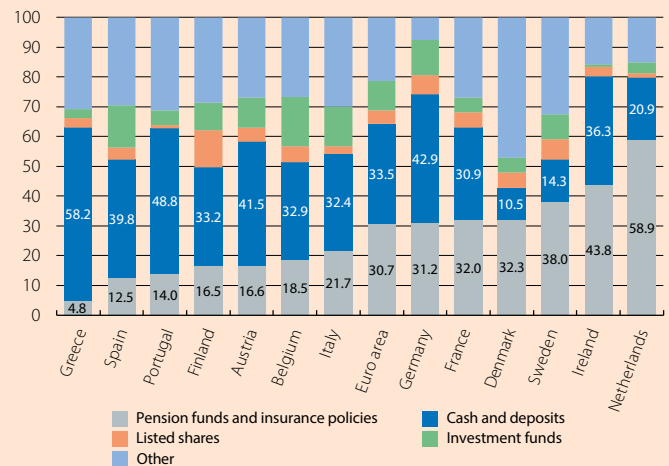


How to manage our cognitive biases to boost private pension savings

The public pension system, a fundamental pillar of the welfare state, presents a set of significant challenges both in Spain and in Europe in a context characterised by the retirement of the baby boom generation. In fact, almost 60% of adult European citizens admit to being concerned about whether they will have enough money in retirement.¹ However, there has not been a significant increase in savings rates in recent years: the savings rate in the euro area in the period 2010-2019 was 12.5% (7.4% in Spain), below the 13.3% of 2000-2009 (9.1% in Spain). Germany is an exception to this trend, as not only is it the euro area economy with the highest savings rate but it has also seen an increase in this rate (17.5% in 2010-2019 versus 16.8% in 2000-2009).

Moreover, the composition of European households' financial savings reflects a conservative profile in most countries, with a clear preference for deposits, which represent between 20% and 40% of total financial assets. In contrast, the proportion of total financial assets made up of savings in private pension funds and retirement insurance policies is rather uneven from country to country and is determined by the replacement rate of public pensions.² It is observed that the higher the replacement rate for public pensions, the lower the percentage of workers with private pension plans: in Denmark and the Netherlands, public replacement rates are among the lowest in the EU, yet between 93% and 100% of working-age individuals have a private pension fund. This is because it is practically mandatory to have this type of savings instrument and, as a result, they contribute around 60% of the total pension which people receive in retirement. On the other hand, in Spain, which has one of the highest public pension replacement rates in Europe (around 74%), it is observed that the percentage of the working-age population with pension plans has barely changed since 2005 and is below 30%.³

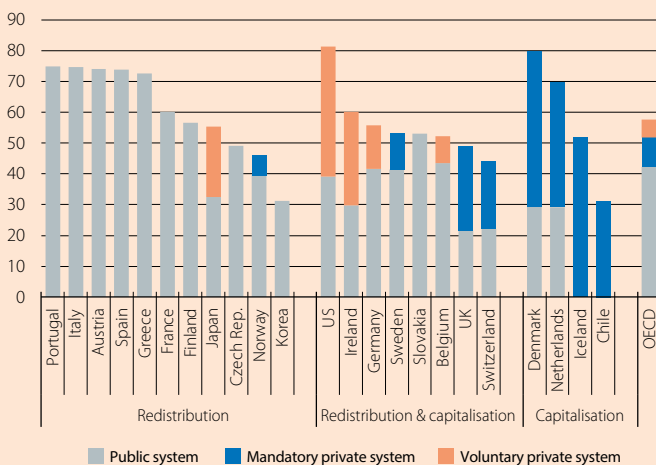
Distribution of households' financial assets
(% of total assets) Q4 2022



Source: CaixaBank Research, based on data from the ECB.

Gross replacement rate for public and private pensions *

Pension to be received as a percentage of the final salary received



Note: * The replacement rate is calculated using the average pension and salary. Gross refers to before taxes.

Source: CaixaBank Research, based on data from the Pensions at a Glance 2021 report, OECD.

What behavioural economics teaches us about how we save

Often, people who can afford to save, even though they are concerned about their financial situation in retirement, fail to allocate a substantial amount of their income to long-term savings products such as pension plans or insurance policies. How can human beings have such contradictory or even irrational behaviour? Precisely because we are human.

Over millions of years our brain evolved into the organ it is today, accounting for just 2.0% of the average weight of a human but 25% of the body's daily energy consumption. Given the challenge involved in finding food for our ancestors, their brains could not remain in a state of concentration all the time, so having a «lazy» brain was a matter of survival. This explains why our brain has two thought mechanisms: the automatic mechanism, installed in the limbic system (impulsive, unconscious...) and the reflective mechanism, located in the prefrontal cortex (planner, controller...).

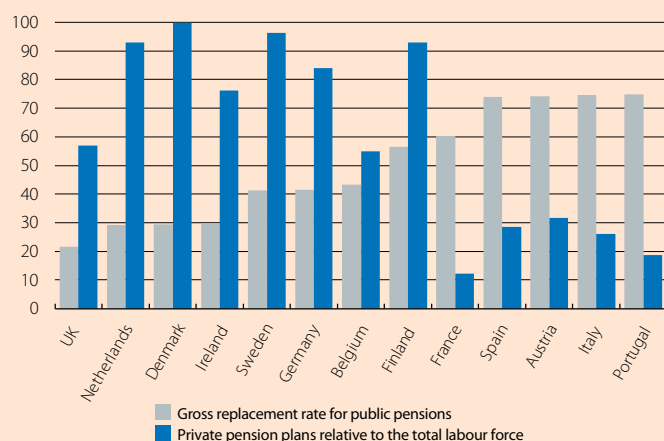
1. According to the European Insurance and Occupational Pensions Authority (EIOPA).
2. The replacement rate shows how much a person's pension received in retirement (whether public or a combination of public and private) represents relative to their final salary.
3. On the other hand, Spaniards tend to start saving late, which limits the savings that can be accumulated for retirement. In Spain, 25% of households where the head of the family is between 35 and 44 years of age have a savings plan or insurance policy, and this percentage rises to almost 39% for those between 45 and 64 years of age (Survey of Household Finances 2020, Bank of Spain).

The automatic mechanism generates a series of biases within us (whether cognitive or emotional) which make it difficult for us to make «rational» decisions. Behavioural economics incorporates this idea that agents do not make their decisions in an entirely rational way (as has traditionally been assumed in economic theory), but rather their decisions are driven by emotions and different types of biases.

Certain biases are decisive when it comes to planning our savings. These include our lack of self-control (too many temptations in the present which prevent us from saving); our aversion to loss (if an investment incurs losses in a particular year, that affects us more than the gains which that same investment had accumulated over the years); the creation of mental accounts (we

Gross replacement rate for public pensions and population with private pensions *

(%)



Source: CaixaBank Research, based on data from the Pensions at a Glance 2021 report, OECD.

organise our money into different categories of expenditure or income, which are not interchangeable), and the status quo and inertia (our preference to remain in the current situation). These biases lead to the erection of three major barriers which prevent us from «activating» our rational brain to think about retirement: we struggle to imagine a time when we will be old and to identify with our future self; we value our present needs much more than our future ones, and we suffer a certain short-sightedness when assessing what our needs will be as we age.

However, these behaviours that are inherent in our human condition can be modified, or adapted, as demonstrated by the findings of behavioural economics which confirm that individuals' decisions are highly conditioned by the way in which the available options are presented to them. It is therefore a question of «taking advantage» of the cognitive biases we have as human beings in order to give individuals a nudge so that their final decision is the right one, while at the

The United Kingdom, a nearby example of how the application of behavioural theories works

same time respecting their freedom of choice, as the available alternatives are neither removed nor blocked.⁴ Behavioural economics therefore presents methods that can be used by government institutions to guide citizens' decisions.⁵

The UK pension system had been mixed since the mid-20th century: it had a public redistribution system and a private pension system. However, the demographic trends and projections were raising warning signs regarding the sustainability of the public pension system. In addition, the private system could not compensate for the situation, since the level of contributions and savings had been gradually declining.

For this reason, in 2008 a new pension law was approved which included the adoption of so-called automatic enrolment. Under this mechanism, employers must automatically enrol their staff in a private pension plan⁶ (so-called company or employment pension plans, which supplement the public pension) provided they meet certain requirements,⁷ although the employee has one month to withdraw from the system. In addition, every three years companies must automatically re-register those workers who had chosen to withdraw. The system was activated in 2012 and gradually implemented across all British companies over the next six years.

The figures confirm the initiative's success: whereas in 2013 only 32% of British private-sector workers had a company pension scheme, by 2019 this figure had risen to 75%. As a result, the total replacement rate for pensions reached 49% in 2021, compared to 22% counting public pensions only. In addition, the volume of assets in private pension plans has more than doubled, amounting to over 120% of GDP in 2021, compared to 73% prior to automatic enrolment.

4. Nudge techniques involve positive reinforcement actions and indirect suggestions to influence behaviour and decision-making. These tools were analysed by the economics Nobel Laureate Richard Thaler and Cass Sunstein in their book «Nudge: Improving Decisions About Health, Wealth, and Happiness» published in 2008.

5. In 2014, Cass Sunstein published his essay «Nudging: A Very Short Guide», which proposed 10 techniques for application in public policy programmes to help individuals make the best decisions.

6. Contributions to these private pension funds are calculated based on the pensionable salary. Since 2019, 3% corresponds to the employer, 4% to the worker and 1% to the state. On the other hand, only 9% of workers exercised their right to withdraw from the system.

7. Employees must be at least 22 years old, earn more than 10,000 pounds a year (a figure that is reviewed annually), work ordinarily in the United Kingdom and not already be a participant in another employment plan.

The titanic challenge of harnessing our biases

The United Kingdom is just one example demonstrating that behavioural economics techniques work. Other success stories can be found in the US with its Save More Tomorrow (SmarT) programme, which managed to boost pension savings for some 15 million people;⁸ in Brazil, which got 80% of public-sector workers to have a supplementary pension fund through automatic enrolment, or in the Netherlands, which raised awareness among workers at the individual level of the status of their public pension by sending them what became known as the «orange envelope».⁹ These cases can serve as inspiration when designing public policies to promote private savings for retirement, although there are no magic formulas and they must be adapted to the idiosyncrasies of each particular culture, because what works in one place may not necessarily work in another.

Ensuring that private company pension plans become widespread is an important first step, but achieving a significant increase in the level of savings depends on the tax incentives offered for doing so – in most countries, contributions made to pension plans can be deducted from one's taxable income, up to a certain limit, and the taxation on this portion of income and its returns is deferred until it is collected in retirement. It also depends on the profile of the affected savers¹⁰ and, as we have seen, on people's cognitive biases. In Spain, where from 2022 the combined tax-deductible contribution limit for workers and employers in company pension schemes is raised to 10,000 euros,¹¹ the available estimates suggest that every euro saved in company plans has historically increased the level of gross private savings by around 66 cents (i.e. a portion is offset by the reduction of other forms of savings, but on balance there is a substantial increase in total savings).¹² An alternative way to boost aggregate savings would be for the state to supplement contributions to individual pension plans. This policy has been followed, for example, in the so-called «Riester plans» in Germany or in the case of Lifetime ISAs in the United Kingdom.¹³ The evidence suggests that supplements to contributions increase the ownership of retirement savings vehicles, but that the majority of taxpayers fail to make any contributions despite the incentive.¹⁴ Once again, we come face-to-face with human irrationality, dear Sancho: as human beings we struggle to see the tax benefits of saving for retirement, unless someone explains them to us well.¹⁵

Rita Sánchez Soliva

8. See R.H. Thaler and S. Benartzi (2001), «Save More Tomorrow: Using Behavioral Economics to Increase Employee Saving», The University of Chicago Press.

9. The Netherlands pioneered these practices and they also report on the status of employment pension schemes. In Spain, since 2015 the Social Security simulator has been available for calculating the public pension, but it is not yet a well-known tool and it gets limited use.

10. While among higher-income and older Spanish households it is observed that the tax deductions in pension plans (whether private or employment) generate, above all, a reallocation of their portfolios to pension funds from other savings instruments, in the case of other types of households it does seem to generate new savings. See J. Ayuso, J.F. Jimeno and E. Villanueva (2019), «The effects of the introduction of tax incentives on retirement saving», Series, nº 10, pages 211-249.

11. Not so in the case of individual pension plans, where the maximum tax-deductible amount is reduced from 8,000 to 1,500 euros.

12. See M. Gómez García and E. Villanueva López (2022), «El efecto de los planes de pensiones de empresa sobre el ahorro privado de los hogares», Bank of Spain Economic Bulletin [Articles], nº 2, 2022 (content available in Spanish).

13. A savings account into which the state pays a bonus of 25% of the contributions (up to a maximum of 1,000 pounds per year) on condition that it is used to purchase a first home or for retirement.

14. See P.H. De Cos (2021), «El sistema de pensiones en España: una actualización tras el impacto de la pandemia. Contribución del Banco de España a los trabajos de la Comisión de Seguimiento y Evaluación de los Acuerdos del Pacto de Toledo», Occasional Papers nº 2106, Bank of Spain (content available in Spanish).

15. See E. Dufló, W. Gale, J. Liebman, P. Orszag and E. Sáez (2006), «Saving Incentives for Low and Middle-Income Families: Evidence from a Field Experiment with H&R Block», Quarterly Journal of Economics 121.4.