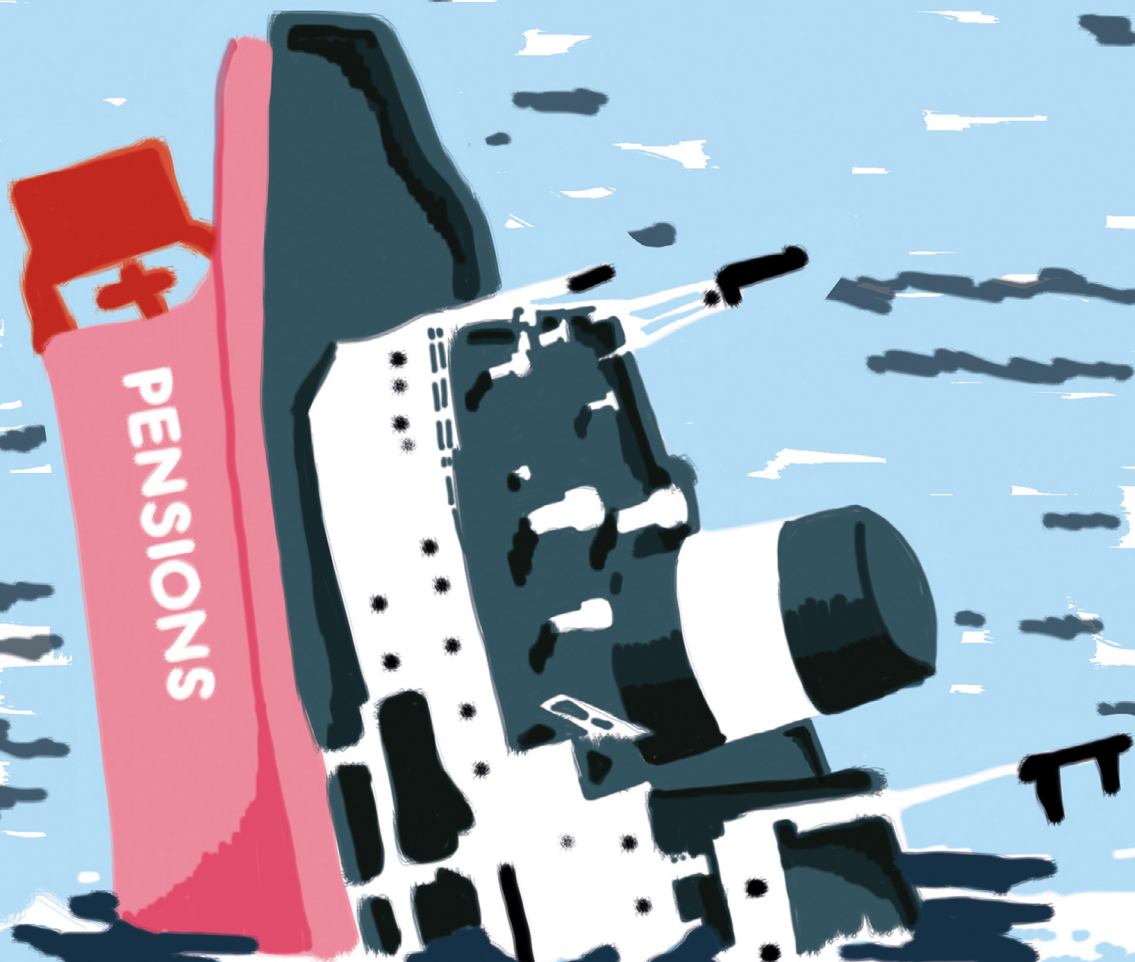


Long-Term and Pension Savings

The Real Return

2020 Edition



BF 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

2020 Edition

A Research Report by BETTER FINANCE

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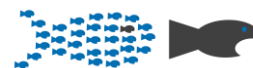
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Acronyms

| | |
|----------|---|
| 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 | Standard & Poor Dow Jones' Indices Research Report on Active Management |
| Scorecard | performances |
| TEE | Tax-Exempt-Exempt Regime |
| TCR/TER | Total Cost Ratio/ Total Expense Ratio |
| UCITS | Undertakings for the Collective Investment of Transferable Securities |
| UK | United Kingdom |



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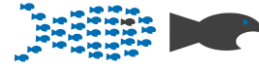
Country Case: Spain

Resumen

Los trabajadores españoles no ahorran para su pensión. Más del 70% de sus activos totales son “ladrillos y cemento”, que de ninguna manera puede considerarse un “activo previsional”. Cuando las pensiones de Seguridad Social sustituyen más del 80% del salario previo a la jubilación, ¿por qué los asalariados deberían ahorrar para ello? Como resultado de estos y otros factores, la “industria de las pensiones” (Pilares II y III) en España es pequeña y menos eficiente que si fuese tan grande como las de Holanda, Dinamarca o el Reino Unido. Los activos previsionales de los Planes de Pensiones a 31 de diciembre de 2019 llegaban al 9,35% del PIB de ese año, y las reservas técnicas de una amplia gama de productos asegurados para la jubilación (o similares) alcanzaban el 15,24% del PIB. Por estas razones, la gestión de estos activos no es barata, aunque puede llegar a serlo, y mucho, en los esquemas del Pilar II. La Fiscalidad de los activos y rentas de ambos pilares en España responde al régimen EET, común en la mayor parte de los países de la OCDE. El rendimiento acumulativo medio general de los esquemas del sistema de Planes de Pensiones una vez descontada la inflación, ha sido del 0,43% por año en el periodo 2000-2019. Poco se sabe de los rendimientos medios de los esquemas asegurados y su estimación no ha sido el objeto de este informe. Todos los datos utilizados provienen de las fuentes oficiales habituales (INVERCO, DGSFP, INE y Banco de España).

Summary

Spanish workers don't save for their retirement. “Bricks & Mortar” make more than 70% of a typical Spanish household's portfolio. And there is no way to think of this asset as retirement savings. As Social Security old-age benefits replace more than 80% of lost labour income at retirement, why Spanish employees should save with this purpose? As a result, Spanish Pensions Industry (Pillars II and III) is small and less efficient as that of Denmark, Nederland or the UK. Pension Funds assets at end 2019 reached 9.35 percentage points of GDP that year, and if insured retirement or retirement-like vehicles were added to this, an extra 15.24 percentage points could be found. These and other reasons imply that asset management in this limited industry cannot be cheap. To be sure, Pillar II assets are as cheap to manage as in advanced countries, but this is not the case with Pillar III assets. Taxation of retirement assets and income in Spain responds to the EET regime, as in most OECD countries. Average cumulative net real returns since 2000, in the standard Pension Plans system, once inflation adjusted, has been just 0.43% annually. Little is known about average returns to insured vehicles' assets, and its computation has not been the purpose of this report. All data used can be found on readily available official sources' web sites (INVERCO, DGSFP and Bank of Spain).



Introduction

The Spanish pension system is composed of three pillars:

- Pillar I – Public, with a pay-as-you-go major branch of compulsory, contributive pensions (old-age, invalidity and survivors' benefits) and a minor, means-tested assistance branch for over 65 years old individuals (old-age and invalidity).²⁴⁶
- Pillar II – Voluntary, defined benefit and defined contribution employer-sponsored pension plans (restricted de facto to large companies).
- Pillar III – Voluntary, personal (or associated) defined benefit pension plans and a variety of other qualified retirement savings vehicles.

A more detailed structure of these three pillars is presented in the following table.

| Introductory Table. Multi-pillar pension system in Spain (2019) | | | |
|---|---|--|---|
| | Pillar I | Pillar II | Pillar III |
| | National Social Security | Employer-Sponsored Pension Plans | Individual Pension Plans |
| Participation | Mandatory | Voluntary | Voluntary |
| Type of funding | Financed by social contributions (employees 4.7%, employers 23.6%) | Financed normally by employers' contributions (no standard rate) | Financed by insured persons |
| Type of benefit entitlement | Variable percentage of a 22 years average pensionable wage | Both DB and DC | DC |
| Management | Publicly managed; Benefits paid via National Social Security Agency (INSS) | Managed by independent agencies under Companies' Social Partners supervision | Managed by Plan's Promoters (Financial, Insurers or Associations) |
| Products | Contributory state pension, Non-contributory state pension and Minimum Basic Income (as from July 2020) | Pension Plans (standard vehicle), Insured Pension Plans (PPA), Life Insurance, Individual Saving Plan (Spanish acronym: PIAS) and Long-term Individual Saving Insurance (Spanish acronym: SIALP). | |
| Average benefit | Average contributory pension (14 payments per year): €1,466 per month (old-age, newly retired employees) Average non-contributory pension (14 payments per year): €396 per month (old-age) | Employer Sponsored standard Pension Plans (14 payments per year): €799 per month (old-age, income only Plans, 2018) Only 40,4% of total beneficiaries opt for income only benefits and these amount to 27,8% of | Individual standard Pension Plans (14 payments per year): €174 per month (old-age, income only Plans, 2018) Only 19,1% of total beneficiaries opt for income only benefits and these amount to 51,5% |

²⁴⁶ As recently as in June 2020 the Government enacted the new Social Security basic scheme, the "Ingreso Mínimo Vital" (Minimum Basic Income), addressed to people most in need, means tested and subject to job search and other eligibility conditions. See this for a compact explanation (in Spanish): <https://revista.seg-social.es/2020/05/30/el-gobierno-aprobara-el-ingreso-minimo-vital-esta-semana/>.



| | | | |
|-----------------|---|--|--|
| Coverage | and invalidity) Social Insurance is compulsory for all workers. There were 6.1 million old-age pensioners in 2019. All persons 65 and over are eligible for Social Assistance. | total benefits paid Barely 8.6% of active population (11,9% of employees) are covered by Employer-sponsored Pension Plans. Only 41.7 thousand retirees received income-only benefits in 2019. | of total benefits paid Slightly below 25% of population aged 16 to 64 is covered by Individual Plans. Only 190 thousand retirees received income-only benefits in 2019. |
| | Net replacement ratio (a) | 72,7% | 39,6% |

(a) This ratio is a gross, effective, average "benefit ratio" rather than a standard replacement ratio (OECD). Own estimation based on data from SS, INE and DGSFP. Only 186k beneficiaries are entitled to obtain monthly Pillar II and III old-age benefits.

It is well known that Social Security contributions, even if they are immediately spent on current benefits and not accumulated as savings by workers, may return relevant yields when retirement benefits are finally received. This happens everywhere, al so in Spain. Estimations of the implicit rate of return for Spain are around 6% real per year. This means that Social Security, as a matter of fact, returns every euro paid in contributions around 12 years after retirement when the average retiree has a similar time span of remaining life years.

This implicit return is difficult to beat by marketed retirement products, even if these offer by default sustainability when they are of the DC variety. Something that Social Security benefits cannot offer.

This said, the summary table below tells a story that bears a sharp contrast with the above description of Social Security internal rate of return. Long term (since 2000) net (of fees), real, before taxes, returns of the standard retirement plans Pillars II and III) in Spain has been 0.40% and this thanks to the good performance of stock markets in 2019, as long-term net real returns in 2018 stood at exactly 0.0%.

| Aggregate summary return table | | | | | | | | | |
|--------------------------------|--------|--------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| | 1 year | | 3 years | | 7 years | | 10 years | | Since 2000 |
| | 2019 | 2018 | 2017-2019 | 2016-2018 | 2013-2019 | 2012-2018 | 2010-2019 | 2009-2018 | 2000-2019 |
| PILLAR II | | | | | | | | | |
| Nominal return | 8.74% | -3.19% | 3.73% | 1.83% | 5.26% | 4.01% | 4.78% | 2.76% | 2.86% |
| Real return | 7.89% | -4.42% | 2.14% | 0.58% | 4.28% | 3.15% | 2.60% | 1.39% | 0.79% |
| PILLAR III | | | | | | | | | |
| Nominal return | 8.81% | -4.48% | 2.72% | 0.26% | 4.33% | 2.90% | 3.42% | 1.85% | 2.40% |
| Real return | 7.96% | -5.71% | 1.14% | -0.97% | 3.35% | 1.70% | 2.10% | 0.47% | 0.32% |
| Both Pillars | | | | | | | | | |
| Nominal return | 8.80% | -4.08% | 1.57% | 0.79% | 4.66% | 3.29% | 3.91% | 2.18% | 2.58% |
| Real return | 7.95% | -5.31% | 1.25% | -0.46% | 3.67% | 2.09% | 2.60% | 0.80% | 0.51% |

Source: INVERCO



Pillar I

The National Institute for Social Security (INSS, Spanish acronym) is the national agency for pensions run by the central government. The Spanish Social Security covers all workers against old-age, invalidity (their dependants) and survivorship (widowhood and orphanhood). It has two separate branches: an insurance branch and an assistance branch sharply differentiated not only by law but also by its size, nature and functions.

The insurance branch of Social Security is, by far, the dominant scheme in the Spanish pension's arena (all vehicles considered). It is contributory, compulsive for all workers, either employee and firms and is financed through social contributions that, within each current year, are used to pay for current pensions. The financial method of the system is thus of the Pay-As-You-Go variety. As of 31st December 2019, The INSS was paying 9.8 million pensions (to about 8.9 million beneficiaries) at a rate of € 995.80 each per month (14 payments in a year, all pension categories, all beneficiaries). Within these figures, almost 6,1 million pensions went to the old age category at an average rate of € 1,143,55 per beneficiary and month (14 payments in a year).

As for workers' coverage, as of 31st December 2018, 19.3 million workers were affiliated to the national Social Security scheme. Out of these, almost 14.8 million (76.7%) were wage earners covered by the General Regime of SS and almost 3.3 million (17.1%) independent workers covered by the Self-employed Regime. The remaining few, a mere 6.2% of workers, belonged to different sub-regimes within Social Security. Around half of unemployed workers were covered at the end of 2019 by Social Security through social contributions paid on their behalf by the Spanish Employment Agency for as long as they received unemployment benefits.

Besides social insurance pensions, the Spanish Social Security, through its assistance branch, as of 31st December 2019, paid 452.2 thousand pensions of which 261 thousand pensions were old-age and the rest were invalidity pensions. Non-contributory (assistance) pensions are subject to means tests and are clearly a minor scheme since autonomous regions in Spain offer a wide range of basic benefits to those individuals and households in need.²⁴⁷ These pensions are paid by Social Security, although fully financed out of general taxation. The average amount paid under this scheme was € 392 per month and beneficiary (14 payments in the year). This amount can be complemented by other personal characteristics.

Within the contributory pensions class, social contributions provide, as of 2019, for 87,8% of total cost of Social Security contributory pensions. The total contribution rate is 28.3% of gross pensionable wage. This rate splits in 23.6 pp paid by employers and 4.7 pp paid by workers. The self-employed must pay the whole 28.3% rate on their pensionable earnings. Pensionable wage (and earnings) track effective wages closely through a scale with a minimum pensionable wage (as of 2019) of € 1,050 and a maximum pensionable wage of € 4,070.10 per month. Employees cannot choose their contribution base but self-employed can do it and the majority of them do choose the minimum pensionable earnings base. This results in their retirement pensions being too small. Many of these benefits will have to be latter complemented with an assistance top in order to reach the statutory minimum retirement pension.

²⁴⁷ As recently as June 2020, Social Security is offering a new individual Minimum Basic Income. See footnote no 1 above.



This resulting, paradoxically, in a larger internal rate of return for minimum contributory old age pensions recipients, over their past contributions, compared to retirees receiving higher or maximum contributory pensions payable by Social Security.

Pillar II

As shown in the Introductory Table above, Social Security old-age benefits in Spain replace pre-retirement wages with one of the highest rates in the world and against a rather high pay-roll tax mostly paid by employers²⁴⁸. So, there is little margin left for occupational and personal retirement accounts to step substantially into the retirement arena²⁴⁹. And, indeed, what we observe in Spain is a very limited landscape for marketed retirement solutions despite the fact that the modern regulation for these products was enacted around 1987 last century.

Pillar II in Spain embraces employer-sponsored retirement accounts for wage earners and individual pension plans for the self-employed (and associate pension plans, a minor category). These products are financed through contributions mostly paid by employers and employees rarely participate on a matching basis. Independent workers pay their own Pillar II contributions. There is a variety of retirement vehicles that employers may offer their employees, or available for self-employed workers as well. Amongst them, tax-qualified Pension Plans are the standard and most prevalent vehicle. These Pension Plans are capitalisation retirement accounts of either Defined Benefit or Defined Contribution type to which employers contribute with a percentage of wage. Workers can also contribute. Contribution rates to occupational Plans may vary considerably, but their average rate can be estimated at around a modest 2.6% of average gross wage²⁵⁰, or around € 629 per employee and year (2019). Employers are not obliged by law to offer these accounts, although some may be obliged by Collective Bargaining agreements in an industry or sector, which is rare. And indeed, very few companies, but the large ones, offer them to their workers as only barely 2 million accounts of this type were registered through 2019, to a total active population of 23 million that same year, a mere 8,6%. In 2019, only 41.7 thousand retired workers received old-age benefits. Average annual benefit was € 11,180 (gross) and the benefit rate (against average annual gross pay) was 39.6%. As of 31st December 2019, total assets under management (AuM, in what follows) to these accounts totalled € 35,7 billion (almost € 2 bn up from one year earlier), that is, a small 2.9% of Spanish GDP.

Pillar II retirement accounts are fiscally qualified by the government. Contributions by employers or employees are tax free up to a general limit of €8,000 per person per year. Benefits, no matter whether retrieved in form of monthly income or as a lump-sum, are taxed under the existing personal income taxation rules (a dual personal income taxation system). When benefits are retrieved in form of an income stream, beneficiaries are obliged to buy an annuity (life or term) or a drawdown.

Often in Spain and in many other countries, and this is a crucial issue of understanding for our industry, layman savers and even experts refer to this fiscal treatment as “incentives” or even “a fiscal gift”. The truth is that having contributions tax exempted and taxing benefits (tax deferral) is the world standard,

²⁴⁸ This said, however, pay-roll taxes to Social Security or other welfare programs are deferred wages and, were they to be entirely supported by employees, gross wages should be accordingly updated to accommodate this wedge.

²⁴⁹ See Introductory Table above.

²⁵⁰ Estimation based on data from INVERCO and INE.



rather than the opposite or, even worst, double taxation of pensions if both contributions and benefits were to be taxed. Tax deferral, as opposed to an “incentive”, is not a gift from government or from the rest of society is a just treatment for income won after decades of work efforts and frugality.

Pillar III

Pillar III embraces personal, or individual Pension Plans, the latter being again the dominant type within a large variety of types (see the Introductory Table above). These plans are personal, voluntary and “complementary” to both Pillar I and Pillar II arrangements. These accounts are equally treated, as Pillar II accounts, from the tax point of view or, in what concerns other features, are virtually the same product as employer-sponsored Pension Plans. In 2019, only 190 thousand retired workers received old-age benefits. Average annual benefit was € 2,441 (gross) and the benefit rate (against average annual gross pay) was 8.6%. As of 31st December 2019, Pillar III included 7.5 million retirement accounts that belonged to around 6.5 million individuals (or 21,37% of Spanish population 16-64 years old). AuM for these plans totalled € 79.85 bn (slightly € 7.6 bn up from one year earlier), that is, a mere 6.4% of Spanish GDP.

Household Savings

Personal (financial) saving in Spain is not a salient feature of its economy’s financial side. But for the fact that it is so low because Spaniards love to save “*autrement*”, in “bricks & mortar”. This said, households are still able to spare some money by the end of the year and have so far managed to accumulate a financial buffer. Only a small part of these assets, however, are dedicated to retirement purposes. One of the reasons for this lies in the fact that Social Security forces Spanish workers to save through pay-roll taxes paid in large part as for employees) by their employers. This reduces the disposable income households could save. Besides, in exchange for heavy pay-roll taxation (28.3% of gross -pensionable- wages only for retirement and associated contingencies), public pensions replace lost wages due to retirement, at a 72.7% (average, effective benefit) rate. This, definitely, must reduce enormously the desire and/or capacity to save for retirement of Spanish workers.

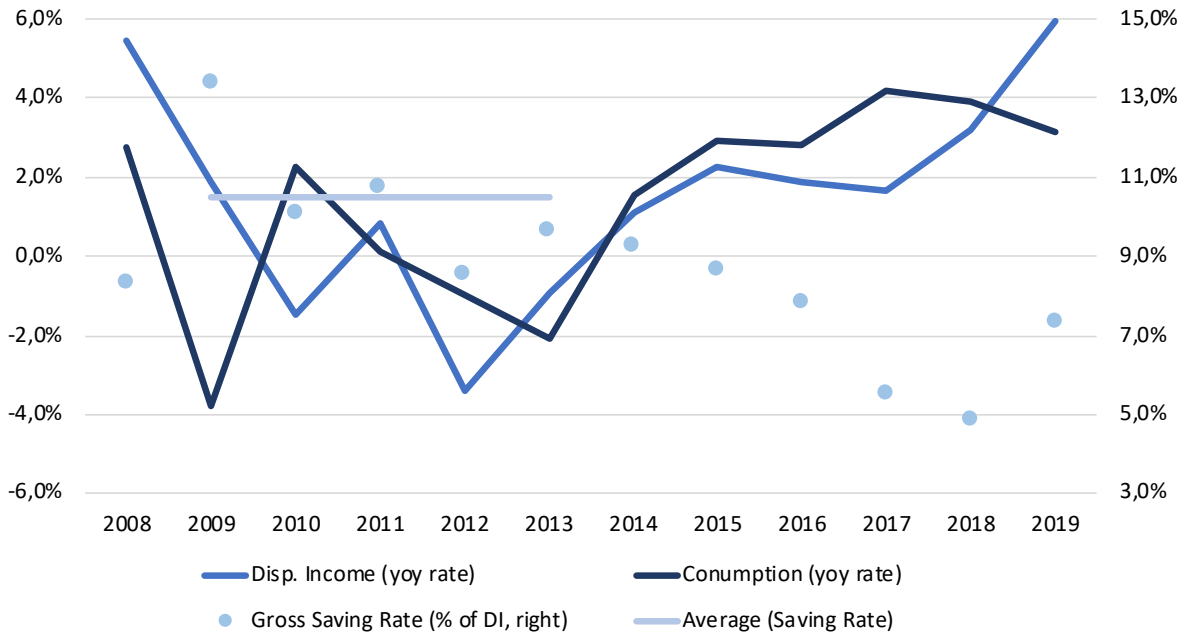
As for real estate, it is well known that it is hardly a retirement asset at all. Yet many owners, that in Spain tend to own more than one house or apartment, think that they could use their houses as a source of retirement income. However realistic this may be, the fact is that an astonishing three fourths of Spanish households’ total wealth is made of “bricks & mortar”, its value representing around four times the value of Spanish GDP. So, housing is “the” retirement asset in Spain and retirement solutions providers would better think on how to develop sound retirement income products based on housing rather than hope for households to start accumulating proper retirement assets, at least for a while.

The overall picture on households’ Gross Disposable Income (year-on-year change), Consumption (year on year change) and Gross Savings (rate over Disposable Income) is shown in Graph ES1 below. During the crisis (2009-2013), the savings rate oscillated amply around an average of 10.5% of Gross Disposable Income. 2009 and 2013 were precisely the most recessive years of the period. Pre-crisis years (since mid-90s in the last century) savings rate was low reflecting the strong dynamics of private consumption, fuelled by cheap debt and intense employment creation coupled with wage increases. After 2008, the big recession and a twin recession in 2011-2013, led Spanish households to increase their savings ratio



above 13% in 2009, and keep it close to 10% in the following recessive years. Meanwhile, wages stagnated, and employment continued to fall bringing the unemployment rate above 25% in the through of the second recession, at mid-2013.

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



Source: Own elaboration based on Bando de España

Expansive years (2015-2018), when consumption was growing vigorously the savings rate dipped to a bottom 5% of disposable income. In 2019, consumption (and the economy) decelerated and savings bounced to above 7%. A trend that is likely to continue in 2020, most probably exacerbated by the current recession.

By the end of 2019, financial assets owned by Spanish households (and non-profit institutions serving households - NPISH) amounted to € 2.4 trillion, according to the Spanish Central Bank financial balance sheets statistics. That amount represented slightly more than three times households' Gross Disposable income and almost two times Spanish GDP. They also increased their investments in financial assets by € 139 billion, a healthy increase of 6.1% compared to 2018.

If we take a closer look at the distribution of financial assets owned by households in 2018-2019, as shown in Table ES1 below, one can immediately observe that the "cash and bank deposits" class of assets, with € 918.6 billion, takes up to 38.3% of all financial assets held by Spanish households. "Equity" being the second most important financial asset in households' portfolios at € 670.2 billion and 27.9% of total financial assets.

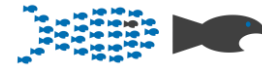


Table ES1. Financial assets held by Spanish households 2019

| | 2018 | | | 2019 | | | Change (%) |
|-----------------------------|----------------|-------------|---------------|----------------|-------------|---------------|-------------|
| | € bn | % | % of GDI | € bn | % | % of GDI | |
| Cash and bank deposits | 880.6 | 39.0% | 120.0% | 918.6 | 38.3% | 118.2% | 4.3% |
| Investment Funds | 309.2 | 13.7% | 42.1% | 338.5 | 14.1% | 43.6% | 9.5% |
| Shares | 639.1 | 28.3% | 87.1% | 670.2 | 27.9% | 86.2% | 4.9% |
| Pension rights | 164.1 | 7.3% | 22.4% | 174.6 | 7.3% | 22.5% | 6.4% |
| Insurance | 193.0 | 8.5% | 26.3% | 213.6 | 8.9% | 27.5% | 10.7% |
| Other | 74.8 | 3.3% | 10.2% | 84.3 | 3.5% | 10.8% | 12.6% |
| Total | 2,260.8 | 100% | 308.1% | 2,399.8 | 100% | 308.8% | 6.1% |
| <i>Pro memoria: GDI (a)</i> | 733.8 | | | 777.2 | | | 5.9% |

(a) GDI: Gross Disposable Income

Source: own elaboration based on Banco de España

Spanish households increased dramatically their investment funds and insurance holdings in 2019. Equity holdings went also up by 4.9% and pension entitlements (apart those included in insurance contracts, *vid infra*) continued to stay slightly above 7% of their total financial assets. A very modest claim.

With respect to households' Gross Disposable Income, that increased at a healthy 5.9% in the year, total financial assets jumped by 6.1 pp, keeping their relative nominal size above three times households' GDI.

Pension Vehicles

Even if, due to the overwhelming presence of Social Security, the room for Pillars II and III is not a very large one in Spain, there is a large variety of marketed retirement products. The most standard retirement vehicles are Pension Plans and Insured Pension Plans. Normally, retirement vehicles are provided by financial institutions and insurers that also act as managers and depositaries of occupational pension funds. Also, a number of professional associations have since long created *Mutualidades* (Mutual Funds) some of which operate as regulated alternative schemes to Social Security selfemployed schemes for these occupational groups.

Current laws regulating modern Pillars II and III were enacted around 1987-1988. Occupational pensions, that were directly provided by employers to their employees before then, were gradually taken out of company books and entrusted to newly created operators (*Planes de Pensiones*) and/or integrated into standard vehicles also created by those laws (*Fondos de Pensiones*).

Notwithstanding the fact that Spanish households choose to hold their financial assets in form of bank deposits and cash, collective investment vehicles kept their place in 2019 at a 25.8% share of total financial assets, slightly below equity, however Tables ES2 and ES1). In 2019, total investment in this class of assets increased by 10,1%. Holdings of all major sub classes, within the broad collective investments class, had healthy increases with with pension funds spotting a rarely seen in a decade 8.9%.



Table ES2. Total assets managed by Instituciones de Inversión Colectiva - 2009-2019 (€Mn)

| | Investment Funds | | | | | | Pension Funds | Total |
|------|------------------|-------------|-------------------|-------------|------------|---------|---------------|-------|
| | Investment Funds | | Investment Trusts | | Foreign IF | | | |
| | Financial | Real Estate | Financial | Real Estate | | | | |
| 2009 | 163,243 | 6,774 | 25,925 | 309 | 32,200 | 84,920 | 313,371 | |
| 2010 | 138,024 | 6,123 | 26,155 | 322 | 48,000 | 84,750 | 303,374 | |
| 2011 | 127,731 | 4,495 | 24,145 | 316 | 45,000 | 83,148 | 284,835 | |
| 2012 | 122,322 | 4,201 | 23,836 | 284 | 53,000 | 86,528 | 290,171 | |
| 2013 | 153,834 | 3,713 | 27,331 | 868 | 65,000 | 92,770 | 343,516 | |
| 2014 | 194,818 | 1,961 | 32,358 | 826 | 90,000 | 100,457 | 420,420 | |
| 2015 | 219,965 | 421 | 34,082 | 721 | 118,000 | 104,518 | 477,707 | |
| 2016 | 235,437 | 377 | 32,794 | 707 | 125,000 | 106,845 | 501,160 | |
| 2017 | 263,123 | 360 | 32,058 | 620 | 168,000 | 110,963 | 575,124 | |
| 2018 | 257,514 | 309 | 28,382 | 734 | 168,000 | 106,886 | 561,825 | |
| 2019 | 276,557 | 309 | 29,446 | 725 | 195,000 | 116,419 | 618,456 | |

Source: INVERCO Report on Investment Funds and Pension Funds 2019

In 2019, investors and savers witnessed extraordinary returns that fully compensated for the dim results in the previous year. They even jumped into more risky assets in most asset classes. But they did not significantly increase their net savings into Investment and Pension Funds. Returns on assets were vastly responsible for the healthy increases in assets values as shown in Table ES3. These returns happened to be the highest observed during the recovery since 2013.

Table ES3. Flows of funds for Investment Funds & Pension Funds 2010 – 2018 (€ Mn)

| | Investments Funds | | | | Pension Funds | | | |
|------|-------------------|------------|---------|---------|---------------|------------|--------|---------|
| | BoY | Net | Net | EoY | BoY | Net | Net | EoY |
| | Assets | Investment | Yields | Assets | Assets | Investment | Yields | Assets |
| 2012 | 127,731 | -10,263 | 4,854 | 122,322 | 83,148 | 70 | 3,310 | 86,528 |
| 2013 | 122,322 | 23,048 | 8,463 | 153,833 | 86,528 | 239 | 6,003 | 92,770 |
| 2014 | 153,833 | 35,573 | 5,412 | 194,818 | 92,770 | 898 | 6,789 | 100,457 |
| 2015 | 194,818 | 24,733 | 413 | 219,964 | 100,457 | 526 | 3,535 | 104,518 |
| 2016 | 219,964 | 13,820 | 1,652 | 235,436 | 104,518 | 264 | 2,063 | 106,845 |
| 2017 | 235,436 | 21,410 | 6,277 | 263,123 | 106,845 | 451 | 3,667 | 110,963 |
| 2018 | 263,123 | 8,410 | -14,019 | 257,514 | 110,963 | -170 | -3,907 | 106,886 |
| 2019 | 257,514 | 1,693 | 17,350 | 276,557 | 106,886 | 799 | 8,734 | 116,419 |

Source: INVERCO Report on Investment Funds and Pension Funds 2019

Pension Plans

Pension Plans (Planes de Pensiones) are the standard retirement saving vehicle in Spain, albeit only one of many different retirement vehicles. They can be promoted by employers on behalf of their employees, by professional associations on behalf of their members or by financial institutions for the general public (workers included, of course). Insurance companies also promote Insured Retirement Plans (Planes de Previsión Asegurados, PPA) for the general public and Insured Employers Retirement Plans (Planes de Previsión Social Empresarial, PPSE). These insured vehicles are basically equivalent to their non-insured counterparts.



Pension Plans are voluntary and complementary to Social Security pensions. They are not integrated in whatsoever way with Social Security. Plans created after 1987 legislation are DC plans but many of previously existing occupational plans, that had to be latter segregated from their parent companies, continue to be DB plans.

Pension Plans integrate for the sake of management and by law into Pension Funds (Fondos de Pensiones) to reach scale and financial synergy. This is the case of small II Pillar plans and of III Pillar or individual retirement plans. Pension Funds are legal entities, linked or not to financial institutions, obliged by law to contract out their managing and a depositary functions with specialized agents.

Pension Plans in Spain, like in most countries, are tax qualified retirement vehicles. All payments by participants (or in their behalf) are tax-exempt up to a limit, so that compounded interest may play its full magic over larger savings during many years. Benefits are taxed (*vid infra*). In exchange for this tax treatment, funds cannot be cashed in in advance of retirement, unless some major contingencies happen (redundancy, sickness or long-term unemployment), albeit some extra flexibility has been added recently (*vid infra*). Accrued rights, however, can be switched between managing institutions and/or depositaries at no cost within the individual accounts scheme.

Table ES4 below presents the number of participants (accounts rather, see note at the bottom of the table) to Pension Funds as of 31st December 2010 to 2019. That decade sums up the recent trajectory of this important complementary retirement income institution in Spain. As of December 2019, slightly more than 9.5 million accounts were integrated in the whole scheme. The individual accounts sub scheme totalled 7.5 million accounts, 78.7% of total number of accounts.

| Table ES4. Number of participants to Pension Plans 2010-2018 | | | | | |
|--|-------------------|-------------|------------------|-------------|---------------|
| | Dec. 2010 | | Dec. 2019 | | Change 10-19 |
| | Participants | % of total | Participants | % of total | |
| Associate schemes | 78,072 | 0.7% | 55,460 | 0.6% | -29.0% |
| Employer-sponsored schemes | 2,149,334 | 19.8% | 1,981,166 | 20.7% | -7.8% |
| Individual schemes | 8,601,775 | 79.4% | 7,519,285 | 78.7% | -12.6% |
| Total | 10,829,181 | 100% | 9,555,911 | 100% | -11.8% |

Source: INVERCO

The most salient feature displayed in the above table is the drop in the number of accounts since 2010, an 11.8% rather uniformly distributed on time, shared by all sub schemes but especially relevant (in absolute terms) in the individual accounts sub scheme, that lost more than 1 million accounts in the period.

Correspondingly, as Table ES5 shows, the number of pension plans displays an almost regular decrease al through the present decade. Number of plans totalled 2,964 in 2010 and 2,457 at the end of 2019, a 17.1%, and fairly regular though time, decrease averaging over sub schemes, but most relevant again (in absolute terms) for the individual accounts sub scheme.

These data tell that the average size of Pension Plans increased in the period from 3.2 thousand accounts per plan to 3.9 thousand, likely making the system more efficient. Even if one cannot get rid of the feeling that the whole scheme reached a ceiling time ago and is now well set for a continuous and regular decline unless a new policy is devised.



Table ES5. Number of Pension Plans by type of scheme

| As of December 31st | Individual schemes | Employer-sponsored schemes | Associated schemes | Total |
|-------------------------|--------------------|----------------------------|--------------------|--------|
| 2010 | 1,271 | 1,484 | 209 | 2,964 |
| 2011 | 1,342 | 1,442 | 198 | 2,982 |
| 2012 | 1,385 | 1,398 | 191 | 2,974 |
| 2013 | 1,384 | 1,350 | 187 | 2,921 |
| 2014 | 1,320 | 1,330 | 178 | 2,828 |
| 2015 | 1,257 | 1,312 | 172 | 2,741 |
| 2016 | 1,189 | 1,305 | 164 | 2,658 |
| 2017 | 1,107 | 1,291 | 156 | 2,554 |
| 2018 | 1,079 | 1,293 | 151 | 2,523 |
| 2019 | 1,027 | 1,284 | 146 | 2,457 |
| Change 2010-2019 | -19.2% | -13.5% | -30.1% | -17,1% |

Source: INVERCO

If Pillar II schemes (employer-sponsored and associate) represented, as of December 2019, 20.6% of total accounts and 58,2% of total plans, implying that individual accounts sub schemes are considerably larger than Pillar II plans in terms of number of accounts managed, the former had 31.4% of AuM (Table ES6 below). This, in turn, implies that average retirement assets per account are also larger within the Pillar II schemes than within Pillar III. Actually, € 10,619 per account in the latter versus € 17,956 per account in the former.²⁵¹

Coming to total AuM for the whole Pension Plans and Funds industry, as of December 2019, this indicator showed a large increase, at 8.8% (10.5% for employment plans) over the preceding year. Two warnings are in order now. First, note that the current level of Pension Plans' AuM is the highest on record albeit due to the brilliant performance of investments in 2019, rather than to more investment by participants coming to the system (Table ES3). Second, note that total AuM for Pension Plans today barely represent 9.3% of GDP.

²⁵¹ Using standard mortality tables for Spain and assumptions about returns, these amounts yield very low pure lifetime annuities. The annuity a typical individual account could buy retiring at 65 amounts to around € 53 per month and increases up to € 90 in the case of the typical occupational account. This said, retirement savings under these two modalities tend to be larger at retirement age. Also, within the occupational variety, around half a million accounts belong to civil servants and these accounts have almost no vested assets. On the other hand, some associate and employer-sponsored plans, covering dozens of thousands of employees in manufacturing and financial and advanced services, notably in the Basque Country (manufacturing) but also all across Spain for professional services (lawyers or engineers), hold large average retirement accounts. That's why benefits at retirement are normally cashed in as a lump sum.

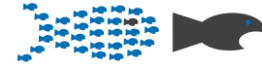


Table ES6. Evolution of Pension Plans' AuM by scheme (31st December, 2009-2019)

| | Individual | | Employer sponsored | | Associate | | Total |
|-------------|------------|-------|--------------------|-------|-----------|------|----------|
| | AuM (Mn) | % | AuM (Mn) | % | AuM (Mn) | % | AuM (Mn) |
| 2009 | 53,228 | 62.6% | 30,784 | 36.2% | 992 | 1.2% | 85,004 |
| 2010 | 52,552 | 62.0% | 31,272 | 36.9% | 926 | 1.1% | 84,750 |
| 2011 | 51,142 | 61.5% | 31,170 | 37.5% | 835 | 1.0% | 83,148 |
| 2012 | 53,160 | 61.4% | 32,572 | 37.6% | 795 | 0.9% | 86,528 |
| 2013 | 57,954 | 62.5% | 33,815 | 36.5% | 1,001 | 1.1% | 92,770 |
| 2014 | 64,54 | 64.0% | 35,262 | 35.1% | 940 | 0.9% | 100,457 |
| 2015 | 68,012 | 65.1% | 35,548 | 34.0% | 958 | 0.9% | 104,518 |
| 2016 | 70,487 | 66.0% | 35,437 | 33.2% | 921 | 0.9% | 106,845 |
| 2017 | 74,378 | 66.9% | 35,843 | 32.3% | 903 | 0.8% | 111,123 |
| 2018 | 72,247 | 67.5% | 33,957 | 31.7% | 829 | 0.8% | 107,033 |
| 2019 | 79,850 | 68.6% | 35,710 | 30.7% | 859 | 0.7% | 116,419 |

Source: INVERCO

It can also be seen that around 68.6% of total AuM in these retirement vehicles belong to the Individual accounts sub scheme, representing a mere 6.4% of GDP. This category of assets has increased its value a 10.5% over the previous year, compared to a 5.2% for occupational pensions assets.

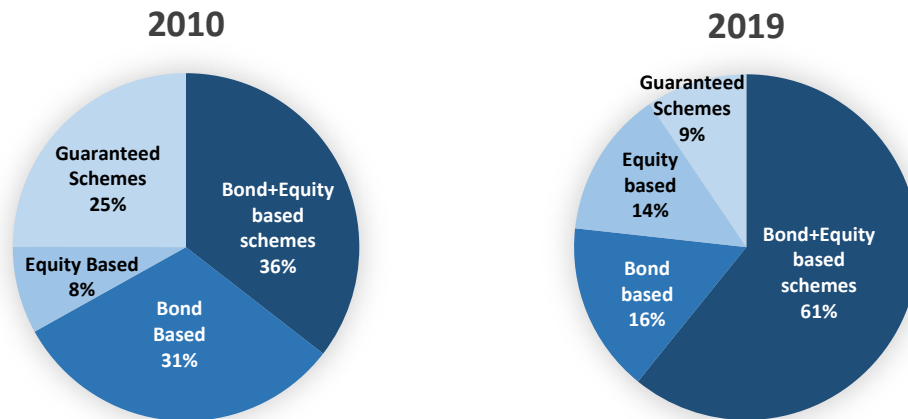
Even if the type of assets in which Pension Funds' assets are invested vary regularly with time, in an effort to increase overall returns for participants, the primary objectives of managers is to do their best given the overall choices of participants concerning the class of assets their funds are invested in.

Typically, Pension Funds offer a variety of risk profiles that participants generally adhere to for some time until they decide to switch their risk profile. This is generally the case of individual schemes, where participants can switch regularly between schemes albeit these schemes remain relatively specialized as for their risk profile as participants come and go. The above implies that all standard asset class must be present in overall portfolios at minimum and maximum thresholds, ranging from mostly bond based schemes to mostly equity-based schemes. Occupational schemes, however, are set with the risk profile established (if at all) by their sponsors and fund managers (or control boards, where employers and workers representatives sit) will have certain freedom to change the risk profile of the fund according to market conditions. Over a large period of time then, both participants, with their regular scheme choices, and managers and social partners may induce relevant changes in the asset allocation of pension funds.

Graph ES2 below shows that Spanish Pension Funds are relatively conservative, as one should expect, and allocate more than $\frac{3}{4}$ of their assets to a combination of mostly-bond-based and mixed (equity+bond-based) schemes. Mostly-equity-based schemes have a reduced stance but, indeed, in 2019 funds have switched towards riskier investments as yields have truly soared.



Graph ES7. Investments by asset class (Pillar III schemes) 2010 - 2019



Source: INVERCO Report on Investment Funds and Pension Funds 2019

On a shorter-term perspective (Table ES7), asset allocation structure of Pension Funds (all schemes) is obviously more stable even if there has been a sharp contrast with respect to 2018 concerning assets' returns. At the end of 2019 (IIIQ, latest data available by the DGSFP), a bias towards equity, Investment Funds and Trusts and foreign sovereign bonds is clearly discernible as well as away from domestic sovereign bonds and liquid assets, less attractive. Less risky investments, however, continued to dominate the allocative strategies of the Spanish Pensions Industry during 2019.

| Table ES8. Pension Funds' Asset Allocation (%) 2018-2019 | | | | |
|--|-------------|-------------|-------------|-------------|
| | IVQ18 | IQ19 | IIQ19 | IIIQ19 |
| Equity & Venture Capital | 15.33% | 16.36% | 16.41% | 16.53% |
| Investment Funds & Trusts | 24.16% | 25.37% | 25.49% | 26.94% |
| Domestic Government Bonds | 18.67% | 17.83% | 16.98% | 16.93% |
| Foreign Government Bonds | 12.67% | 12.83% | 12.75% | 14.01% |
| Securities and Private Bonds | 17.74% | 18.04% | 17.65% | 17.55% |
| Other (Liquid Assets) | 11.43% | 9.57% | 10.71% | 8.04% |
| Total | 100% | 100% | 100% | 100% |

Source: DGSFP

As shown in Graph ES4, when a mid-term perspective is adopted, the increasing role of riskier assets in Pension Funds' allocation strategy is the result of a gradual switch from bonds in the last few years after sovereign debt became less and less attractive in an ultra-low interest rate scenario. A bet that finally, in 2019, has rewarded those who undertook it.

Life Insurance

Measured by own AuM, the Insurance Industry is a major retirement income products provider in Spain, both for Pillar II and, specially, Pillar III. Also, a substantial part of Pension Funds' assets is managed by insurers. A salient feature of this trade is the large variety of retirement vehicles that are marketed by the industry, in Spain and everywhere.

Some of these vehicles are indistinguishable from genuine retirement or pension plans (if we forget about the insurance part of any retirement solution) and quite a few are genuine life insurance solutions



marketed since very old times by the industry and turned into retirement vehicles through a progressive assimilation with the standard vehicle (Pension Plans) firstly regulated in Spain some thirty years ago (*vid supra*). This assimilation has been fuelled by converging fiscal treatments for all these products even if some of them continue to have distinctive features of their own.

Very often, market practitioners make the distinction between “finance” and “insurance” when describing the nature of a given retirement solution. It must be said that as long as it is a true, integral “retirement solution”, any product must contain insurance genetics in its composition. What is also true, instead, is that this insurance part must not necessarily be the heaviest part of any retirement product. Any retirement solution can contain an insurance part all through the accumulation and decumulation cycles of the most comprehensive product one might imagine or just the time span past the life expectancy point of the cohort the buyer belongs to. In between that span, a retirement product may or may not embody insurance features but just financial ones. Insurance-only retirement products tend to be safer and thus costlier for the buyer than financial only (no insurance on them, thus). This balance implies per se a rather large array of products, but not necessarily a “very large one”. As retirement products are not easy to understand by the common buyer, a very large array of products in the market does not make things easier for the retirement industry.

According to UNESPA, the Spanish Insurers Association, the total life and saving technical reserves/assets under management of the entire Spanish insurance sector at the end of 2019 amounted to € 240.95 bn, having spotted a 4.95% increase over 2018. As for the number of insured persons (and participants), 2019 ended with 34.3 million, and a 1.62% annual growth rate.

Not all insured persons/participants and technical reserves/assets under management were allocated to retirement and/or pension vehicles. But about 15.5 million insured persons and € 189.8 Bn worth of technical reserves were closely related to retirement rights and savings generated within the insurance sector. Moreover, insurers established in Spain manage assets worth 41.2 Bn on behalf of 3.4 million Pension Plans participants. The details of these gross numbers can be seen in Table ES8 below.



Table ES9. Insured Retirement and other Retirement-like vehicles 2019

| Broad Category | Type of Vehicle | Persons insured (x000) | | | Technical provisions (Mn) | | |
|--|---------------------------------|----------------------------|-----------------|------------------|-------------------------------------|-------------------|-------------------|
| | | Pillar II | Pillar III | Both Pillars | Pillar II | Pillar III | Both Pillars |
| Deferred capital | Insured Pension Plans (PPA) | | 928,5 | 928,5 | | 12.342,70 | 12.342,70 |
| | Company Retirement Plans (PPSE) | 34,3 | | 34,3 | 348,5 | | 348,5 |
| Pension Accruals and Insured Saving Vehicles | Risk | 2.367,60 | | 2.367,60 | 521,5 | | 521,5 |
| | PIAS* | | 1.428,50 | 1.428,50 | | 14.457,00 | 14.457,00 |
| | SIALP** | | 611,6 | 611,6 | | 4.321,40 | 4.321,40 |
| | Deferred capital | 205,1 | 2.612,70 | 2.817,80 | 2.890,80 | 44.720,30 | 47.611,10 |
| | Annuities*** | | 1.949,80 | 1.949,80 | | 65.813,60 | 65.813,60 |
| | Income (acc. phase) | 212,8 | | 212,8 | 11.355,50 | | 11.355,50 |
| | Income (pay-out phase) | 290,7 | | 290,7 | 10.829,00 | | 10.829,00 |
| | Unit/Index-Linked | 27,2 | 1.099,00 | 1.126,20 | 1.403,90 | 11.993,40 | 13.397,30 |
| Other Group Insurance (retirement-linked) | Risk | 3.299,10 | | 3.299,10 | 1.020,50 | | 1.020,50 |
| | Deferred capital | 308,2 | | 308,2 | 2.366,80 | | 2.366,80 |
| | Pensions (accumulation phase) | 21,4 | | 21,4 | 1.307,40 | | 1.307,40 |
| | Pensions (pay-out phase) | 59,3 | | 59,3 | 3.277,80 | | 3.277,80 |
| | Unit/Index-Linked | 31,1 | | 31,1 | 880,3 | | 880,3 |
| Total | | 6.856,70 | 8.630,10 | 15.486,90 | 36.201,90 | 153.648,30 | 189.850,20 |
| YoY change (in %) | | 2.27% | -0.89% | 0.51% | 0.46% | 4.03% | 3.35% |
| Pro-memoria | | Participants (x000) | | | Assets under Management (Mn) | | |
| Pension Plans managed by Insurers | | 3,378.66 | | | 41,178.29 | | |
| YoY change (in %) | | 1.66% | | | 3.91% | | |

Note: Individual life insurance and long-term care insurance are not included in these figures.

** Standing for Plan Individual de Ahorro Sistemático or Regular Individual Saving Plan*

*** Standing for "Seguro Individual de Ahorro a Largo Plazo" or Individual Long Term Saving Insurance*

**** Life and Term Annuities, including tax-qualified asset's conversions into annuities in the year*

Source: own computations based on UNESPA (<https://unespa-web.s3.amazonaws.com/main-files/uploads/2020/02/NdP-Seguro-de-vida-Q4-2019-FINAL.pdf>)



Table ES8 above also shows indeed a large variety of retirement and pension vehicles offered by the insurance industry and, it can also be seen, that even as they share an insurance feature that makes them quite different from the purely financial vehicles (as they try to cope with death uncertainty through actuarial techniques) each vehicle responds to a different need by consumers concerning their risk profiles, fiscal rules applying to them, etc.

It is clear that the most popular insured retirement products are Deferred Capitals and Annuities, commanding, respectively, 2.6 and 1.9 million insured persons and totalling technical reserves of € 44.7 Bn and € 65.8 Bn, respectively. Many other products that emerged when the standard Pension Plans were regulated in Spain have a rather moderate presence in the insurance industry. In what follows, some of these different products are explained.

Insured Retirement Plans (PPA)

The Insured Retirement Plans (PPA or *Planes de Previsión Asegurados*, in Spanish) are the insured counterpart of standard Pension Plans previously discussed. Among all insured retirement (or retirement-like) vehicles, PPAs are the most proper for this purpose. Their features concerning taxes, redeemability or other are thoroughly the same as with Pension Plans, but for the fact that interest and principal risks are taken by the insurer, at a cost naturally. In particular, a known and certain interest rate is attached to this product. Once retirement happens, the insured person gets a life annuity (a lump-sum is also a popular option). In a way, technically at least, a PPA is basically a pure deferred annuity. Table ES8 shows that, by December 2019, 0.93 million individuals had adopted this Pillar III retirement vehicle, with total technical reserves amounting to 12.3 bn, a mere 13.2 thousand euros per account.

Company Retirement Plans (PPSE)

These are employer-sponsored Group Insurance aiming a complementary retirement benefits, basically a deferred capital product. They are the insured counterpart to the employer-sponsored Pension Plans (Pillar II), albeit more flexible as they adapt better to SMEs conditions. Table ES8 shows that, as of December 2019, only 34.3 thousand workers have been opted in this Pillar II retirement vehicle by their employers, with technical reserves amounting to 348.5 Mn, again a mere 10.2 thousand euros per account.

Regular Individual Savings Plan (PIAS)

Regular Individual Saving Plans (PIAS or *Planes Individuales de Ahorro Sistemático*, in Spanish) are, again, insured saving plans to which individuals can contribute regularly. If certain conditions are met and savings are not removed after a long period of time, accumulated assets must be converted into a permanent income at very low (and decreasing with age) fiscal cost (on interest or capital gains). Table ES8 shows that, as of December 2019, almost 1.4 million individuals have adopted this Pillar III retirement vehicle, with technical reserves amounting to 14.5 bn, or 10.4 thousand euros per account.

Long-Term Individual Saving Plans (SIALP)

Long-term Individual Saving Plans (SIALP or *Seguro Individual de Ahorro a Largo Plazo*, in Spanish) are PIAS-like retirement vehicles. The major difference with a PIAS being that they can be cashed both as



an annuity or as a lump-sum. As of December 2019, 611.6 thousand individuals have this product totaling € 4.3 bn technical reserves, barely € 7 thousand euros per account.

Charges

Since inception (19987/1988), the current Pension Plans market in Spain has been characterized by large average charges. This said, there are three aspects that need to be dealt with right away: (i) the market has always been and continues to be very small and this entails a heavy toll on efficiency, (ii) Pillar II schemes bear internationally competitive low fees that, given market size, must be cross subsidized with significantly higher fees charged in Pillar III markets, and (iii) fees have been decreasing in the last years due to regulatory pressure on companies.

Data discussed below is eloquent enough about the consequences for savers that stem out of these market conditions. Average fees²⁵² have been oscillating in the last decade at around 1% of assets under management. Using this figure as a proxy for Total Expense Ratio (TER or total cost ratio for investors), and under basic assumptions, typical investors could bear a Reduction in Yield (RIY) rate of 13%.²⁵³

As for the insurance part of the retirement market, little is known referring to data directly usable for harmonized comparison, although all relevant data are available in raw from the regulators and the industry itself. The large variety of retirement and pension products available in this market segment, and their varied features complicates enormously the task, however. The work to be done in order to produce directly comparable data cannot be made in the context of this chapter and any initiative to reach that goal should be most welcomed.

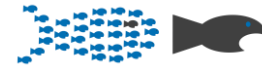
Even if regulation itself accounts for part of the extra burden that management and depositary fees pose on consumers, the fact is that too large a chain of intermediaries (managers, commissioners and retailers) end up by adding to the overall cost for the participant or the insured. Recently, and regularly, management and depositary fees have been limited by law.²⁵⁴ These regulations however allow variable fees to be set based on yields, within certain limits.

Graph ES4 and Table ES9 and below show the evolution of effective average fees charged on Pillars II and III Pension Funds to Plan participants by both managers and depositaries. Note that to management fees, as said before, some retailing fees (not known) may also be added.

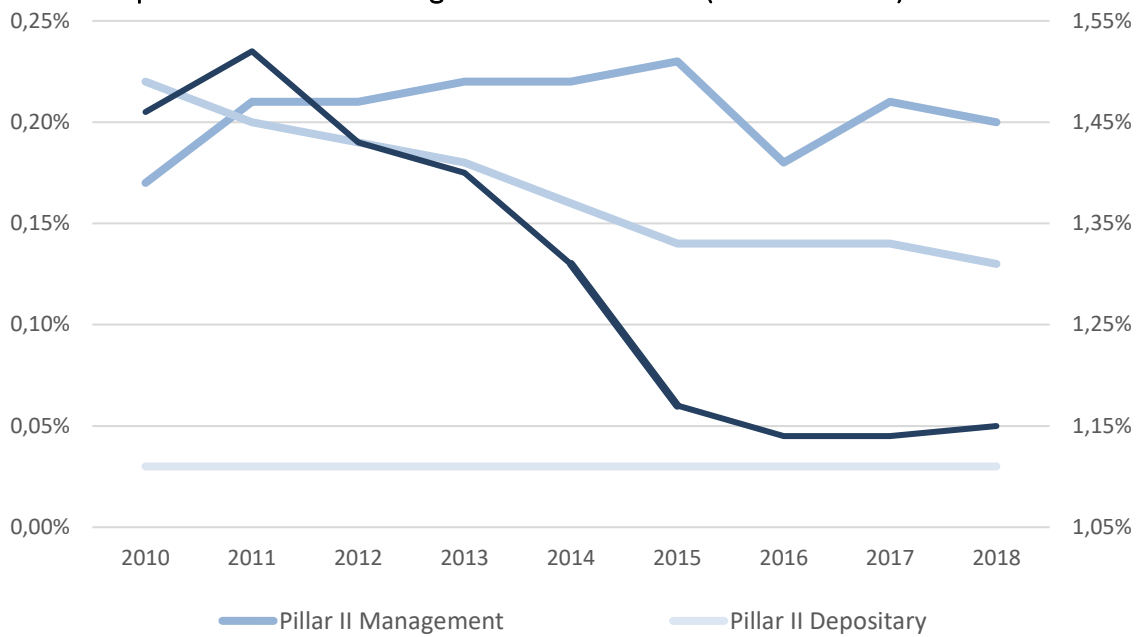
²⁵² Management and depositary, all classes combined, weighted by market shares

²⁵³ It is assumed that a typical investor increases his or her annual savings in retirement assets at 2% per year, for 35 years; total annual fees (TER) are 1% of AuM at the end of the year. Gross yields of AuM are assumed at 2% per year. Total Expenses (TE) from previous year are detracted from AuM for the next year. RIY ratio is then computed as accumulated TC at year 35 as a percentage of gross AuM at year 35.

²⁵⁴ Royal Decree 304/2004 established specific limits to management and depositary fees. Royal Decree 681/2014 modified this. More recently, Royal Decree 62/2018, set maximum management fees including fees paid to non managing retailers, depending on the asset classes under management at 0.85% for mostly bonds funds, 1.3% for mixed bonds funds and 1.5% for the rest of funds. Maximum depositary fees were set at 0.2%.



Graph ES10. Effective charges in Pension Funds (as a % of AuM) 2010-2018



Source: Table ES9 below.

The most salient feature of the data in the graph is clearly and immediately appreciated at first sight: Pillar II assets (employer-sponsored pension plans) are considerably cheaper to manage (up to almost 6 times cheaper in recent years) whereas depositary fees, that are comparatively lower in both pillars, continue to be 4 times cheaper in Pillar II as compared to Pillar III. The question remains whether just market scale grants such a large difference and, ultimately, large fees (Table ES9).

| Table ES11. Effective charges in Pension Funds (as a % of AuM) | | | | | | | | | | |
|--|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Pillar | Function | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Pillar II | Management | 0.17% | 0.21% | 0.21% | 0.22% | 0.22% | 0.23% | 0.18% | 0.21% | 0.20% |
| | Depositary | 0.03% | 0.03% | 0.03% | 0.03% | 0.03% | 0.03% | 0.03% | 0.03% | 0.03% |
| Pillar III | Management | 1.46% | 1.52% | 1.43% | 1.40% | 1.31% | 1.17% | 1.14% | 1.14% | 1.15% |
| | Depositary | 0.22% | 0.20% | 0.19% | 0.18% | 0.16% | 0.14% | 0.14% | 0.14% | 0.13% |

Source: DGFSP

Within this context, industry transparency requirements at the international scale are starting to provide a framework within which generate a comprehensive understanding and common ground for comparison about the cost and the advantages of complementary retirement vehicles as these solutions became increasingly necessary to help cushion the hard landing of Social Security benefits everywhere.

All Pillar III vehicle providers are obliged to advance a Key Information Document (KID) package to their customers. These KID packages are firmly rooted on PRIIPS regulation that is not binding however for pension products. Pillar II products are not obliged to advance a KID package to their customers, albeit they must of course provide information akin to this package.

Taxation

With charges and returns (*vid infra*) taxation is one of the hottest issues around retirement products. But it shouldn't be, think twice. Income must be taxed, this everyone admits, but not double taxed. This



is unjust and inefficient. One could also admit easily that labor and capital income can be differently taxed, or that tax bases can convey certain policy objectives. But definitely not that the same income concept is taxed twice.

In the absence of ordinary tax deductibility for retirement vehicles, as practiced by virtually all countries, that part of income saved for years for future retirement, and the interest earned on that income, would be taxed twice.

This treatment is often referred to as “tax incentives” or “tax gifts”, and also questioned by certain social or political agents as unjust or regressive tax benefits. Nothing less true. The conventional tax treatment to which pension assets and products are subject is generally and admittedly the best way to avoid what otherwise would be a case of unacceptable double taxation of personal income.

The pensions industry must be clear and strong on this if their members want to be perceived as truly looking after the best interest of those who entrust their savings to them. As much as they must be clear and strong, by the way, on transparency, open competition and best efforts concerning charges and returns.

Normally, taxing retirement vehicles means exempting income as it is saved (as well as interest earned on this income) and taxing benefits as they are cashed. That’s the “Exempt-Exempt-Tax” or EET paradigm most commonly used in the world. Another way to avoid double taxing of income is to tax contributions and interest and make benefits tax exempt (TTE), but this paradigm is rarely used. In truth, neither pure extreme is actually being used as all countries have some limits to deductibility and also some limits to benefits exemption.

Normally too, tax allowances at accumulation of savings are justified because these retirement savings can’t be cashed or converted into non-retirement savings before retirement age. Yes, this a legitimate way to justify EET schemes. But again, tax authorities only have to claim unpaid taxes back when savings conversion occurs instead of forcing savers to stay fixed on their products.

Taxing retirement savings and benefits remains in the literature and in practice a much debated issue, just because we don’t realize that the best and most fair taxing schedule for these bases should be exactly the same tax regime that Social Security social contributions and benefits enjoy, that is full (or almost full) EET.

Even if standard Pension Plans set the tax norm for many other retirement vehicles, there remain important differences, especially at the pay-out phase, among the pension plans and insurance vehicles. Some of these peculiarities are analyzed below.

Pension Plans

The fact that tax exemptions during accumulation are important is well reflected in the Spanish market as most of the payments into these vehicles happen at the end of the year when investors seek to improve their tax bills by deciding up to what limit bring their contributions to retirement saving plans. This has contributed to locate the only and most important attractive of saving for retirement into the tax treatment of this kind of investments. The limit up to which income saved for retirement under a Pension Plan is tax exempt in Spain is currently € 8,000.



Table ES12. Personal Income Tax scale and rates - Central Government*

| Tax Base from... | To | Nominal Marginal Rates** |
|------------------|----------|--------------------------|
| € 0 | € 12,450 | 9.50% |
| € 12,450 | € 20,200 | 12.00% |
| € 20,200 | € 35,200 | 15.00% |
| € 35,200 | € 35,200 | 18.50% |
| € 60,000 | - | 22.50% |

* Spain has several government levels and PIT is roughly split in half between Central and Regional Governments (See Table ES11).

** Only Central Government, only labor income. Interests and dividends are thoroughly taxed at 19%. Effective rates are sensibly lower.

Source: Agencia Tributaria

When withdrawal of benefits at retirement occurs, there are three possible cases:

- (i) Retirement income is retrieved as a lump-sum: after a deduction of 40% from this sum the rest is taxed at the current marginal personal income tax rate. No distinction is made between principal and interest earned during accumulation phase, despite the fact that Spain has a dual personal income tax.
- (ii) Retirement income is retrieved as a life (or term) annuity: this income is considered as wages or labour income and taxed at the current marginal personal income tax rate, again with no distinction whatsoever between principal and interest part of pension benefits.
- (iii) Retirement income is retrieved both as a lump-sum and an annuity (“mixed income”): both tax regimes apply, each of them to the corresponding part of the retirement benefit in the first year.

This said, depending on where each retiree has his or her fiscal residence, the tax bill may change. Spain has its Personal Income Tax scheme split between the Central Government and its seventeen Autonomous Regions. While the Central Government sub scheme applies uniformly for the whole nation, the regional sub schemes have different income brackets and marginal tax schedules, as it is shown in Tables ES10 and ES11.



Table ES13. Personal Income Tax - Autonomous Regions

| Region* | Top Income Bracket (ordered) | Top Marginal Tax Rate beyond Top Income Bracket |
|---|------------------------------|---|
| Madrid | 53,407.20 | 21.00% |
| Castila y León | 53,407.20 | 21.50% |
| Catilla-La Mancha, Galicia, Ceuta y Melilla | 60,000.00 | 22.50% |
| Murcia | 60,000.00 | 23.30% |
| Canarias | 90,000.00 | 24.00% |
| Cantabria | 90,000.00 | 25.50% |
| Extremadura | 120,000.00 | 25.00% |
| Andalucía | 120,000.00 | 24.90% |
| La Rioja, C. Valenciana | 120,000.00 | 25.50% |
| Aragón | 150,000.00 | 25.00% |
| I. Balears | 175,000.00 | 25.00% |
| P. de Asturias, Cataluña | 175,000.00 | 25.50% |

* Two historical Autonomous Regions (Navarra and The Basque Country) are exempted from the Common Tax Regime. Two Autonomous Towns are included (Ceuta and Melilla)

Source: Agencia Tributaria

Life insurance products

Since 1999 premiums paid into insured saving are not tax exempt. Retirement capitals or income from these vehicles are not taxed except in its interest and capital gains part. These capital gains are integrated into the savings tax base and subject to a tax rate schedule of 19% up to the first € 6,000, 21% from € 6,000 to € 50,000 and 23% beyond € 50,000. When benefits are paid as annuities, the tax rate depends on the life of the annuity and the age of the annuitant when payments began. In case of death of the annuitant, with remaining capital reverting to them, heirs will have to pay inheritance tax, which may vary considerably depending on the region where they have their fiscal residence, as this tax lies within the regional jurisdiction.

Insured Retirement Plans (PPA)

This vehicle has a similar tax treatment as standard Pension Plans, Contributions to these plans are tax exempted up to an annual limit of € 8,000 and benefits are taxed as labor income taking into account the recipients age at retirement. Capital gains are subject to a dual income tax scheme. The tax regime of this vehicle thus can be said to be of the EET kind.

Regular Individual Savings Plan (PIAS)

PIAS are a more flexible vehicle than Pension Plans and PPAs, also from the point of view of taxation. As a retirement saving vehicle, annual contributions to it are fully tax deductible up to a limit of € 8,000 per year, as with Pension Plans and PPAs. There is also a global limit for this type of saving plan: € 240,000. Savers can only own one PIAS. At the pay-out phase, if income is received as a lump-sum, taxation intervenes as usual through the dual income tax for labour income (principal) and capital gains income (returns).

But if retirement income is retrieved as a life annuity, capital gains are 100% exempt and principal is taxed according to a rapidly diminishing rates schedule. PIAS can be cashed in well before ordinary



retirement age, but when cashed after age 65 the tax rate is 20% falling to 8% when cashed after age 70.

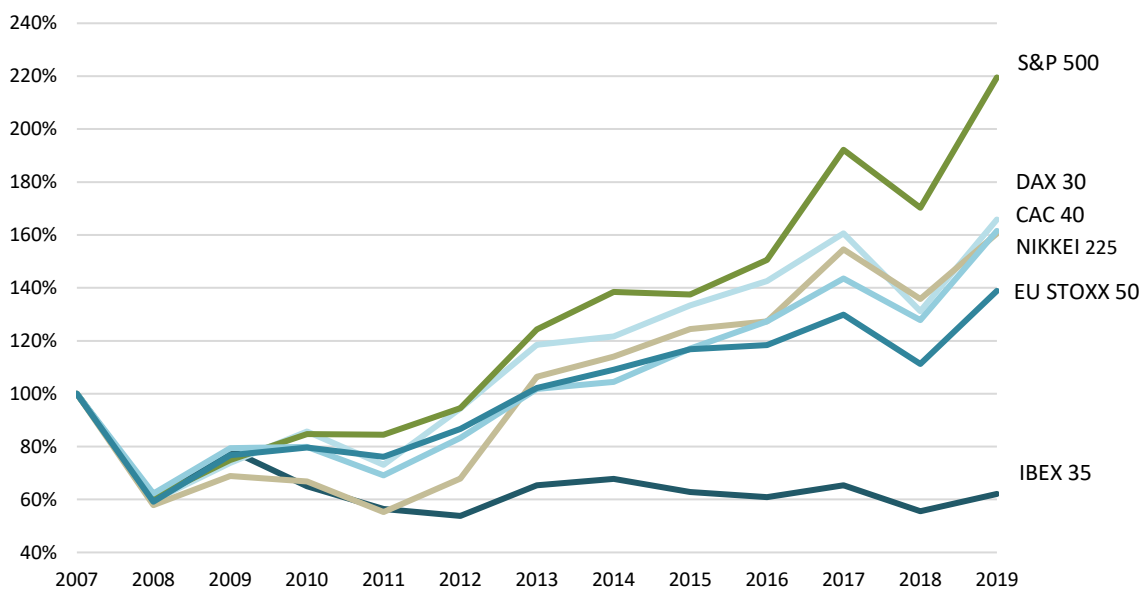
The € 240,000 limit for total saving under a PIAS is relevant here for, as from 2015, individuals aged 65 or more who liquidate any asset they may own (financial, real estate, art works, etc) to buy a life annuity have related capital gains fully exempted from the dual income tax.

Returns

Spanish capital and debt markets returns

In 2008 major world stock indexes suffered a 40% loss with respect to the previous year. That was a catastrophe. All asset classes linked to stock suffered accordingly. Hundreds of thousands of workers in advanced countries had to postpone their retirement because these losses would mark the value of their retirement incomes for the rest of their lives nearing them to poverty at old age. Most of these stock markets recovered the 2007 line by 2012-2013, But the Spanish stock market has barely recovered the 2008 bottom-line. This can be seen in Graph ES5 below.

Graph ES14. Major Stock Markets performance 2007-2019



Sources: BME

Happily enough (unfortunately), Spanish workers have their retirement savings well away from the stock market. In fact, Spanish workers have no (relevant) retirement assets at all as we have been arguing so far. Spanish workers have no relevant retirement savings because they have a rather large (expected) Social Security implicit wealth as pension benefits replace labour income above 80% (OECD).

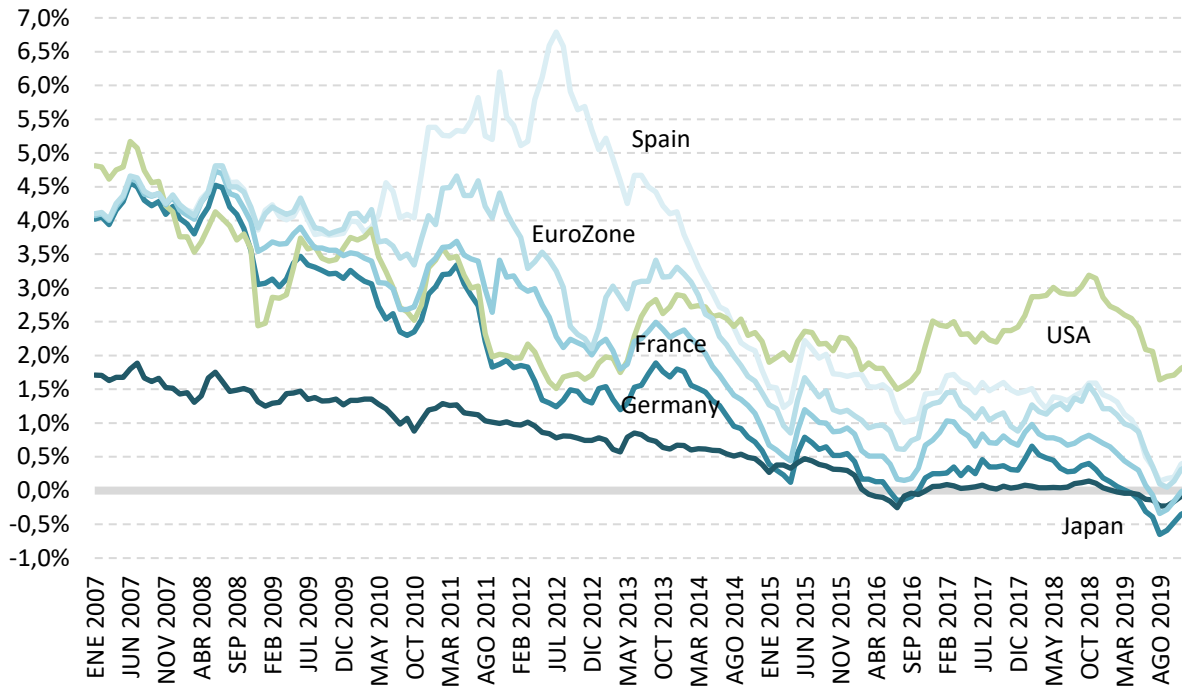
If 2018 was a bad year for stocks return, 2019 was exceedingly better so that most exchanges overshooted above 2017 levels and taking most markets to all time highs since the beginning of the financial crisis. In the period 2007-2019 the S&P 500, for instance, grew by around 120% (a cumulative



annual rate of 6.8%), or a 66% in the case of the German DAX 30. The Spanish IBEX 35, in 2019, displayed a dismal 62% of its 2007 value.

Sovereign debt markets in advanced countries, on the other hand, haven't been less turbulent. Provoking real roller coaster effects in associated assets and savings. Spanish 10y bond yields, in particular, reached intervention levels in 2012, at 679 bpts in August. Only a financial sector rescue package saved the sovereign market from Brussels intervention, at a cost naturally. See Graph ES6 below.

Graph ES15. Major Sovereign Bond Yields (10 years) 2007-2018



Source: Banco de España

Since May 2015, the ECB succeeded calming lenders and sovereigns entered into a considerably quieter environment. By mid 2019 European and Japanese 10y bonds reached around 0 or negative levels. Spanish 10y bonds were quoted at 0.14% in September. Only, among advanced economies, Treasury 10y bonds (USA) stood below 2% in late 2019, albeit at historical low levels.

All in all, any retirement vehicle has to be invested in a mix of stocks, debt and monetary assets and the performance of these underlying assets determines the returns of those savings. As for vehicles set in advanced countries, the strong recovery of Stock markets in 2019 and the strong appreciation of bonds has undoubtedly been a blessing provided that management has profited efficiently from these conditions. In Spain, stock and bond markets have performed similarly in 2019, albeit more modestly in what concerns the former.

Retirement assets' performance (standard Pension Funds)

One of the salient features of the Spanish retirement vehicles market is the large variety of solutions marketed and the small size of the overall market, let apart the small significance of some of its



segments. This may seem hard saying, but a way must be found to substantially enlarge the number of workers covered and the size of per account assets and reserves.

So far, as it is shown in the tables below, savings have managed to maintain their purchasing power with few exceptions performing better. Undoubtedly, even if a crude one, the key factor pushing or keeping Spaniards into the complementary retirement savings system is tax deferral (and the locking-in effect it creates), and not as much the real, after fees returns of these assets.

However, all the evidence produced below belongs to the standard Pension Plans system, not to insured retirement vehicles, due to data limitations. All data comes basically from the web site of INVERCO, the Spanish body representing Mutual Investment Institutions and Pension Funds.

Notice, nevertheless, that retirement products insurance comes at an additional cost (with respect to purely financial vehicles) due to the intrinsic nature of both guaranteeing assets' value, on the one hand, and mutualising longevity, on the other. Even if insurers are good performers also in terms of assets management and enjoy the very long-term premiums of the underlying matching assets they invest in, they need to beat the insurance extra cost that these products embody.

Table ES12 contains the basic information concerning Pillars II and III Pension Funds. Returns are labelled "gross", "net" and "real". Gross means before management and depositary fees and commissions (retailing and other transaction costs are disguised here), net means after management and depositary fees and commissions, being nominal returns, and real means after fees and inflation. At first glance, positive net nominal returns dominate the landscape, and even net real returns, with some years at really good returns on assets invested. On historical basis, average cumulative real returns continue to be clearly positive (INVERCO).

2018, however, was a bad year for investments returns of all sorts, particularly the stock market. But returns in 2019 overshooted the 2018 ones. This provided for the best year in the current decade.



Table ES16. Returns of Spanish Pension Funds (before taxes)

| | Pillar II | | | Pillar III | | |
|------|--------------|------------|-----------------|--------------|------------|-----------------|
| | Gross Return | Net Return | Net Real Return | Gross Return | Net Return | Net Real Return |
| 2009 | 9.47% | 9.8% | 8.38% | 10.39% | 8.76% | 7.86% |
| 2010 | 2.21% | 2.01% | -0.86% | 0.25% | -1.43% | -4.30% |
| 2011 | 0.24% | 0.00% | -2.35% | 0.50% | -1.22% | -3.57% |
| 2012 | 8.28% | 8.04% | 5.03% | 7.29% | 5.67% | 2.66% |
| 2013 | 7.95% | 7.70% | 7.39% | 10.30% | 8.72% | 8.41% |
| 2014 | 7.39% | 7.14% | 8.27% | 7.77% | 6.30% | 7.43% |
| 2015 | 3.14% | 2.88% | 3.01% | 2.52% | 1.21% | 1.34% |
| 2016 | 2.95% | 2.74% | 1.33% | 2.97% | 1.69% | 0.28% |
| 2017 | 3.42% | 3.19% | 1.97% | 3.85% | 2.56% | 1.34% |
| 2018 | -2.96% | -3.19% | -4.42% | -3.20% | -4.48% | -5.71% |
| 2019 | 8.97% | 8.74% | 7.89% | 10.09% | 8.81% | 7.96% |

Note: Gross Returns are returns before management and depositary charges, Real Returns are computed using the Spanish HCPI published by Eurostat. See Table ES13 for cumulative and average returns

Source: INVERCO

A more vivid landscape emerges when overall returns are followed through time with the help of average cumulative returns computations as presented in Table ES13. This time overall returns for the entire Pension Funds' system are presented and the cumulative perspective is based in 2000. Average cumulative returns at any particular year are thus for the period "2000-that-particular-year".²⁵⁵

In the period 2000-2019, cumulative nominal returns for Pension Funds reached a 165.01 level (base 100 in 2000) and an annual cumulative nominal return of 2.51%. This return is net (after charges) for savers, but inflation must be taken into account. When this is done, cumulative real returns are slightly above the base (107.91 in 2000) so that nominal returns just helped to match inflation since 2000 to present. The corresponding average cumulative real rate is thus 0.43% for the period. Note that inflation has been negative in four years in the period and moderate over the rest of years. Actually, at an average rate of exactly 2.34%, that is the average net nominal rate of return in the period previously discussed.

²⁵⁵ Average cumulative returns for the last 3, 5, 10 or 15 years at 2019 or at any other year can be easily computed using the cumulative return data in the corresponding column in Table ES13.

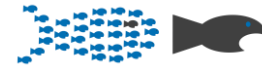


Table ES17. Returns of Spanish Pension Funds (after charges and before taxes)

| | Nominal Returns* | | | Real Returns*, ** | | | Harmonised Consumer Price Index |
|------|------------------|-------------|--------------------|-------------------|-------------|--------------------|---------------------------------|
| | YoY Return | Cum. Return | Average since 2000 | YoY Return | Cum. Return | Average since 2000 | |
| 2000 | 2.95% | 102.95 | 2.95% | -1.05% | 98.95 | -1.05% | 4.00% |
| 2001 | -1.64% | 101.26 | 0.63% | -4.15% | 94.84 | -2.62% | 2.51% |
| 2002 | -4.40% | 96.81 | -1.08% | -8.41% | 86.86 | -4.59% | 4.01% |
| 2003 | 5.79% | 102.41 | 0.60% | 3.10% | 89.55 | -2.72% | 2.69% |
| 2004 | 4.46% | 106.98 | 1.36% | 1.18% | 90.61 | -1.95% | 3.28% |
| 2005 | 7.22% | 114.70 | 2.31% | 3.50% | 93.78 | -1.06% | 3.72% |
| 2006 | 5.23% | 120.70 | 2.72% | 2.51% | 96.14 | -0.56% | 2.72% |
| 2007 | 2.18% | 123.33 | 2.66% | -2.10% | 94.11 | -0.76% | 4.28% |
| 2008 | -8.05% | 113.40 | 1.41% | -9.50% | 85.17 | -1.77% | 1.45% |
| 2009 | 7.70% | 122.14 | 2.02% | 6.80% | 90.96 | -0.94% | 0.90% |
| 2010 | -0.13% | 121.98 | 1.82% | -3.00% | 88.24 | -1.13% | 2.87% |
| 2011 | -0.76% | 121.05 | 1.60% | -3.11% | 85.50 | -1.30% | 2.35% |
| 2012 | 6.59% | 129.03 | 1.98% | 3.58% | 88.56 | -0.93% | 3.01% |
| 2013 | 8.36% | 139.81 | 2.42% | 8.05% | 95.69 | -0.31% | 0.31% |
| 2014 | 6.91% | 149.48 | 2.72% | 8.04% | 103.39 | 0.22% | -1.13% |
| 2015 | 1.78% | 152.14 | 2.66% | 1.91% | 105.37 | 0.33% | -0.13% |
| 2016 | 2.04% | 155.24 | 2.62% | 0.63% | 106.03 | 0.35% | 1.41% |
| 2017 | 2.77% | 159.54 | 2.63% | 1.55% | 107.67 | 0.41% | 1.22% |
| 2018 | -4.08% | 153.03 | 2.26% | -5.31% | 101.96 | 0.10% | 1.23% |
| 2019 | 8.80% | 166.50 | 2.58% | 7.95% | 110.07 | 0.48% | 0.85% |

* Cumulative and average returns (since 2000) are non ewighted.

** Real Returns are computed using the Spanish HCPI published by Eurostat

Source: INVERCO

The overall picture shown in the table above, however, hides a much richer detail of returns by type of retirement scheme and the asset classes these schemes are invested in. Tables ES18 to ES16 below offer this detail.

Pillar II Pension Funds are much cheaper to manage, as seen before, and obtain a larger net nominal return as seen in Table ES14. Particularly those of the associate segment, a minor one, nevertheless. Spanish Pension Funds' average cumulative nominal returns were 2,45%, 3.21% and 3.01% over the 2000-2019 period for, respectively, individual, associate and employer-sponsored plans. A 65,01%, 84.92% and 75.72% cumulative return, respectively, over the entire period. The overall return rate was 2.67%. Once inflation adjusted, average real returns managed to stay slightly above inflation, namely 0.18%, 1.01% and 0.73% for, respectively individual, associate and employer-sponsored plans and 0.40% for the standard Pension Plans system.



Table ES18. Returns of Spanish Pillar II Schemes (after charges and before taxes)

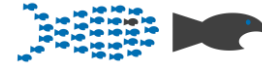
| | Associate Plans | | Occupational Plans | |
|--------------------------|-----------------|---------------|--------------------|---------------|
| | Nominal | Real | Nominal | Real |
| 2000 | 0.93% | -3.07% | -3.62% | -7.62% |
| 2001 | 0.10% | -2.41% | 0.64% | -1.87% |
| 2002 | -3.84% | -7.85% | -3.72% | -7.73% |
| 2003 | 5.61% | 2.92% | 6.73% | 4.04% |
| 2004 | 6.56% | 3.28% | 5.52% | 2.24% |
| 2005 | 9.49% | 5.77% | 8.39% | 4.67% |
| 2006 | 8.16% | 5.44% | 5.36% | 2.64% |
| 2007 | 3.05% | -1.23% | 2.44% | -1.84% |
| 2008 | -11.10% | -12.55% | -10.50% | -11.95% |
| 2009 | 9.23% | 8.33% | 9.28% | 8.38% |
| 2010 | 0.95% | -1.92% | 2.01% | -0.86% |
| 2011 | -1.11% | -3.46% | 0.00% | -2.35% |
| 2012 | 6.94% | 3.93% | 8.04% | 5.03% |
| 2013 | 9.51% | 9.20% | 7.70% | 7.39% |
| 2014 | 6.88% | 8.01% | 7.14% | 8.27% |
| 2015 | 2.57% | 2.70% | 2.88% | 3.01% |
| 2016 | 2.45% | 1.04% | 2.74% | 1.33% |
| 2017 | 2.99% | 1.77% | 3.19% | 1.97% |
| 2018 | -4.32% | -5.55% | -3.19% | -4.42% |
| 2019 | 10.31% | 9.46% | 8.74% | 7.89% |
| Cum. 2000-2019 | 84.92% | 22.54% | 75.72% | 16.20% |
| Average 2000-2019 | 3.12% | 1.02% | 2.86% | 0.75% |

Source: INVERCO

Given the performance of Pillar II pension funds and the overall system performance just discussed, the conclusion emerges that Pillar III funds have performed in the 2000-2019 period very slightly above inflation, namely at 0.18%.

Being this, indeed, the case, it is interesting to look at the asset classes these funds are invested in as these schemes' managers have more flexibility than occupational schemes' managers, rather more constrained by social partners' presence in control boards of these Plans.

Table ES15 shows returns of debt-based Individual Funds (Pillar III). Due to higher charges (already netted out in data), net returns are sensibly poorer to those of occupational funds, were charges are typically five to six times lower. After inflation adjustment, real returns show a dominant negative pattern that, in averaged cumulative terms over the 2000-2019 period, translate into real investment returns that range between -0.29% for Long-term debt-based funds to -1.22% for Mixed debt-based funds. Average nominal returns cannot beat the 1.85% mark in the best performing class the Long-term debt-based category. Before charges, however, returns for Pillar III funds' investments aren't that different from returns for Pillar II funds' investments.



| Table ES19. Returns of Individual Pension Plans - (After charges and before tax) | | | | | | |
|--|-----------------|---------------|----------------|---------------|---------------|---------------|
| | Short-Term Debt | | Long-Term Debt | | Mixed Debt | |
| | Nominal | Real | Nominal | Real | Nominal | Real |
| 2000 | 3.83% | -0.17% | 0.68% | -3.32% | -2.20% | -6.20% |
| 2001 | 3.64% | 1.13% | 0.62% | -1.89% | -2.41% | -4.92% |
| 2002 | 3.83% | -0.18% | 0.73% | -3.28% | -5.16% | -9.17% |
| 2003 | 1.95% | -0.74% | 2.62% | -0.07% | 3.92% | 1.23% |
| 2004 | 1.77% | -1.51% | 1.92% | -1.36% | 3.16% | -0.12% |
| 2005 | 1.04% | -2.68% | 1.78% | -1.94% | 5.33% | 1.61% |
| 2006 | 1.26% | -1.46% | 0.34% | -2.38% | 3.58% | 0.86% |
| 2007 | 1.94% | -2.34% | 0.75% | -3.53% | 1.32% | -2.96% |
| 2008 | 2.13% | 0.68% | 2.03% | 0.58% | -8.79% | -10.24% |
| 2009 | 1.80% | 0.90% | 3.96% | 3.06% | 6.05% | 5.15% |
| 2010 | 0.64% | -2.23% | 0.47% | -2.40% | -1.54% | -4.41% |
| 2011 | 1.38% | -0.97% | 1.39% | -0.96% | -2.21% | -4.56% |
| 2012 | 3.47% | 0.46% | 4.79% | 1.78% | 5.41% | 2.40% |
| 2013 | 2.08% | 1.77% | 4.66% | 4.35% | 6.11% | 5.80% |
| 2014 | 1.37% | 2.50% | 8.93% | 10.06% | 3.61% | 4.74% |
| 2015 | -0.20% | -0.07% | -0.46% | -0.33% | 0.78% | 0.91% |
| 2016 | 0.20% | -1.21% | 1.25% | -0.16% | 0.71% | -0.70% |
| 2017 | -0.11% | -1.33% | 0.11% | -1.11% | 1.50% | 0.28% |
| 2018 | -1.79% | -3.02% | -2.01% | -3.24% | -4.08% | -5.31% |
| 2019 | 0.65% | -0.20% | 2.91% | 2.06% | 5.14% | 4.29% |
| Cum. 2000-2019 | 135.59 | 89.68 | 144.23 | 95.06 | 120.28 | 78.99 |
| Average 2000-2019 | 1.53% | -0.54% | 1.85% | -0.25% | 0.93% | -1.17% |

Source: INVERCO

As for Pillar III funds mostly invested in stock, Table ES16 contains further and final evidence telling us that by no means returns for this category can be said to be better than those of debt-based investments. Indeed, average real returns to mostly-stock-based investments, as shown in the table, lie around the -1.30% threshold on average over the 2000-2019 period. Paradoxically, guaranteed funds, despite being the option of more conservative savers manage to obtain a healthy 1.19% real return in the last two decades, a 3.32% nominal return and a cumulative 92.3% nominal return over the entire period.



Table ES20. Returns of Individual Pension Plans - (After charges and before tax)

| | Stocks Mixed | | Stocks | | Guaranteed | |
|-------------------|--------------|---------|---------|---------|------------|--------|
| | Nominal | Real | Nominal | Real | Nominal | Real |
| 2000 | -4,97% | -8.97% | -10.60% | -14.60% | 9.22% | 5.22% |
| 2001 | -7,73% | -10.24% | -16.30% | -18.81% | 0.35% | -2.16% |
| 2002 | -17,20% | -21.21% | -30.10% | -34.11% | 5.04% | 1.03% |
| 2003 | 8,70% | 6.01% | 16.18% | 13.49% | 5.67% | 2.98% |
| 2004 | 5,60% | 2.32% | 8.88% | 5.60% | 4.66% | 1.38% |
| 2005 | 12,16% | 8.44% | 18.73% | 15.01% | 4.64% | 0.92% |
| 2006 | 10,09% | 7.37% | 18.30% | 15.58% | 1.44% | -1.28% |
| 2007 | 2,96% | -1.32% | 3.93% | -0.35% | 1.48% | -2.80% |
| 2008 | -23,80% | -25.25% | -38.40% | -39.85% | 0.68% | -0.77% |
| 2009 | 14,21% | 13.31% | 27.20% | 26.30% | 3.77% | 2.87% |
| 2010 | -0,82% | -3.69% | 1.63% | -1.24% | -3.96% | -6.83% |
| 2011 | -7,01% | -9.36% | -10.40% | -12.75% | 1.15% | -1.20% |
| 2012 | 8,62% | 5.61% | 10.43% | 7.42% | 5.48% | 2.47% |
| 2013 | 12,51% | 12.20% | 22.19% | 21.88% | 9.41% | 9.10% |
| 2014 | 4,77% | 5.90% | 7.63% | 8.76% | 11.37% | 12.50% |
| 2015 | 2,50% | 2.63% | 5.58% | 5.71% | 0.27% | 0.40% |
| 2016 | 2,70% | 1.29% | 4.34% | 2.93% | 2.12% | 0.71% |
| 2017 | 4,54% | 3.32% | 8.83% | 7.61% | 0.41% | -0.81% |
| 2018 | -6,55% | -7.78% | -10.10% | -11.33% | 0.41% | -0.82% |
| 2019 | 12,17% | 11.32% | 23.59% | 22.74% | 4.12% | 3.27% |
| Cum. 2000-2019 | 125,60 | 82.09 | 133.32 | 86.16 | 192.31 | 127.67 |
| Average 2000-2019 | 1,15% | -0.98% | 1.45% | -0.74% | 3.32% | 1.23% |

Source: INVERCO

Investment strategies

Returns discussed in the previous section are indeed varied. Their diversity, of course, is rooted in a couple of basic factors: (i) the assets in which retirement funds are invested in and (ii) the strategies managers deploy, given the portfolio, in order to get a high return for their customers. In general, few facts can be established concerning the data described above:

- For the 2000-2019 period, overall nominal (after charges) returns for Pillars II and III pension funds combined have been 2.67% and real returns have been 0.40%, nominal and real respectively, that is, a 227 basis points difference given to inflation.
- In the last decade (20010-2019), for Pillar II pension funds, with (unweighted average) gross nominal returns of 4.64%, net nominal returns of 4.41% and net real returns of 3.29%, barely 23 basis points of assets under management have been given to managers and depositaries every year and 112 basis points per year have been given to inflation.
- However, for Pillar III pension funds, in the same period, with (unweighted average) gross real returns of 4,79%, net returns of 3.33% and real returns of 2.20%, a much higher 147 basis points have been given to management and depositary costs and also 112 basis points to inflation. So that charges have been 124 basis points larger for Pillar III vehicles than for Pillar II ones.
- In Spain, up to six different regular portfolios are managed in the pensions industry, ranging from almost-only debt to almost-only stocks and guaranteed funds (that may contain both



bonds and stock in varied proportions). Nominal returns for these broad categories, for the 2000-2019 period (annual, cumulative) have been 1.58%, 1.79% and 0.67% for, respectively, short-term, long-term and mixed debt vehicles and 1.15%, 1.47% and 3.32% for, respectively, mixed stocks, almost-only stocks and guaranteed funds.

As a clue for the reasons behind the widely varied results just discussed, several ones are rather standard irrespective of managers' capacity to beat the most popular categories. Long-term debt yields more than short-term debt, debt is less volatile than stocks and thus less risky and managers' fees are far smaller for Pillar II vehicles than for Pillar III ones. The superior returns of guaranteed funds however defy common sense as these should bear some extra cost due to the guaranty over the principal they embody.

So, to what extent managers have been responsible for the rather mild results that pension funds have obtained in Spain since 2000? To answer this question, one should go fund by fund and manager by manager, which is not the purpose of this chapter²⁵⁶, but few general comments can be made. Guaranteed funds, that accounted for 9.53% of Pillar III total assets in 201 (19,47% in 2010) have been much more profitable for participants than the rest, while assumedly they are more expensive to run due to the insurance coverage they embody. On the other hand, Pillar III vehicles are considerably more charged by management fees than their Pillar II counterparts.

Managers in Spain may be restricted by the rigid asset structure in the established portfolios within Pillar III while being rather freer in what concerns Pillar II vehicles (albeit they may eventually be the same). But the fact is that gross (before charges) returns in these two broad categories differ by a mere 8 basis points average (unweighted) in favour of the former since 2000. The large difference in (net) returns (114 bp, same period) being thus entirely attributable to managing fees, much lower within Pillar II than within Pillar III.

All categories or retirement vehicles in Spain invest rather shyly in foreign assets with only few funds specialising in these assets' class. Superior returns in foreign assets however are by no means assured and this investment strategy has extra costs anyway.

Guaranteed funds' managers, finally, which are considerable more free than their non-guaranteed counterparts (being also the same managers eventually) and, besides, do not have to face internal control bodies like their Pillar II counterparts, seem to have profited from this conditions to obtain larger returns for their vehicles' participants.

Conclusion

Spanish retirement assets, through standard Pension Plans are a mere 9.3% of GDP. Insurance retirement (and retirement-like) assets and provisions, a large array of different products not equally qualified as retirement vehicles, could add another 15.24% GDP points to standard Pension Plans. This, by all standards, is a small pensions industry even if some 9.5 million individuals participate in Pension Plans and some 15.5 million individuals are covered by insurance retirement or quasi-retirement

²⁵⁶ See Fernández y Fernández-Acín (2019). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3319461



vehicles. Assets, technical provisions or other retirement rights barely reach € 10,000 per contract or account making the whole system an insufficient complement, let alone an alternative, to Social Security retirement benefits. Unfortunately, this state of affairs is common to many other European countries.

The retirement vehicles market in Spain, however, has a rich structure of agents, products and retirement schemes that, on paper, should be able to cover the entire work force and beyond. Two tightly related factors prevent this to happen: the pervasive presence of Social Security pensions, whose old-age variety replaces lost labour income at retirement by around 80% and the reluctance of employers to sponsor retirement schemes for their employees because of costs reasons, particularly among SMEs.

This Spanish pension report, apart general descriptions of the landscape, has gone with a certain detail through some of the most salient features of our Pillars II and III arrangements on, basically, three crucial dimensions: (i) charges, (ii) taxes and (iii) returns.

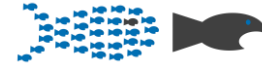
On charges, we find that these are rather large on average, only because the Individual schemes are considerably costlier to manage than occupational ones. The latter keep their charges very low in line with what is observed in other more advanced and developed markets. Actually, thanks to intense regulatory effort in the last few years, charges to the Pillar III schemes have decreased clearly. A continuation of this trend, without a significant increase in market size, continues to look far less affordable.

On taxation, Spain has an EET, tax-deferral regime for retirement assets and incomes, which is the standard in most countries in the world. Spain also has deductability of contributions to retirement vehicles (up to certain limits), an even more followed standard in most countries in the world. This is the right way to avoid unacceptable double taxation. No tax expert would have any doubt about the importance of keeping not only the current deductability of contributions but also tax deferral. Tax deferral empowers the accumulation of pension rights and may also turn to be a good business for thax authorities in the longer run.

This means that the above-mentioned tax treatment of pensions (deductability cum deferral) should not be seen as gifts or favours, but as the best policy that can be performed. Some ceilings to tax deductibility may be too low or even arbitrary. Less understandable is still the push among political and social agents to dismantle deferral and/or deductability. The latter would be even worse.

This said, tax deferral in Spain is seen by most agents participating in the retirement market, be they workers, insured persons or even managers and retailers, as the only reason to buy/sell these products. A cultural trait that may explain, jointly with other reasons discussed in this report, the poor development of Pillars II and III in our country.

On returns, it has to be admitted that performance to date has been barely enough to just beat inflation. A result that many will find poor. Nominal gross returns for more than two thirds of participants are loaded with heavy charges, as mentioned before, but before charges returns are not that terrible. Again, it is taxes that come in to help many participants to reach the conclusion that it is



still worth putting their money into this vehicle, despite the illiquid nature of most of these schemes. Participants' *revanche*, however, takes the form of a strategic game in which they allocate just enough money every year to these investments as to exhaust the fiscal margin, no more. And this just for some of them, as the rest of participants cannot perhaps afford to put more money into their complementary pension pots and/or, perhaps, they think that Social Security will walways be there to give them back retirement benefits with a much higher implicit rate of return (on their contributions) free of management fees and inflation linked.



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