is it intelligible for the average pension saver. As this report proves, the EU citizen too often does not achieve, in the end, decent net returns⁴⁷ on his investments. In addition, he usually is not aware of this. Therefore, in order to raise citizens' awareness and encourage them to look for alternative better performing products, the truth should be communicated clearly:

- pension products 'performance disclosure must be made in relative terms (% change from one year to another) and with cumulative effects (compound % change over pre-defined periods);
- after deducting charges from gross returns, disclosures must show the impact of inflation on real returns, and, where possible, calculate them net of taxes. If calculation net of taxes is not possible, disclosures must give generic examples for the purpose of showing what the saver will be actually left with at retirement;
- as pension products are by essence long-term (investment horizon of at least 20 years), key mandatory disclosures and public authorities' reporting must cover at least a period as long, or since inception – whichever is earlier – in order to reflect the characteristics of retirement provision vehicles.

3. Restore and standardize relative past performance disclosure for all longterm and retirement savings products.

Neither past, nor future performance are a reliable indicator of future results. However, while past performance can be analysed to determine whether the product manufacturer has provided any positive returns and/or has achieved its objectives in the past, future performance is just simply wrong (nobody can predict

⁴⁷ "Decent" returns are returns that at the very least do not destroy the value of EU citizens' lifetime's savings: i.e. net (after charges) real (after inflation) returns that are positive over the long-term, and sufficiently high to allow them to get an adequate pension replacement income.



future performances), and misleading, has no added value and stimulates retail investors to hyperbolise future returns. Therefore:

- the EU must re-instate standardised disclosure of past performance of "retail" investment products compared to objective market benchmarks (as required up to 2017 for all UCITS investment): <u>long term</u> historical returns after inflation, after all charges taken from the investor; and after tax - when possible;
- make the period of the past performance disclosure consistent with the time horizon of the investment product: it is currently 10 years minimum for UCITS funds and it should be longer for pension products;
- extend the exemption of UCITS funds⁴⁸ from the PRIIPs Regulation until the issues of performance and cost methodology and presentation are resolved.

The UCITS KIID represented a great achievement in properly disclosing essential information for the retail investor: simple concepts, based on actual data, and fully comparable across products. If the PRIIPs exemption for UCITS ceased before addressing all issues of the KID, it would mean a huge step back for disclosure and comparability of investment products. Therefore, KIDs should:

- Disclose total fees and commissions charged to the end investor, both direct and indirect;
- Disclose the funding status, when relevant;
- Disclose transfer/exit possibilities and conditions and provide this information in plain language;
- Extend the PRIIPs'⁴⁹ KID⁵⁰ principle (meaning a standardized plain language and short information document) to all long-term and pension savings products, including pension products, shares and bonds;
- Initiate a full review of the PRIIPs Regulation without further delay;
- Eliminate future performance scenarios or at the very least make the PRIIPs KID compliant with MIFID II rules on performance disclosure, in particular by

⁴⁸ Also in view of the 2017 request to ESAs to issue reports on the cost and past performance of the main categories of retail investment, insurance and pension products where the EC itself called for the UCITS KIID to serve as a key source for the performance data.

⁴⁹ PRIIPs: Packaged Retail and Insurance-based Investment Products

⁵⁰ KID: Key Information Document (the existing summary document for UCITS funds is the "KIID": Key Investor Information Document).



adding to the future performance "information" a prominent warning stating that such forecasts are not reliable indicators of future performance.

4. Improve EIOPA's report on cost and performance of retail investment products.

EIOPA did not include personal pension products in the first report, and it seems that neither will Defined Contribution (DC) non-insurance-based Occupational Pension Schemes ("IORPs") be included in the scope of next year's report.

EIOPA must establish and maintain a database for costs and performance (at least) of all IBIPs⁵¹ for pensions and PPPs in its scope of competence, no matter how large or subscribed.

5. Ensure that the PEPP truly represents an "EU quality label" product

The Pan-European Personal Pension (PEPP) product must create an EU quality label for retirement provision vehicles that will increase transparency and trust of consumers in capital markets.

- <u>Fee cap</u>: ensure that the basic PEPP fee limitation to 1% covers all direct and indirect costs (management, sale & distribution, capital protection, transaction costs) in order to prove effective.
- <u>Use tax as an incentive</u>: EU public authorities and Member States must ensure that the PEPP will benefit from an equivalent tax regime, at least as attractive as for existing national personal pension products, in order to allow a real European coverage.

PEPP KID: The key pre-contractual disclosure document for the PEPP must be simple, based on actual data and comply with the principle of *"fair, clear, and not misleading"* information.

<u>Capital guarantee</u>: the notion of "capital" must be calculated on the basis of the amounts saved before the deduction of all accumulated fees, charges and expenses directly or indirectly borne by investors and if possible in real terms, otherwise the long-term, accumulated fees and inflation will destroy both the nominal and real value of this "protection". If not, there should be at least a mandatory and prominent warning in the PEPP KID pointing to the very negative impact that inflation and fees

⁵¹ Insurance-Based Investment Products.


will have on the real net value of the "guaranteed" capital over time. If adopted without these conditions, the so-called "capital protection will very seriously mislead consumers.

<u>*Risk & return scale*</u>: the risk scale must be simple as well and adapted to the long-term horizon of the product, incorporating:

- a clear, simple and standardised life-cycle "de-risking" approach supervised at EU level⁵²;
- the disclosure of the provider's benchmark(s) and their past performance alongside the PEPP's past performance since the inception of the product.

6. Simplify, standardise and streamline the range of product offerings:

BETTER FINANCE recommendations concerning the product offerings are:

- Restrict the use of non-UCITS funds (the 20,000 or so "AIFs") in all packaged long-term and pension products promoted to savers and individual investors, and in particular in the future PEPP;
- Reduce and consolidate the excessive number of UCITS on offer in the EU;
- ESAs to ensure EU individual investors have full access to low fee investment products such as shares, bonds and index ETFs (in line with the CMU initiative of the EU); this requires banning inducements that push intermediaries ("non independent advisors") to ignore these low cost products to the detriment of pension savers.

⁵² Based on its research on the divergence of asset allocation paths in existing life cycle funds, BETTER FINANCE believes that the life cycle approach should be allowed if: i) the life-cycle "de-risking" design of the investment option will be simple, cost effective, standardised and supervised by EIOPA ii) Information disclosure will be improved with the publication of the asset allocation glidepath and corresponding target allocation table iii) diversification will be ensured iv) overall fees will be capped at 1%.



 Better align the pricing of investment products with the interests of savers and end biased advice at the point of sale⁵³ and guarantee competent advice on long-term investments, including equities and bonds.

Asset-based fees do not ensure the alignment of interests between providers and clients.

 Address the lack of consistency regarding terminology as it is contributing to the investors' confusion and work with stakeholders, like BETTER FINANCE, to agree on a standardised terminology, in particular on how to define concepts such as "investment advice", "personal recommendations", "product selling", "guidance", "planning", "fee-based" and "commissionbased".

8. Improve the governance of collective schemes:

- Ensure that at least half of the schemes' supervisory bodies are designated directly by the pension schemes' participants.
- 9. Establish EU-wide transparent, competitive and standardised retail annuities markets:
 - grant more freedom to pension savers to choose between annuities and withdrawals (but after enforcing a minimum threshold for a guaranteed life-time retirement income);
- 10. Grant special treatment by prudential regulations to all long-term & pension liabilities allowing for an adequate asset allocation (in particular the solvency II⁵⁴ requirements should be recalibrated as to eliminate the penalisation of equity holdings by insurers when covering long term and pension liabilities).

⁵³ The 2018 EC Study on retail investment products confirmed BETTER FINANCE's findings, i.e. that investment products are not bought but sold, and that an average individual investor is not able to differentiate between the benefits and risks of different types of advice, often believing that advice provided by non-independent advisors via banks and insurers is "free" (unaware of incentive schemes and potential conflicts of interests). ⁵⁴ Solvency II Directive (Directive 2009/138/EC [recast])





11. Use tax to incentivise Pan-European long-term retirement savings and investments over consumption and short-term savings.

Member States must stop exploiting the "monetary illusion" to abuse pension savers: they must stop taxing the nominal returns of long term and pension savings, and tax only their REAL returns (i.e. after deducting the very negative impact of inflation over time).

Pan-European products such as ELTIFs and PEPPs will not emerge significantly unless they get the most favourable tax treatment already granted to numerous other nationally sponsored long-term investment products.

The FTT (financial transactions tax) should be reviewed in order to actually meet its stated goal: tax the transactions of financial institutions (the largest ones by far being the Forex ones, and then derivatives) instead of those from the real economy (end-investors ones in equities and corporate bonds, individual ones in particular). To this end, a "FAT" (Financial Activities Tax) may be more fit for purpose;

12. Improve the rules and requirements for automated investment advice

In light of BETTER FINANCE's Robo-advice report findings on very diverging results for one and the same investor profile on different robo-advice providers, it is clear that EU citizens are in dire need of comparable information on investment products, including past performances relative to the objectives of the providers (their "benchmarks"), and on costs:

- Make comparable information on investment products accessible via independent web-based comparison tools for retail investments.
- propose a legislative framework that will ensure that Automated-Decision Making (ADM) systems such as Robo- advisors are accountable, transparent and fair for EU citizens and are developed on criteria that comply with the legislation (MiFID II) with regards to the investment advice process, in order to ensure a harmonised, minimum level of quality.
- 13. Improve financial literacy: introduce financial mathematics' basics (compounding interest rates and returns, annuities) and capital markets' (shares and bonds) as part of school curricula; financial institutions to inform clients on



shares, bonds and index ETFs (and not only on fee-laden more "packaged" products), and to allow at least a part of their financial education efforts to be guided by independent bodies.

14. Sustainability

More and more retail investors are asking to invest in financial products that take into consideration sustainability criteria considering environmental, social and governance objectives as important factors for their investments. ⁵⁵

- Develop a clear, precise and common **taxonomy** established on science and facts (not on emotions and ideologies), and focussing on all the three criteria (Environmental, Social and Governance);
- Develop a well-designed EU-wide Ecolabel for retail investment products, that avoids the pitfalls of existing national labels (being granted to products not complying with existing investor protection and disclosure rules) – BETTER FINANCE is involved in the process and forms part of the Joint Research Centre's Ecolabel Working Group as well as the EU Ecolabelling Board;
- Address the short-termism ensuring by ensuring the link and consistency between sustainability and long-term value creation by putting exemplarity with regard to investor protection rules first and ensuring decent returns for individual investors at the very least that the very least do not destroy the value of their savings.

Prevent the use of ESG specific benchmarks (such as low carbon indices for example) in retail investment products in lieu of mainstream capital markets ones, as this can only confuse pension savers further and prevent them from assessing the long -erm performance of these products.

⁵⁵ FINANCING A SUSTAINABLE EUROPEAN ECONOMY, Final Report 2018 by the High-Level Expert Group on Sustainable Finance <u>https://ec.europa.eu/info/sites/info/files/180131-sustainable-finance-final-report_en.pdf</u>

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