PENSION SAVINGS
THE REAL RETURN
2018 EDITION

BETTER FINANCE

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

Pension Savings: The Real Return
2018 Edition

A Research Report by BETTER FINANCE

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Acronyms

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

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

Glossary of terms

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

"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.

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[2] See European Commission, 'Investment Funds' (28 August 2018) https://ec.europa.eu/info/business-economy-euro/growth-and-investment/investment-funds_en.

[3] Werner Eichhorst, Maarten Gerard, Michael J. Kendzia, Christine Mayrhruber, Connie Nielsen, Gerhard Runstler, Thomas Url, 'Pension Systems in the EU: Contingent Liabilities and Assets in the Public and Private Sector' EP Directorate General for Internal Policies IP/A/ECON/ST/2010-26.

"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]

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

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[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).

basket of underlying assets, and are increasingly more used due to the very low management fees that they entail.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

a) for related employers i.e. companies that are financially connected or owned by a single holding group (group pension funds);

b) for unrelated employers who are involved in the same trade or business (industry pension funds);

c) for unrelated employers that may be in different trades or businesses (collective pension funds).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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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Edin Mujagić is a Dutch economist and journalist and holds a degree in Monetary Economics from the University of Tilburg. He is a member of the Economists' Club at Project Syndicate and founded the independent macro-economic consultancy Oranje Lelie. Youngest ever member of the Monetary Circle in the Netherlands, Mujagić is currently aligned to Tilburg University.

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Pension Savings: The Real Return

2018 Edition

Country Case: Spain

Resumen

Tradicionalmente, los hogares españoles han estado ahorrando principalmente por el medio de activos no-financieros (propriedad immobiliaria), inversión directa y productos bancarios. Non-obstante, en los años recientes, la participación en Pilar II y Pilar III ha incrementado, con el mayor número de partícipes en productos de seguro-vida, cual ofrece el mayor ingreso de la renta de jubilación por el retiro español. Sobre las rentabilidades reales de los productos privados de ahorro-jubilación, los fondos de pensiones españoles han realizado cerca de 0% durante los últimos 18 años (rendimientos acumulados de +48%). Teniendo en cuenta el efecto cumulativo de la inflación (+ 2.19% anual), el rendimiento bruto anual promedio neto de la inflación apenas se mantuvo positivo con + 0.05% en los últimos 18 años.

Summary

Traditionally, Spanish households have mostly saved for retirement through non-financial assets (real estate, immovables), direct investment and bank-based channels (deposits). Although participation in Pillar II and Pillar III retirement saving schemes have increased in recent years, particularly in life-insurance products, the numbers still remains at modest levels. This is due to a strong public pension scheme in Spain, providing the vast majority of the pension income stream for the average Spanish retiree. Concerning the real returns of private pension products, Spanish pension funds have performed close to zero over the entire investment horizon targeted by this Report. The nominal average annual return was +2.24% over the last 18 years (cumulating profits of +48%). Considering the cumulative effect of inflation (+2.19% annually), annual gross average returns net of inflation barely remained positive with +0.05% in the past 18 years.

Introduction

The Spanish pension system is composed of three pillars:

- Pillar I – Public, composed of *pensiones contributivas* and *pensiones no contributivas*;
- Pillar II - Occupational;
- Pillar III - Invidivual pension plans.

Pillar I

Pillar I represents public pensions. This kind of pension falls under the umbrella of the State. The aim is to guarantee some level of protection against certain social risks, such as illness, unemployment, accidents, as well as provide income during retirement.

Pillar I offers two types of pensions. Through the first type of pension, the *pensiones contributivas*, indiviudals contribute (usually through income taxes) while part of the work force and subsequently draw from it upon retirement. Through the second type of pension, the *pensiones no contributivas*, no contributions are required. The latter is directed towards covering basic necessities (pillar 0).

Among the five principles governing the public pension system, three are of relevance for this report:

1. *The Principle of distribution*: contributions made by the active population finance pensions at that particular moment.
2. *The Principle of proportionality*: generated pension benefits are directly proportional to contributions.
3. *The Principle of contribution*: individuals who have not contributed will only have access to the healthcare system and the *pensiones no contributivas*.

The contribution rate for the social insurance (pension included) is set at 28.3%, out of which 4.7 pp are paid by the employee and 23.6 pp by the employer. In Spain, one is eligible for full pension entitlements upon reaching the statutory retirement age, currently at 65 years and 6 months (growing by 1 month/year until 2020 and then by 2 months/year until 2027 upon reaching 67). The final pension amount is determined by dividing the product of the contribution base multiplied by the number of worked months with the number of contributed months, subsequently a contributory-years-dependent coefficient (%) is applied.[255]

The net pre-retirement income replacement rate in Spain was estimated at 81.8% in 2016, the fifth highest amongst the countries in this Report, while the age-dependency ratio in 2017 was at 29.5% and projected to increase to 44.4% by 2030.

[255] This coefficient starts at 50% for the minimum contributory period (15 years) and grows gradually upon reaching the maximum amount (100%) at 35 years of contributions.

Introductory Table: Multi-pillar pension system in Spain			
	Pillar I State Pensions	**Pillar II Occupational Pensions**	**Pillar III Individual pensions**
Participation	Mandatory	Voluntary	Voluntary
Type of funding	Financed by social insurance contributions (4.7% employee + 23.6% employer)	Funded; Financed by social insurance contributions	Funded; Financed by employees' own contributions
Type of benefit entitlement	NDC PAYG	DB, DC and Hybrid	DC
Management	Publicly managed; Benefits paid via State Social Insurance Agency	Privately managed	Privately managed
Products	Contributory state pension; Non-contributory state pension	Pension Plans; Life insurance; PPAs; PIAS; SIALP; Unit-linked products	
Average pension	**€1,208.75 (75% from Pillar I)**		
Coverage	Coverage: generally all population	9.8 million workers (43%)	Coverage: 23,5% of working population (in 2017)
Net replacement ratio:	**81.8% in 2016**		

Source: INSS, OECD, BETTER FINANCE own computation, 2018

The incentive to save via occupational or complementary pension products (Pillars II and III) is rather low considering the high public pension income stream out of the total replacement ratio for Spanish retirees, estimated in 2016 at 75% of the pension amount.[256]

Pillar II

Pillar II consists of occupational pension schemes (*planes de pensiones de empleo*) linked to companies and entrepreneurial activities. Their objective is to generate private savings for employees, and they are offered in all three forms of contribution-to-benefit relationship: DB (accounting for 13% of contributions), DC (accounting for 66% of contributions) or the

[256] European Commission, Ageing Report 2018.

hybrid DB-DC (accounting for 21% of contributions).[257] Contributions to these plans can be made in full by the employer, or by the employees. As in Pillar III, Pillar II offers two types of savings products: pension saving arrangements and insurance products. they both hold a significantly low proportion in the occupational provision sector as compared to the voluntary one (Pillar III).

The difference between Pillar II and Pillar I is that pension entitlements are based on a capitalisation system, meaning that every worker contributes to his/her own pension savings account, thus the payouts depend on the amount accumulated and on financial returns achieved on his/her savings. The coverage of PPEs is relatively low (approximately 2 million employees or 8.7% of the total economically active population), this is because occupational pension arrangements are not mandated by law and are usually only provided by large companies. However, the Spanish Pillar II covers approximatively 10 million workers, or 44% of the economically active population.[258]

Pillar III

Pillar III is composed of individual pension plans. These plans are personal and complemetary, meaning that an individual can voluntarily contribute (from net income) to a pension plan of his/her own choice. Although these arrangements are also based on the capitalisation system, in this particular case it mainly consists of Social Provision and Pension Funds. Pillar III facilitates a progressive increase in private savings in the long-run.

Household Savings

The appraisal of household savings has always been an identifying characteristic of the Spanish socio-economic model. The household saving has been channeled through direct investment or through the deep-rooted desire for real estate acquisition, which has in turn become a speculative asset in the housing bubble, in an antisocial way.

Historically, a consolidated social welfare system with proven guarantees offering assurance for the future has been lacking. This has caused the Spanish population to start speculating, with the aim of accumulating enough capital in order to face potential life changing events like unemployment, old-age and unforeseen illness or accidents.

These conditions have led to an important savings and investment culture focused on real estate. Although there is currently a well-established welfare state offering complete social cover, seemingly sustainably, the tendency to save and invest for the future with a particular focus on real estate has persisted, Spanish citizens continue to invest for future needs,

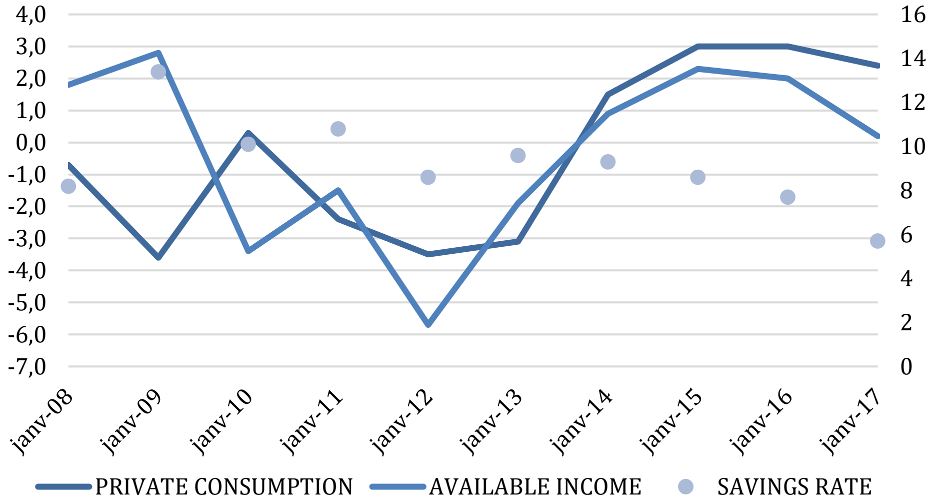
[257] UNESPA, Informe 2017 "Estamos Seguros"
[258] UNESPA, Informe 2017 "Estamos Seguros"

however, at a continuously decrasing rate (less than half in 2017 compared to 2009), giving up part of their present buying power in the process.

The Bank of Spain[259] has reported that for a long period of time, the savings rate in Spain was around 11%. Nevertheless, from 2009 onwards, the savings rate decreased dramatically. The reduction was in large part due to a prolonged period of time during which Spanish families saw their incomes reduced because of the lack of employment opportunities. Other factors contributing to the reduction of the household savings rate were the decrease of net transfers from the Public Administration through automatic stabilizers, discretionary tax measures, and lower rates of disposable income.

As illustrated in Graph ES1, the savings rates have not managed to regain the levels of the years prior to the crisis. In 2013, the savings rate decreased again, subsequently reaching 5.5% in 2017. This was due to an unmatched increase in consumption rates compared to the available income. For the last quarter of 2017, 4.9% was reported as the Spanish households' savings rate out of the quarterly gross income.[260]

Graph ES1. Evolution of household spending and savings rate (real terms)



Source: Spanish Central Bank, Annual Report for 2017

[259] BdE: Boletín Económico, Sept. 2013. pag.65: Evolución del Ahorro y del Consumo de los hogares españoles durante la Crisis. Óscar Arce, Elvira Prades y Alberto Urtasun, de la Dirección General del Servicio de Estudios

[260] Instituto Nacional de Estadistica, 'Cuentas Nacionales no Financieras de los Sectores Institucionales – primer trimester 2018' CTNFSI (Trimestre 1/2018).

In times of economic distress and crises, the important phsycological effects of decreased employment prospects, as well as hardship endured by large parts of the population, must be taken into consideration. Together, these effects erode consumer confidence. The financial crisis exposed structural weaknesses in the Spanish economy, anaging population, high unemployment rates and a large blackmarket economy. As a result of subsequent austerity measures, the main victim has turned out to be the Spanish social welfare system.

By the end of 2017, financial assets owned by Spanish households and non-profit institutions serving households amounted to €2.14 trillion, according to the Spanish Central Banks' financial balance sheets. Moreover, according to the 4th term report from INVERCO (*The Spanish Association of Collective Investment Schemes and Pension Funds*), Spanish households increased their investments in financial assets to the tune of €49,739 million, representing an increase of 2.37% compared to 2016.

If we take a closer look at the distribution of non-real estate assets owned by households, 2016 and 2017 breaks down as follows:

Table ES1. Breakdown on channels of investments of Spanish households in 2017

	2016		2017		Change
	€ mln	**%**	**€ mln**	**%**	**(%)**
Bank deposits	858,815	40.93%	856,940	39.90%	-0.22%
Direct Investment	577,960	27.55%	584,366	27.21%	1.11%
Collective investment institutions	278,208	13.26%	312,551	14.55%	12.34%
Insurance/ occupational pension	230,384	10.98%	233,409	10.87%	1.31%
Pension Funds	115,731	5.52%	119,518	5.56%	3.27%
Cash	12,667	0.60%	12,543	0.58%	-0.98%
Other	24,416	1.16%	28,593	1.33%	17.11%
TOTAL	**2,098,181**	**100%**	**2,147,920**	**100%**	**2.37%**

Source: INVERCO[261]

As we can see, there is no great modification in the distribution of pension funds in 2017 compared to the previous year (+3.27%). The investment channels have not changed, and the main allocation remains in bank deposits followed by direct investments. The most significant changes are the alternative investments (*other,* +17.11%) and collective investment schemes (+12.34%), in terms of recipients of investments. Subsequently, cash holdings decreased by 0.98% (€124 mln less).

[261] INVERCO, 'Las Instituciones de Inversion Collectiva y Los Fondos de Pensiones: Informe 2017 y Perspectivas 2018'.

According to the Spanish Central Banks' financial balance sheets,[262] Spanish households held 40% in currency and deposits in 2017; 1.35% in debt securities; 40.36% in equity and investment fund shares; 16.44% in insurance, pensions and standardised guarantees, and 1.16% in other assets. The following table shows the total financial asset allocation:

Table ES2. Financial asset allocation of Spanish households in 2017		
Outstanding financial assets	**€ mln**	**%**
Currency and Deposits	856,940	40%
Debt	29,067	1%
Equity and investment fund shares	866,121	40%
Insurance, pensions and standarised guarantees	352,928	16%
Other Assets	41,136	2%
Total	2,146,192	100%

Source: Spanish Central Bank, Spanish Economy Financial Accounts for 2017

Pension Vehicles

Pension Plans

There is a clear distinction to be made between insurance-based pension plans on the one hand (referred to as *retirement plans* in Spain), and pension plans on the other. The differences between the two systems are related to liquidity, risk profiles and tax treatment.

Retirement plans are insurance products developed by financial institutions with one main goal: saving for retirement. These plans tend to focus on mid- to low-income segments of the population with lower purchasing power compared to high-income segments of the population. These vehicles are more flexible and require less commitment than a pension plan. This is because they allow for early withdrawal of amounts deposited. However, it is important to note that the price of such an early withdrawal is considerable.

Pension plans are private social security instruments compatible with and complementary to the public pension system. Payments into pension plans complement the ones made by the public pension system, even completely substituting them in some cases. They are promoted by the public administration through significant fiscal incentives, translating into substantial direct tax benefits.

These fiscal incentives were counterweighted by the fact that participants couldn't withdraw contributed funds until they reached the age of retirement (60 years minimum). However, there were exceptional circumstances that allowed for early recovery such as a serious illness or unemployment. This framework changed with the introduction of Law

[262] https://www.bde.es/webbde/en/estadis/ccff/ccff2.html

26/2014, making the pension system more flexible. All contributions made from 2015 onwards can be withdrawn, together with its accrued interest, ten years after being paid into the fund.

Furthermore, personal pension fund participants have the right to move their accrued capital to a different plan, either with the same asset manager or another, at no extra fee. Moreover, it has no effect on past or future fiscal benefits.

For the fifth year in a row, the main capital markets channel for investments of Spanish households were direct investments in equities (20.6% of total financial assets), followed by Collective Investment Schemes (IIC being their acronym in Spanish). Investments in pension funds have also increased significantly, starting with 2012, reaching €116 bln (an increase of 20%) at the end of 2017.[263]The total volume of households' savings in IIC was estimated at €313 bln (14.8% of total) at the end of 2017, whereas the total AuM of IICs in Spain was reported at €464 bln.[264] Total AuM of Spanish Pension Funds also enjoyed a positive growth rate during these four years - 5.1% annually.

Table ES3. Distribution of the annual financial asset flows 2001 – 2017 (€ mln)

	Deposits	Direct investments	IIC	Insurances	Pension Funds	Total
2001	36,615	-1,887	5,487	17,667	5,103	62,985
2002	20,938	9,070	1,649	19,021	5,341	56,019
2003	16,559	8,938	17,882	14,024	6,650	64,053
2004	32,437	-73	13,341	15,031	6,237	66,973
2005	40,570	1,543	17,161	15,797	7,581	82,652
2006	74,418	-2,989	2,559	17,020	7,005	98,013
2007	57,257	2,005	-10,410	9,606	4,436	62,894
2008	71,279	-16,829	-40,264	12,810	1,423	28,419
2009	23,800	6,672	-3,210	7,957	1,640	36,859
2010	23,674	10,014	-14,603	6,057	2,695	27,837
2011	1,058	20,808	-4,494	-33	-1,697	15,642
2012	5,962	6,731	-8,794	2,843	410	7,152
2013	26,565	-40,224	21,140	7,809	770	16,060
2014	-6,917	-30,554	36,676	13,683	982	13,870
2015	-39	-20,548	34,497	2,371	-39	16,242
2016	15,736	8,760	14,844	11,946	-255	51,031
2017*	-1,000	-9,500	30,000	5,550	50	25,100

Source: INVERCO report on IICs and Pension Plans 2017

[263] All figures concerning Spanish households' financial assets published by Inverco are only an estimate for 2017.

[264] Inverco, Informe Annual sobre los IICs y los Fondos de Pensiones 2017

In 2017, investments in IICs continued to increase, reaching unprecedented levels both in terms of assets under management and in number of participants. This is thanks to a renewed trust among Spanish savers who prefer Investment Funds and Pension Funds as their instruments to complement their savings for retirement.

The total Collective Schemes (including Pension Funds) grew by €73.1bln, bringing the total to €575 bln at the end of 2017, 15% higher than in 2016. The IIC increased their assets under management by €70 bln, 17.7% more than during the previous year. Pension Funds saw an increment of €4.24 bln, as shown in the following table:

Table ES4. Evolution of the total IICs, Pension Funds and Collective Investment Schemes (2011 – 2017) (€ mln)

	IICs					**Pension Funds**	**Total**
	Investment funds		Investment companies		Foreign IICs		
	Movable Assets	Fixed Capital Assets	Movable Assets	Fixed Capital Assets			
2011	127,772	4,495	24,145	313	45,000	82,992	284,717
2012	122,322	4,201	23,836	284	53,000	86,528	290,171
2013	153,834	3,713	27,331	868	65,000	92,730	343,476
2014	194,844	1,961	32,358	826	90,000	100,457	420,446
2015	219,877	421	34,082	721	118,000	104,518	477,619
2016	235,341	377	32,794	707	125,000	106,839	501,058
2017	262,847	360	32,058	620	168,000	111,077	574,962

Source: INVERCO report on IICs and Pension Plans 2017 & CNMV

Pension Funds

For five year, the Pension Funds' assets under management have grown, bringing them to €111.1bln at the end of 2017, representing an increase of €4.24bln (4% more than in 2016). The Spanish market for Pension Funds is composed of approximatively 2661 pension plans, based on 1534 pension funds managed by 75 managamenet companies, with in total 9.6 million Spanish subscribers.[265]

Out of these, the majority are covered by *individual arrangements* (plans), followed by PPEs and *associated plans*, as exhibited in the table below.

[265] DGSFP, Informe Annual 2017.

Number of participants to Pension Funds		
	number of participants	% of total
Associate plans	65,560	1%
PPEs	2,039,265	21%
Individual plans	7,728,459	79%
Total	**9,833,284**	

Source: INVERCO report on IICs and Pension Plans 2017

In 2017 there were 2,557 pension plans, a decrease representing a continuing downward trend in the number of pension plans observed over previous years. T*he Spanish Association of Collective Investment and Pension Funds (*INVERCO[266]) maintains a classification system for individual pension funds according to liquidity and risk, establishingthe following categories:

Number of pension plans by type							
Plan Type	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2016/2017**
PPE	1398	1343	1336	1308	1287	1290	-0.23%
Associate	191	186	176	172	164	156	5.13%
Individual	1385	1402	1320	1264	1196	1111	7.65%

Source: INVERCO report on IICs and Pension Plans 2017

The composition of Pension Fund portfolios in 2017, as presented in the last quarterly report of *the Dirección General de Seguros y Fondos de Pensiones* (DGSFP, the Spanish Insurance and Pension Funds Authority), showed the following distribution:

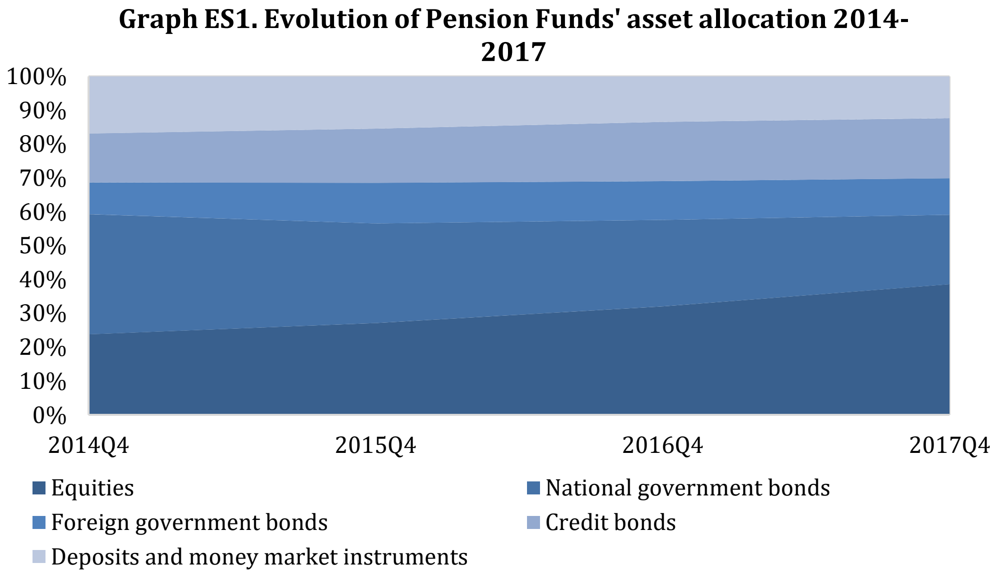
Table ES5. Pension funds' asset allocation (2017)				
	Q1	**Q2**	**Q3**	**Q4**
Equities	35.04%	35.73%	37.77%	38.59%
National government bonds	24.25%	22.92%	21.44%	20.51%
Foreign government bonds	11.08%	10.79%	11.18%	10.81%
Credit bonds	18.16%	18.88%	18.48%	17.74%
Deposits and money market instruments	11.46%	11.69%	11.13%	12.35%

Source: Directorate-General for Insurances and Pension Funds (DGSFP)

As we can see, investments in equities surpassed investments in national government bonds with 38.59% and 20.51% respectively, at the end of 2017. Compared with the last quarter of 2014, pension funds are slightly more aggressive, with the equity allocation increasing from 24% to 39% and sovereign Spanish bonds decreasing from 36% to 21%. Credit bonds attracted 17.74% of investments, followed by deposits and money market instruments, with 12.35% and foreign government bonds with 10.81%.

[266] INVERCO: INSTITUCIONES de INVERSIÓN COLECTIVA y los FONDOS de PENSIONES Informe 2017 y perspectivas 2018, pag. 37, 38.

The most remarkable feature is the negative trend of investments in National government bonds, which in the first term of 2014 still attracted around 40% of investments, but rapidly started to decrease. By the end of 2014 (Q4) it had already reached 35.50%.



Source: Table ES5; DGSFP Report 2016 and 2017.

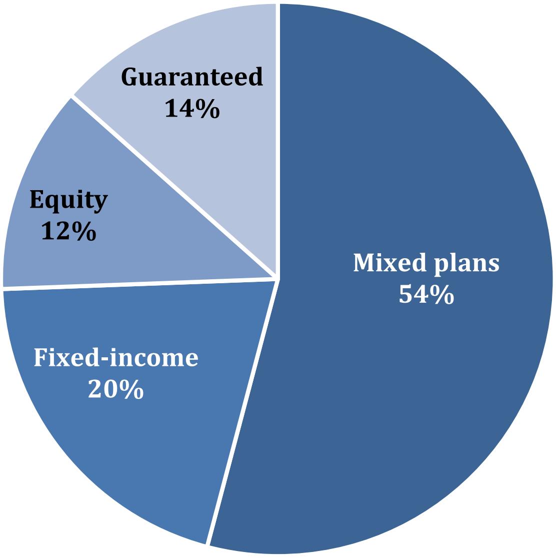
The ocupational system represented 32% of all assets under management held in 2017, and the associated system just 0.81%. The individual system represented 67 % of investments, sub-divided as follows: 11.13% for short-term fixed income, 9.17% for long-term fixed income, 33.43% for mix of fixed income, 20.69% for mixed equity, 12.14% for equity and 13.44% for guaranteed plans.

Table ES6. Evolution of Pension Plans' AuM by type of arrangement (2010-2017)					
		Associate plans	PPEs	Individual plans	Total
2010	€ mln	926	31,272	52,552	84,750
	%	1%	37%	62%	
2011	€ mln	835	31,170	51,142	83,147
	%	1%	37%	62%	
2012	€ mln	795	32,572	53,160	86,527
	%	1%	38%	61%	
2013	€ mln	1,005	33,815	57,911	92,731
	%	1%	36%	62%	
2014	€ mln	940	35,262	64,524	100,726
	%	1%	35%	64%	
2015	€ mln	958	35,548	68,012	104,518
	%	1%	34%	65%	
2016	€ mln	921	35,431	70,487	106,839
	%	1%	33%	66%	
2017	€ mln	903	35,796	74,378	111,077
	%	1%	32%	67%	

Source: INVERCO report on IICs and Pension Plans 2017

The following graph reflects the percentage of investments in the different categories of individual pension funds. As illustrated, the mixed plans attracted the most cash flows, at 54% of total investments, while guaranteed plans represented 14%, fixed-income plans accumulated 20% and equities only 12% of total AuM managed in Spanish pension plans.

Chart ES2.Breakdown of the Individual Pension Funds (based on AuM) in 2017



<u>Source:</u> INVERCO (n 7)

Mixed plans are pension arrangements that invest either both in short- and long-term fixed-income securities (bonds, loans etc.) or in mixes of variabile income securities (generally equities, but floating bonds or other types of securities can also be included).

Life Insurance

According to UNESPA,[267] the total assets under management of the entire insurance sector at the end of 2017 amounted to €226 bln. The AuM level of 2017 represents an increase of 3.79% with respect to 2016. The disaggregated numbers are, on one hand, €183.6 bln for life-savings contracts (not considered pension plans, representing 81.08%, and an increase of 3.33% compared to the previous period) and, on the other hand, €42.85 bln for pension funds (pension plans representing 18.92%) - managed by the same insurers and which by 6.11% compared to 2016.

33,277,018 individuals held insurance products in 2017, out of which 89.39% had a life-insurance contract (29,747,162 in absolute terms) and 10.60% of them had a pension fund contract (3,529,856 in absolute terms).[268]

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[267] UNESPA, Informe 2017 "Estamos Seguros"
[268] https://www.news3edad.com/wp-content/uploads/2018/02/NdP-Seguro-de-Vida-Q4-2017-FINAL.pdf.

The Pillar II life-insurance plans are shown in the below table. It shows the number of contributors at the end of 2017, the volume of provisions, and the annual growth rate for both variables. The total volume was €37.23 bln, which represented a decrease of -1.33% compared to the end of 2016.

Table ES7.Life-insurance plans for Pillar II

	Modalities	Number of insured		Technical provisions (in €)	
		31/12/2017	Annual Change (%)	31/12/2017	Annual Change (%)
Corporate pension plans	Deferred capital	31,398	4.64%	274,122,537	55.48%
Implementation of pension obligations	Risk	2,265,504	-4.80%	526,793,688	-28.74%
	Deferred capital	191,819	-8.77%	2,949,135,526	8.06%
	Income (acc. phase)	221,174	6.38%	10,736,852,023	-0.22%
	Income (dec. phase)	354,960	-3.49%	12,750,037,586	-8.82%
	Unit- or Index-Linked	25,953	11.44%	1,372,095,593	20.56%
Other collective insurances	Risk	3,430,683	2.59%	1,047,165,218	1.64%
	Deferred capital	297,180	-4.04%	2,012,508,597	6.22%
	Pensions (acc. phase)	22,397	25.40%	1,369,567,386	-6.70%
	Pensions (dec. phase)	63,249	-7.00%	3,482,708,493	7.76%
	Unit- or Index-Linked	18,050	16.84%	718,491,335	21.54%
Total		6,922,367	0.01%	37,239,477,981	-1.33%

Source: UNSPA Press Release "Estamos Seguros" 07/02/2018

The life-insurance plans of Pillar III are shown in the below table. The number of individuals who participate in these plans decreased by 0.51%, bringing the total up to 7,609,172 individuals at the end of 2017. Moreover, the total volume of individual life-savings plans grew by 4.55% to a total of €141.95 bln. The following graph shows the disaggregated life-insurance plans for the individual schemes:

Table ES8.Life-insurance plans of Pillar III					
		Number of participants		Technical provisions (in €)	
		31/12/2017	Annual Change (%)	31/12/2017	Annual Change (%)
PPA	Insurance Pension Products	997	-1.97%	12,415,706,006	-4.01%
Saving Insurance / Retirement	Deferred capital	2,869,341	-6.57%	43,001,528,197	1.61%
	Life and temporary income	1,604,302	-1.85%	58,920,077,252	6.62%
	Asset transformation into permanent income	17,754	110.58%	1,610,921,313	109.60%
	PIAS (systemic individual savings plans)	1,638,442	-8.94%	12,188,872,143	19.23%
	SIALP (long-term individual savings insurance plans)	867,553	18.04%	2,961,584,311	48.75%
	Unit- or Index-linked	610,783	-6.45%	10,857,576,016.39	-0.31%

Source: UNESPA Press Release "Estamos Seguros" 07/02/2018

PPAs

The Insured Prevision Plans (PPAs) are equivalent to the pension plans but are guaranteed by an insurance company. The features, in terms of benefits and fiscal treatment, are the same. However, contrary to the pension plans, PPAs are completely safe for the insured thanks to the fact that the risk is taken on by the insurance company, guaranteeing the interests. PPAs guarantee a certain level of return during the capital accumulation period. In short, we could say that they are pension plans with certain similarities to insurance products. They are non-redeemable before the agreed date.

Both insured pension plans (PPA) and systematic individual savings plans (PIAS – see below) are gaining ground compared to other financial products, traditionally used to accumulate and yield profit from savings for retirement. These plans are commonly accepted as life insurance, although they are technically long-term individual savings products. The capital fund is formed by periodic payments. These payments are invested and, once the investor reaches the age stipulated in the contract, the lifelong payments are paid to the beneficiary.

Life-saving plans

These are life-insurance plans with the objective of saving in the long-term. These products manage and invest the insured's savings. They are designed as medium and long-term products, usually to complement the pension. There are several categories:

- Deferred capital plans: The insurance company has to pay all the accumulated savings, plus an interest, by an established date.
- Permanent and temporal income plans: the money saved in the accumulation phase, plus interests, is recuperated as annuities in the decumulation phase, usually on a monthly basis. Amongst them:
  - Permanent: plans ensuring that the insured is going to receive money during the decumulation phase, until the end of the insured's life.
  - Temporal: plans which have been previously established by both the insurance company and the insured. The insured is going to receive the money during the decumulation phase, until the plan's money dries up.

Systematic Individual Savings Plan (PIAS)

The PIAS are products that offer fiscal advantages upon payment because the interest is exempt in case certain requirements were fulfilled during the saving phase. That is, to have contributed at least five years and to perceive it as a permantent income. The annual limit is €8,000, which is compatible with long-term saving plans (SIALP & CIALP – see below). PIAS allow for early recovery of consolidated rights, but only if the conditions for early recovery of pension plans are met. The recovered amount is then subject to a significant tax penalty, so if it occurs within ten years of the contribution, the sum will be considered as capital gains and taxed at 18%.

According to UNESPA,[269] at the end of the first quarter of 2017, €11.066 million (27.72% annual increase) were managed in PIAS. On the other hand, over a million people invested €13.31 millions in PPA's.

Long-Term Individual Saving Plans (SIALP)

This is an insurance product with a similar fiscal treatment to the PIAS in that it is exempt from taxes after five years. Contrary to PIAS, it is not necessary to receive the money as an annuity. This kind of products – along with the long-term individual savings account (CIALPs) – limits participant contributions to €5,000 per year.

[269] UNESPA: Press release of 17/5/2017, page 1.

Unit-linked products (Vinculados a Activos)

These products are linked to assets and the participant assumes the risk.

According to UNESPA[270], at the end of the first quarter of 2016, 1.8 million savers (17.76% annual increment) invested a total sum of €10.22 bln in PIAS. On the other hand, 1.02 million people invested a total amount of €12.93 bln in PPAs.

In addition to PPA's and PIA's there are corporate social welfare plans for employees (PPSE). The latter are similar to pension plans of the employment type, as contemplated in Art. 51.4 of Law 35/2006 and the Royal Decree 1588/1999 modified by the Royal Decree 1684/2007. Although the tax treatment is similar to that of pension funds, they are not as well established as PPA's and PIA's.

Charges

Spanish savers have greatly benefited from the regulator's recent intervention in fees and commissions. Until this moment, the transparency of these key aspects was insufficient and inadequate. The reform established a legal limit on management and administration fees attributable to investors. However, there were no measures introduced in order to limit transaction fees.

In 2012, Aguirreamalloa, Corres y Fernández[271] exposed these sales incentives, revealing that commissions paid by fund providers to financial advisers were often presented to participants as ordinary expenses or commissions (such as management or deposit fees, subscription and reimbursement fees, etc.). This led to situations where financial advisors who placed the pension products could make more money than the portfolio managers.

Article 84 of the Royal Decree 304/2004[272] established specific limits to the deposit or management fees charged to subscribers for this type of products. This was slightly modified by Royal Decree 681/2014[273]. Nonetheless, the regulation allows variable commissions to be set based on yields, although the providers have to respect certain limits such as the following:

- Pension fund managers can charge a 1.5% commission annualy (before, it was 2%) of the value of the administered account. This limit must be respected by the

[270] UNESPA, Informe 2017 "Estamos Seguros"
[271] Aguirreamalloa, J; Corres, L. and Fernandez, P. — Pension Funds Returns in Spain 2001-2011, IESE Research document, February 2012
[272] http://www.boe.es/boe/dia5/2004/O2/25Q)dfs/A08859-08909.pdf
[273] http://www.boe.es/boe/dias/2014/08/02/pdfs/BOE-A-2014-8367.pdf

pension fund as well as by every pension plan that forms the fund, and individually for each subscriber.

- Pension fund depositary entities may charge a maximum of 0.25% (previously 0.5%) of the value of deposited accounts. They must comply with this limit for every individual pension plan, the pension fund as a whole, and individually for each subscriber.

The following table shows the evolution of the administration and management fees for pension funds over the last ten years.[274] The fees for Pillar II were 0.20% in 2017, and for Pillar III 1.15%. The difference between the fees paid in the two pillars has decreased over this period of time thanks to a decrease in fees in the complementary pension schemes (Pillar III), especially from 2014 onwards. Nevertheless, at 6 to 1, the proportional difference in Administration and Management fees between pillars is still significant.

These figures clearly reflect the difference in fees applied to retirement savings products marketed for Pillar III (retail) and those for Pillar II (corporate), due to the significant negotiating power of corporate investors in the price setting process with providers. As a result, it is understandable that the regulator was pressed to limit the management and depositary fees, which showed effective in reducing sale fees charged to retail investors.

For the purpose of classification of pension funds as used by pension plans (individual, associated and occupational), it should be noted that the charges corresponding to Pillar II concern the occupational plans (*sistema de empleo*), whereas those for Pillar III are the mean administration and management fees charged by individual and associated plans (*sistema individual* and *sistema asociado*).

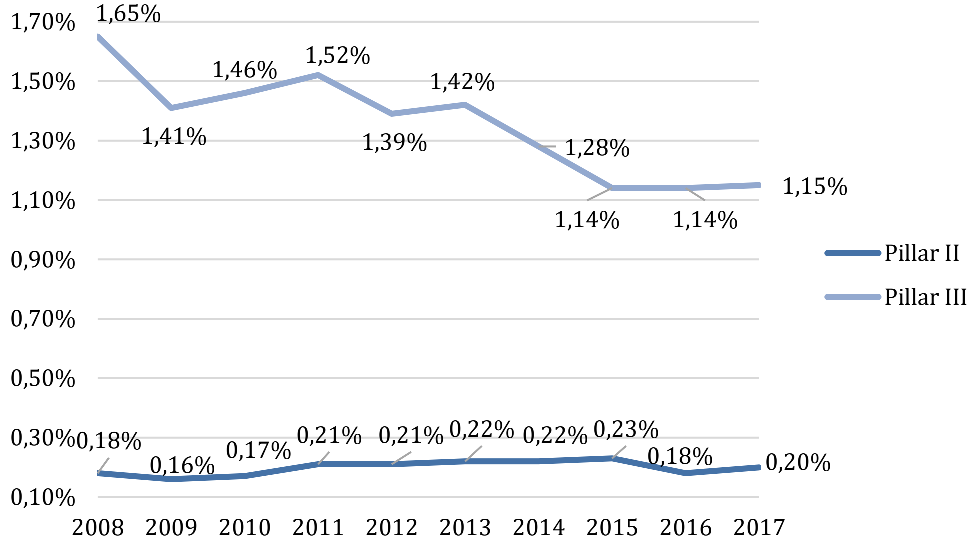
Table ES9. Administration and Management fees (in %)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Pillar II	0.18	0.16	0.17	0.21	0.21	0.22	0.22	0.23	0.18	0.20
Pillar III	1.65	1.41	1.46	1.52	1.39	1.42	1.28	1.14	1.14	1.15

Source: DGSFP, Annual Report 2018

[274] http://www.dgsfp.mineco.es/sector/documentos/Informes%202018/INFORME%20SECTOR%202017.pdf

Graph ES3. Evoution of Administration and Management fees in Pillars II and III



Source: Table ES9.

A similar pattern is repeated for the depositary fees, where the difference between retail and corporate fees has diminished throughout the same period of time, as shown below. In 2017 depositary fees remained stable at 0.03% for Pillar II for the tenth year in a row, and 0.14% for Pillar III for the third year in a row, amounting to a 4 to 1 proportional difference between pillars. This is thanks again to a decrease in the Pillar III depositary fees, and it shows the significant negotiating power of corporate investors in price setting with product providers, and with the high commissions charged by retail distributers. Consequently, it is understandable that the regulator was pressed to limit the management and deposit fees. This in turn has proven effective in reducing sale fees charged to retail investors.

Table ES10. Depositary fees

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Pillar II	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%
Pillar III	0.23%	0.22%	0.22%	0.20%	0.18%	0.19%	0.16%	0.14%	0.14%	0.14%

Source: DGSFP

According to Aguirreamalloa, Corres y Fernández (2012), administrators failed to sufficiently inform pension fund participants about the portfolio management policies. These authors criticised the quality of the information provided, deemed insufficient for the purpose of taking decisions on the value of the management of the fund. Nowadays, all fees and commissions attributable to the pension plan have to be included, both in pre-contractual documentation as well as quarterly and semi-annual reports that entities must send to participants. This way, investors are aware of commissions and fees that their subscription to the plan will entail, before they make their decision to invest. Furthermore, once invested in the plan, they receive periodic information about paid fees and their actual impact on their product and its returns.

In addition, all pension plans of Pillar III are obliged to provide the Key Information Documents (KID) to potential investors. This KID should include the necessary information for participants to make an informed investment decision. This document should contain key information, briefly and concisely, to allow for a clear understanding of the product. It should include the main features and nature of the product, the costs and the risk profile, as well as relevant information about its returns.

Although pension products are not included in the PRIIPS regulation,[275] the KID model is strongly influenced by it. There has been a notable effort to include pension funds in this regulatory scope, two years before its official implementation (once the transitory periodof the Royal Decree that introduced the KID passes). Unlike plans in Pillar III, plans in Pillar II do not need to present a KID. Although the same information must be presented in the pre-contractual information to participants upon joining the plan, including expenses and fees.

Table ES11. Aggregate Fees on Pillars 2004-2017

	Pillar II	Pillar III
2002	1.22%	
2003	1.29%	
2004	0.19%	1.56%
2005	0.14%	1.45%
2006	0.14%	1.46%
2007	0.17%	1.53%
2008	0.21%	1.88%
2009	0.19%	1.63%
2010	0.20%	1.68%
2011	0.24%	1.72%
2012	0.24%	1.57%
2013	0.25%	1.61%
2014	0.25%	1.44%
2015	0.26%	1.28%
2016	0.21%	1.28%
2017	0.23%	1.29%

Source: DGSFP Reports 2010-2017.

[275] http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R1286&from=EN

Taxation

The Spanish private pensions system is similar to the EET model. This system allows for savers that invest in pension products to enjoy fiscal incentives, leaving the contributions exempt from taxation. Moreover, the revenue generated by the capital investments is only taxed if it has generated profits. This illustrates the underlying political strategy undertaken by the government to encourage savings through taxation measures when the pension system is in question.

It would have been interesting for end-investors to have truthworthy information on net returns (after tax and inflation) of long-term investment products. But a general comparative and objective study is not possible. It is due to the fact that net returns are different for each pension saver and for each fiscal year. This is a consequence of the difference in tax expenses derived from personal income tax in the capital recovery phase, due to different marginal rates applied to total income, future fiscal policies being difficult to predict at the time of investment.

The following section is a summary of the different fiscal treatments that products receive:

Retirement Plans

This system does not contemplate fiscal benefits for contributions made to retirement plans, thus applying taxation rates for contributions (“T” regime).

If the policy holder chooses to withdraw the whole invested amount, together with its generated returns, at the age of retirement, the lump-sum will be taxed as capital gains in the income tax declaration of that year. These gains will be considered as the difference between the capital received and the premiums paid, to avoid double taxation. Therefore, the “T” regime for the pay-out phase with the defered taxation of positive returns on investments will be applicable.

On the contrary, when the pay-outs are deferred payments (temporary or lifetime) the result of applying a percentage added to the return obtained until the constitution of the payment, will be considered as capital gains.

Thus, benefits received for retirement or disability reasons in the form of deferred payments by beneficiaries of life or disability insurance policies, will be integrated in the tax base as capital gains from the moment the amount exceeds that of the premiums that have been paid according to the contract. Therefore, retirement plans are taxed according to the “TET” phase.

Life insurance products

All fiscal benefits for contributions on life insurance products were eliminated in 1999. Today, returns on the accumulated capital are taxed like any other return on financial capital.

If the policy holder withdraws a lump-sum, this amount is treated as capital gains (the difference between capital received and the sum of the paid premiums). This difference is included in the savings tax base, being taxed at 19% up to the first six thousand euros; at 21% from six thousand to fifty thousand euros, and at 23% for amounts over fifty thousand euros.

If the capital is received as income, it is also treated as capital gains, and it is included in the savings tax base. Each annuity has a different percentage applied to it, depending on how many years the income will be paid or the age of the beneficiary at the start of payments.

In case of death of the insured party before the end of the policy contract, the beneficiaries will pay tax on their inheritance, which will vary depending on the regional regulation. As Spanish regional governments (Comunidades Autonomas) have the competency to decide on tax rates, reductions and deductions within their regions, this leads to significant differences inside the Spanish territory. Therefore, life insurances are taxed according to the "TTT" regime.

PPAs (Insured Provision Plans, "Planes de Prevision Asegurados")

The commitment to this type of private social welfare products is reflected in the favourable fiscal treatment that they receive. All contributions reduce the labour income tax base for investors by up to €8,000 p.a.[276] On the other hand, payments are taxed as labour income in accordance with the age of the saver at the moment of the set-up of the payment scheme,[277] excluding the capital gains taxation. It could therefore be said that these products enjoy the same fiscal treatment as pension plans, thus having an "EET" regime.

PIAS (Individual Systematic Savings Plans, "Planes Individuales de Ahorro Sistematico")

The PIAS is an insurance-savings instrument which was created after the last fiscal reform (1st January 2007). It is complementary to the PPAs and other Pension Plans, and it also

[276] Article 53 of Law no. 35 of 2006 concerning the Taxation of Natural Persons' Income and for the partial modification of Taxation on Companies, on Non-residents' income and on wealth.
[277] Article 49 of the Royal Decree no. 439 of 2007 for approving the Regulation on Taxation of Natural person's Income and for modifying the Regulation of Pension Plans and Funds, approved by the Royal Decree no. 304/2004.

benefits from a favourable fiscal treatment. They were first defined by the Third Additional Provision of Law 35/2006 on Personal Income taxes, and then modified by section sixty-nine of the first article of Law 26/2014.

The participant can save by making individual or periodical contributions. Just as for other pension products, there is a maximum annual deductible amount that the participant can save per year. In this case, the maximum amount is €8,000. Moreover, there is a maximum amount that the contributor can save in this kind of plan, which is €240,000 p.a. Contrary to similar products, a contributor cannot have more than one PIAS.

If these requirements are met, and the first contribution to the PIAS was made within a five years period, the saver does not pay any taxes on the investments returns. That is, when the contributors receive lifelong payments, the generated returns are exempt from taxation. On the contrary, there is no tax deduction if it is recovered as a lump-sum.

The taxed percentage of life-time annuities depends on the age at recovery, as follows:

- Under 40 years: 40%;
- Between 40 & 49 years: 35%;
- Between 50 & 59 years: 28%;
- Between 60 & 65 years: 24%;
- Between 66 & 69 years: 20%;
- Over 70 years: 8%.

Pension Plans

Private pension funds and plans constitute the most popular products to save for retirement in Spain. This is thanks to the important fiscal benefits attained through personal income tax exemptions. These advantages have also been extended to other insurance products that have emerged as more flexible alternatives. The "TET" regime is applicable to these products, but the amount of tax on withdrawals depends on the type of payout.

These fiscal advantages are the reason why investors have chosen private pension funds as the main non-public way of saving financial resources for retirement. In fact, the most significant contributions to these plans tend to coincide either with the end of the fiscal exercise (guaranteeing the maximum deductibility) or the payment of personal income taxes.

Law 26/2014 introduced new tax measures for Spanish pension plans and similar products. Deductions on the personal income-tax-base following contributions to pension plans remain unchanged. There is an exception for €8.000 or 30% of annual income.

As for the rest of retirement and pension products defined by Spanish law, there are three possibilities for the recovery of the accumulated capital after the investment period has finished:

- **Lump-sum**: before 2007, there was the option to receive a lump-sum as a unique payment with an implicit tax reduction of 40%. After 2007, the cases in which this reduction was applicable were reduced. Moreover, a transitional regime was established[278], still in force, when the recovery of the sum occurs within two years of the retirement age. Those who retired before 2010, and haven't already withdrawn their capital, have eight years to do so and those who retired between 2011 and 2018 have eight years also to enjoy the same treatment. This makes it almost obligatory for pensioners to recover the amount within two years to avoid being tax-wise disadvantaged in a system in which contributions and accumulated returns are taxed, although one could argue that the taxation of these contributions as well as the benefits received are deferred in time.
- **Annual annuity (lifelong or temporary)**: This is an option in which the amount recovered is taxed, although it is deferred over the years that the payments last. The amount of the payments will be treated as labour income and are added to other incomes that the pensioners receive (public pension, dividends, coupons, etc.). Nonetheless, there is an additional advantage for these annual payments from insurance products (life, insurance, PIAS, PPAS, PPSE), that depends on the age at which the saver/policy holder starts to recover his/her investments, as shown in relation to PIAS.
- **Mixed payments**: In this case, both of the mentioned possibilities are combined, so that there is a lump-sum received and the rest is deferred in time through annual payments, so both types of fiscal treatments are enjoyed.

As indicated, the amount paid in taxes upon retirement depends on the decision the investor makes regarding the type of recovery he/she prefers. In any case, there is an inevitable imbalance reflected in the difference between the fiscal burden that the contributor supports when he contributes part of his income to savings/pension products and what he will effectively pay when he receives the capital. Therefore, the net fiscal balance changes depending on the total annual income received and the progressive marginal applicable rate on income taxes.

These marginal rates were reduced in 2017 to 19% for contributors with lower income (20% in the past) and 45% for the higher brackets (47% in the past). A deeper look reveals that for income lower than €12,450, the tax rate has fallen from 20% to 19%; for amounts between €12,450 and €20,200 from 25% to 24%; for amounts between €20,200 and

[278] BOE number 288 of the 28th of November 2014.

€35,200 it dropped from 31% to 30%; for income between €35,200 and €60,000 it went from 39% to 37%; and finally, for amounts above the €60,000 threshold, the rate decreased from 47% to 45%.

Table ES12. Income-tax brackets for natural persons

Taxation base		Tax in 2017
From	**To**	
€ 0	€ 12,450	19%
€ 12,450	€ 20,200	24%
€ 20,200	€ 35,200	30%
€ 35,200	€ 35,200	37%
€ 60,000	-	45%

Source: Rankia[279]

The marginal rates since 2014 have been reduced, decreasing from 24.75% to 19% for the lowest income bracket, and to 45% to the highest income bracket (as compared to 47%). However, these percentages have not varied since 2016.

This is significant in that tax implications are especially relevant for retail investors when considering the final return on their pension/investment products, since they must consider how much of their return is lost due to inflation rates and taxation upon recovery.

The most precise estimation of real returns can only be made at the end of the plan's investment phase. The reason for this is that the closer we come to the recovery date, the clearer the net fiscal effect will be, allowing us to calculate deductions and the tax expense of the recovery of the investment and its returns.

Over the last few years, we have seen a change in tax treatment thanks to policies aimed at stimulating savings. This, in turn, makes it a difficult task to decide between pension funds and alternative retirement savings products, since information on future net returns is not reliable. The decision process is replete with long term uncertainty.

Pension Returns

Spanish capital markets return

IBEX 35 is the Spanish stock exchange index and is the most representative index to study national large cap returns. It is the index most representative and widely used by the media to assess the performance of stocks of large national companies (large caps). Returning +7.4% by the end of 2017 (+11.25% with dividends), it had one market upturn until May

[279] https://www.rankia.com/blog/irpf-declaracion-renta/3527053-cuales-son-tramos-irpf-2017-campana-2018.

(+19) and then suffered a market correction by the end of the year (a loss of almost 10%), due to political uncertainty in Catalonia amongst other factors. After 2 years of negative rates of return (-7.2% and -2.6%), in 2017 IBEX 35 picked up again and reached 80% of its initial value on31 December 1999 (+7.4%).[280]

In the wider context, world stock markets have performed well, ranging from 17.4% to 20.5% and have reached several historic highs intra-year. In 2016, global aggregate indicators closed with lower profits, around 6%.

Looking at the broader index, the ITBM (the Madrid Stock Exchange total index) performed positively on the long-term (18 years) reaching 114.75% (cumulatively, dividends included), having a nominal annual rate of growth of 5.23% (three times that of IBEX 35).

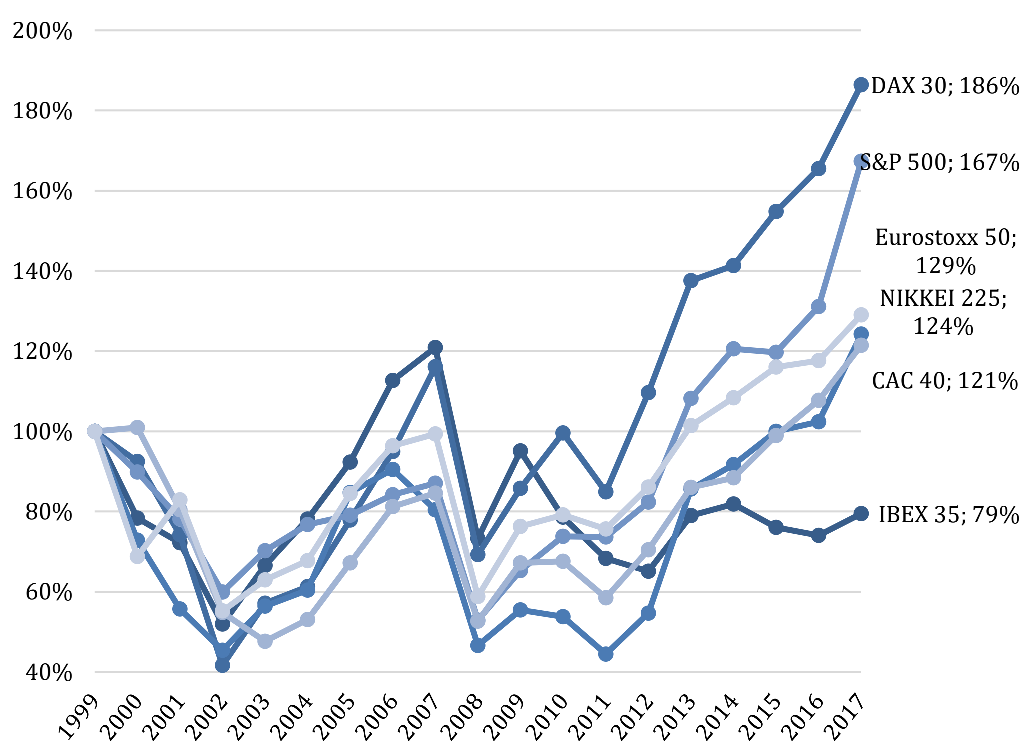
In light of the aforementioned, it is understandable that both households and corporate investors chose to invest in blue chips (large caps).

The tendencies followed by the stock exchange indexes are positive over the last 26 years. As shown in the following graph, during periods of economic growth, the index trends evolved more evenly than during the years with negative rates.

Following the financial crisis of 2008, differences between the DAX, the DOW and the S&P reached higher levels that they did previously to the crisis. The CAC and the IBEX, on the other hand, followed a flatter tendency and, even though they both recovered in the last years, they have not reached levels prior to the crisis.

[280] Based on data: (1) published by INVERCO on Stock market indices' performances in the annual reports on IICs and Pension Funds, 2006-2016; (2) Euronext Paris CAC 40; (3) STOXX Eurpe 50; (4) Nikkei 225.

Graph ES3. Main stock markets' performances



Source: INVERCO reports 2010-17, Euro Stoxx, Euronext, S&P, NIKKEI

The IBEX35 has struggled to recuperate its original level ever since the financial crisis. This is due - amongst other factors – to a slow economic recovery, political uncertainty experienced in Spain, and an unstable European macroeconomic context.

Concerning Spanish sovereign bonds, the nominal annual rate of growth for the period mentioned was 4.01% (according to *Barclays All Maturities Index*). This means that the real returns for Spanish bonds have been positive, considering that inflation reached in the same period was 2.86% annually. However, it should be noted that European households seem to have higher exposure to shares than to bonds in their direct investments, according to information published by the OECD Factbook of 2017.

Pension fund performance

Taking as a reference the amounts published by the business association INVERCO, the annual average return for Spanish pension funds is shown in the table below.

***Methodological note**: In the previous reports, the annual nominal returns of Spanish pension plans were calculated using an equal weighting (1:8) of all 8 categories of pension plans (associate, occupational, and six types of individual plans). In addition, returns for 2000-2001 for associate and occupational plans were not provided, neither 2000-2003 returns for guaranteed plans.*

The 2018 update, using data from INVERCO on pension systems and AuM, we were able to compute both the missing returns, as well as the annual weighted averages, using the weighting for each plan based on AuM.

Table ES13. Real returns of Spanish pension funds, net of inflation and charges

	Nominal returns, before charges, inflation and tax		Nominal returns net of inflation, before tax and charges	
2000	-2.95%	**AVERAGE**	-6.23%	**AVERAGE**
2001	-2.07%		-4.74%	
2002	-4.77%		-8.08%	
2003	5.79%		2.61%	
2004	4.51%		1.37%	
2005	7.21%		3.68%	
2006	5.25%		1.59%	
2007	2.08%		-0.70%	
2008	-8.13%		-11.75%	
2009	7.63%	**2.24%**	7.84%	**0.05%**
2010	-0.19%		-2.15%	
2011	-0.70%		-3.59%	
2012	6.57%		4.07%	
2013	8.31%		6.71%	
2014	6.96%		7.17%	
2015	1.80%		2.41%	
2016	2.11%		2.42%	
2017	2.77%		0.75%	

Source: Own computations using INVERCO data (reports as of 2014)

Due to the deflationary effect of 2014-2016, the nominal returns net of inflation had a stronger purchasing power than the gross returns. However, the compounding effect of average weigheted returns of Spanish pension plans only reaches a gross profit of 49% over the last 18 years, before applying administration and management charges, taxes and inflation. This is significantly different to the positive returns the Spanish capital markets enjoyed over the same period, seen earlier in this section.

The following three tables show the nominal returns (*net of inflation*) of Spanish pension plans based on a breakdown of categories (based on liquidity and risk, according to INVERCO): associate plans, occupational plans, and individual plans: sub-divided in fixed-income (FI) on short-term (ST) and long-term (LT) mixed (M); variable income (VI), mixed variable income (VI-M) and guaranteed plans (G).

Table ES14. Real returns of Spanish occupational and associate sistems

	ASOCIATE PLANS		OCCUPATIONAL PLANS	
	Nominal	Real	Nominal	Real
2000	0.93%	-2.48%	-3.62%	-6.88%
2001	-0.10%	-2.82%	-0.64%	-3.35%
2002	-3.84%	-7.18%	-3.72%	-7.07%
2003	5.61%	2.43%	6.73%	3.52%
2004	6.56%	3.36%	5.52%	2.35%
2005	9.49%	5.89%	8.39%	4.83%
2006	8.16%	4.40%	5.36%	1.70%
2007	3.05%	0.24%	2.44%	-0.35%
2008	-11.10%	-14.60%	-10.50%	-14.02%
2009	9.23%	9.45%	9.28%	9.50%
2010	0.95%	-1.03%	2.01%	0.01%
2011	-1.11%	-3.99%	0.00%	-2.91%
2012	6.94%	4.43%	8.04%	5.51%
2013	9.51%	7.89%	7.70%	6.11%
2014	6.88%	7.09%	7.14%	7.35%
2015	2.57%	3.19%	2.88%	3.50%
2016	2.45%	2.76%	2.74%	3.05%
2017	2.99%	0.97%	3.19%	1.17%
2001-2017	73.25%	18.42%	64.80%	11.60%
Average	3.29%	0.94%	2.81%	0.61%

Source: Own composition based on INVERCO data (annual reports as of 2014) – real returns are net of inflation, before charges and tax

As apparent from the table above (Table ES14), Spanish pension plans perform slightly better taken separately, with an annual average growth rate of +0.94% for associate plans (+18% cumulative) and 0.61% (+12% cumulative) for occupational plans – net of inflation.

Table ES15. Real returns of Spanish individual sistem - Fixed-income plans						
	INDIVIDUAL - FI-ST		INDIVIDUAL - FI-LT		INDIVIDUAL - FI-M	
	Nominal	Real	Nominal	Real	Nominal	Real
2000	3.83%	0.32%	0.68%	-2.72%	-2.20%	-5.51%
2001	3.64%	0.82%	0.62%	-2.12%	-2.41%	-5.07%
2002	3.83%	0.22%	-0.73%	-4.18%	-5.16%	-8.46%
2003	1.95%	-1.12%	2.62%	-0.47%	3.92%	0.80%
2004	1.77%	-1.29%	1.92%	-1.14%	3.16%	0.06%
2005	1.04%	-2.28%	1.78%	-1.57%	5.33%	1.87%
2006	1.26%	-2.26%	0.34%	-3.15%	3.58%	-0.02%
2007	1.94%	-0.84%	0.75%	-1.99%	1.32%	-1.44%
2008	2.13%	-1.89%	2.03%	-1.99%	-8.79%	-12.38%
2009	1.80%	2.00%	3.96%	4.17%	6.05%	6.26%
2010	-0.64%	-2.59%	-0.47%	-2.42%	-1.54%	-3.47%
2011	1.38%	-1.57%	1.39%	-1.56%	-2.21%	-5.06%
2012	3.47%	1.04%	4.79%	2.33%	5.41%	2.94%
2013	2.08%	0.57%	4.66%	3.11%	6.11%	4.54%
2014	1.37%	1.57%	8.93%	9.15%	3.61%	3.82%
2015	-0.20%	0.40%	-0.46%	0.14%	0.78%	1.39%
2016	0.36%	0.66%	1.27%	1.57%	0.83%	1.13%
2017	-0.11%	-2.07%	0.11%	-1.85%	1.50%	-0.49%
2001-2017	35.64%	-8.14%	39.66%	-5.42%	19.41%	-19.13%
Average	1.71%	-0.47%	1.87%	-0.31%	0.99%	-1.17%

Source: Own composition based on INVERCO data (annual reports as of 2014) – real returns are net of inflation, before charges and tax

Table ES16. Real returns of Spanish individual sistem - variable income and guaranteed plans						
	INDIVIDUAL - VI-M		INDIVIDUAL - VI		INDIVIDUAL - G	
	Nominal	Real	Nominal	Real	Nominal	Real
2000	-4.97%	-8.18%	-10.60%	-13.62%	9.22%	5.52%
2001	-7.73%	-10.24%	-16.30%	-18.58%	0.35%	-2.39%
2002	-17.20%	-20.08%	-30.10%	-32.53%	5.04%	1.39%
2003	8.70%	5.43%	16.18%	12.69%	5.67%	2.50%
2004	5.60%	2.42%	8.88%	5.61%	4.66%	1.51%
2005	12.16%	8.47%	18.73%	14.83%	4.64%	1.20%
2006	10.09%	6.26%	18.30%	14.19%	1.44%	-2.08%

2007	2.96%	0.16%	3.93%	1.10%	1.48%	-1.28%
2008	-23.80%	-26.80%	-38.40%	-40.83%	-0.68%	-4.59%
2009	14.21%	14.44%	27.20%	27.45%	3.77%	3.98%
2010	-0.82%	-2.76%	1.63%	-0.36%	-3.96%	-5.84%
2011	-7.01%	-9.72%	-10.40%	-13.01%	1.16%	-1.79%
2012	8.62%	6.07%	10.43%	7.84%	5.48%	3.01%
2013	12.51%	10.85%	22.19%	20.38%	9.41%	7.79%
2014	4.77%	4.98%	7.63%	7.85%	11.37%	11.59%
2015	2.50%	3.12%	5.58%	6.22%	0.27%	0.88%
2016	2.75%	3.06%	4.71%	5.03%	2.11%	2.42%
2017	4.54%	2.49%	8.83%	6.70%	0.41%	-1.56%
2001-2017	19.88%	-18.82%	20.41%	-18.46%	81.44%	22.87%
Average	1.01%	-1.15%	1.04%	-1.13%	3.37%	1.15%

Source: Own composition based on INVERCO data (annual reports as of 2014) – real returns are net of inflation, before charges and tax

The best performing plans in gross terms (*net of inflation*) were the guaranteed product offered as individual savings plans (Pillar III), with +1.15% annually over the last 18 years, while the worst performing were the mixed fix-income pension plans offered as part of the individual system (Pillar III).

For this edition of the Pensions Report, we have extended the performance study period and have integrated the 2000 market as well as the upward trend of the last few years.

The aforementioned studies performed by Aguirreamalloa, Corres y Fernández (2012), concluded thatanother reason behind these low returns (apart from high fees and commissions) was the conservative investment strategy followed by Spanish private pension funds. The OECD reports that Spanish funds are investing more and more of their portfolios in debt products. Although this has worked well throughout the economic crisis, it could become an obstacle to the generation of adequate real returns for savers.

This growing trend has become especially noticeable in the portfolios of life insurance products. Part of this is due to the new regulation introduced with the Solvency II Directive[281] as it has a low tolerance for assets with high volatility, such as private and non-quoted assets, making insurance companies guarantee and maintain investors' capitals through investment in debt instruments with a supposed lower volatility. This has led to a

[281] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:335:0001:0155:en:PDF

priority positioning in Government debt instruments, which have historically offered lower returns compared to the rest of the market.

In this sense, the Royal Decree that approved the regulation on pension funds and plans, articles 69 to 77 of the 304/2004 one,[282] , stipulated the Spanish pension fund portfolio allocation requirements. It indicates that pension funds must be invested, mostly, in investment instruments and deeds that are commercialised in regulated markets. On the contrary, instruments from non-regulated markets may be part of the portfolios, but they must constitute a low percentage of the overall assets, where the regulator can also include an extensive list of eligible investment instruments.

It should be noted that if the present investment policies are maintained, the capacity for Spanish pension plans to generate returns is limited. This situation is particularly worrisome for the 1st pillar public pension system, asthe only possibilities we see are further fiscal stimuli as a way of promoting private pension saving (since another cut in fees and commissions seems improbable).

Objectively, asset managers have maintained the purchasing power of these funds and covered fees and commissions, although value generation has come from the fiscal authorities.

Conclusion

On average, the real returns before taxes on private pension plans in Spain since 2000 have practically been flat (+0.05% annualized), even though the Spanish capital market performance has been truly positive (both fixed income and equities). Furthermore, over the last few years, the local securities market has thrived, together with minimal inflation. The lowering of legal limits set on fees and commissions in the last few years has been crucial in improving those return indexes. Even with all these favourable elements, pension plans have not shown themselves to be adequate instruments capable of offering attractive positive returns.

The fiscal regime in Spain promotes private pension systems, albeit for questionable reasons (either to prop up the sustainability of the public pension system or to provide the necessary stimuli for the private insurance and financial sector in Spain). Some of these measures have consisted of tax deductions for contributions, and tax benefits during the investment period. Moreover, pension funds are exempted from paying tax on capital gains, received dividends, corporate income tax or VAT on management and deposit fees.

[282] https://www.boe.es/buscar/pdf/2004/BOE-A-2004-3453-consolidado.pdf

The artificially low tax burden on returns falls exclusively on the saver who may have to pay higher marginal income tax if the capital is recovered as a lump-sum. This creates an added incentive to replace the lump-sum recovery method with annual payments that defer payment of due tax over the payback period. In this sense it could be stated that the fiscal system in Spain is more favourable for the providers of savings/pension instruments than for savers themselves, especially as a consequence of the significant tax reductions that have been put in place to encourage contributions to these products, even though they have difficulties generating sufficient returns to maintain the deposited savings' long-term buying power (at least for the period between 2000 and 2017)

Regarding the evolution of the Spanish equity and bond markets, it seems pension products could offer better long-term returns for participants if there were significant changes introduced to their choice of portfolios of assets. This could only occur if there were changes in the criteria required for institutional investors to comply with solvency requirements. Admittedly, it seems that with the present disinformation and lack of protection of retail investors, it is doubtful that taking on more risk is the solution.

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