HOUSEHOLD SAVINGS OBSERVATORY

Resilience /
vulnerability of Spanish households in the face of COVID-19. Disparities in the distribution and composition of savings in Europe.

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HOUSEHOLD SAVINGS OBSERVATORY

The Household Savings Observatory, promoted by the Fundación Mutualidad de la Abogacía and the IE Foundation, was created with the aim of carrying out pioneering research with a social impact in areas related to **household savings and financial planning** (motivations and barriers that encourage or hinder savings, behavioural biases, financial education, chosen savings instruments, best practices in different countries, micro and macroeconomic consequences of the distribution of savings, household consumption vs. savings, financial investment vs. property investment, household finance, etc.).

Its intention is to provide a solid base of knowledge and disaggregated indicators or indices on household savings, which will improve the quality of the debate on the best economic, tax, monetary, etc., policies to promote savings, and ways to raise society's awareness of its importance.

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Letter from **JOSÉ MARÍA PALOMARES**, Managing Director of the Fundación Mutualidad de la Abogacía, and **GONZALO GARLAND**, Executive Vice President of the IE Foundation.

Dear all,

It is with great pride that we at the Fundación Mutualidad de la Abogacía (English: Mutual Society of Lawyers) are able to present the first report from the *Observatorio del Ahorro Familiar* (English: Household Savings Observatory). It represents a milestone in the mission we embarked on within the last year: to promote and develop a culture of saving among families in Spain. In publishing this ambitious report -developed by qualified researchers from the IE Foundation and which took considerable effort to produce- we hope to consolidate our position as key players in disseminating knowledge of this kind in Spain.

The report entitled *"The resilience/vulnerability of Spanish households in the wake of COVID-19. Disparities in the distribution and composition of savings within the European context"* [title translated from the original Spanish] is entirely unique to date, boasting unprecedented scope, level of detail and a singular focus. The report includes a detailed analysis of -and draws revealing conclusions from- a survey of families' finances and spending habits spanning six countries in the Eurozone: Germany, Belgium, Spain, France, Italy and Portugal. Through this research, we hope to increase awareness about the importance of financial planning and savings among Spanish families, which is perhaps now even more important during the current pandemic. We also seek to generate debate among the public regarding the management of household budgets.

Alongside this, we would like to raise the issue within public institutions in order to promote regulatory change that incentivizes saving and financial planning among families in Spain. The objective is none other than to break down the current barriers, which have led to an environment of inequality.

We invite you to take the time to read the following pages and dive into the different sections of the report to understand the academic experts' opinion regarding an issue that concerns us all: the behavior of families with regard to saving. Only together, working hand-in-hand with both the public and private actors that make up the financial sector, can we build a more secure economic future for our homes amidst the current backdrop of complexity and change brought on by the pandemic.

Thank you to everyone who took the time to read this and to all the academic professionals who have made this document possible. We truly hope that it will prove to be an enriching and beneficial read for all.

Kind regards.

José María Palomares
Managing Director of the Fundación Mutualidad de la Abogacía

Gonzalo Garland
Executive Vice President of the IE Foundation

“IF YOU ADD ONLY A LITTLE TO A LITTLE AND DO THIS OFTEN, SOON THAT LITTLE WILL BECOME GREAT”

From the poem *‘Works and Days’*,
by the Greek poet and philosopher
Hesiod (VII B.C.)

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1 INTRODUCTION

The unprecedented global health and economic emergency caused by the COVID-19 pandemic highlights, now more than ever, the importance of promoting savings and financial planning in every household. Knowing households' degree of financial resilience (or conversely, their degree of vulnerability) prior to the pandemic is essential in order to be able to anticipate the consequences of the pandemic and better gear economic and social measures. As a result of this situation, the academic community has raised its voice, advocating the urgent need to promote structural policies that foster conscious financial planning in households as a mechanism of resilience to future crises; see Arellano and Cámara (2020).

Despite the packages of social and economic measures put in place by the governments a great deal of households has experienced a deep income reduction.

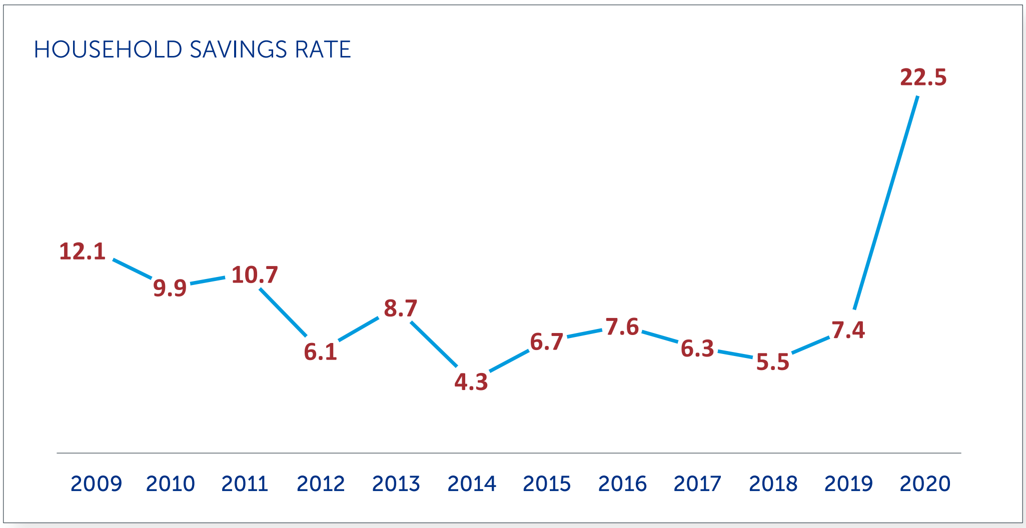
Despite the packages of social and economic measures put in place by the governments of different countries, including Spain, and by the European Union, a great deal of households has experienced, and will continue to experience in the coming months, a deep income reduction. In Spain, the number of workers affected by temporary lay-offs amounted to nearly 3.4 million. In some sectors, more than 80% of social security affiliates has been in this situation. In turn, more than 1 million self-employed workers have been eligible to receive the aid for the cessation of activities. Considering that the employed population in Spain is around 18.5 million people, at least a quarter of the population has suffered a significant income reduction due to the health emergency.

In these situations, it is clear that accumulating savings over time (referred to in the literature as 'wealth') is an excellent mechanism of precaution and financial stability that citizens can apply to compensate for temporary income reductions. Analysing the state of this accumulation of savings or the level, of wealth that households had prior to the crisis caused by the pandemic, can be used to assess a family's degree of resilience (and therefore, their degree of vulnerability). Literature does so by estimating the time that households would be able to subsist on their savings in the hypothetical scenario of a total lack of income, a scenario that is unfortunately not so hypothetical, but rather real, for many families in the current circumstances.

1 INTRODUCTION

In Spain, historical figures on the behaviour of households in relation to savings over time indicate that families do not have an adequate savings culture and that their behaviour poses a risk for the financial stability of the household, and therefore its well-being. Instead of accumulating savings during an economic boom, Spanish households increase consumption, while in adverse economic circumstances, savings rates rise. This behaviour further exacerbates economic cycles, rather than smoothing their effects, which becomes particularly prominent during the current health emergency (see Chart 1.1). In the second quarter of 2020, the savings rate of Spanish households reached an all-time high, 22.5% of gross disposable income. Although some of this increase is certainly due to the economic closure of many consumption choices, especially those related to leisure, it is likely that most of it is a direct consequence of the household's active behaviour, as it was the case during the previous economic crisis. In 2008, Spanish families faced the crisis with a savings rate that was at an all-time low and yet, rose substantially with the onset of the crisis.

Chart 1.1. Spanish household savings. Percentage of gross quarterly disposable income.



Source: INE [1]. *Seasonal and calendar-adjusted data. Last dada refers to second quarter 2020.*

1 https://www.ine.es/daco/daco42/ctnfsi/ctnfsi0220.pdf

1 INTRODUCTION

For savings to become a real social lever in times of unforeseen circumstances, not only the total volume of savings accumulated by households at the peak of the economic cycle is relevant, but also, that these accumulated savings are distributed throughout all levels of society. Economic and social consequences will be very different if savings are concentrated on a small number of households rather than being widely distributed among all of them. This is why institutions should not only foster savings, but even more so, they should support families with fewer socio-economic resources (income, education, etc.) so that they have the possibility and the appropriate incentives to allocate part of their income to savings. Small savings rates sustained by households over time generate significant differences in their wealth accumulation.

Based on these premises, this research intends to anticipate to what extent and with which scope, the savings accumulated by Spanish households, their wealth, will constitute a leverage mechanism to face the current health-economic crisis. To this end, we analyse the savings that Spanish households have invested in financial assets (including deposits), by examining the greater or lesser inequality in the distribution of these savings among households, and comparing their situation with households in other five European countries: Germany, Belgium, France, Italy and Portugal. To complement this financial savings approach, we analyse the savings that households possess in real estate. The proportion of households that own their main residence or another dwelling is analysed, as well as whether or not these are free of mortgage burdens, since when real estate investment is free of burdens, or these are lower than its real value, the vulnerability of the household can also be reduced through different mechanisms: (i) reducing household expenses by the amount equivalent to paying rent; (ii) providing liquidity to the household, if it were to be mortgaged, and in the case of not being the main residence, through potentially renting it; (iii) and finally, by transforming it into money through sale. The resilience (vulnerability) of households in the face of COVID-19 is estimated based on both concepts of wealth, financial and real estate savings.

The data used in this research come from various sources: (i) the Household Finance and Consumption Survey (HFCS), which is coordinated and managed by the European Central Bank and is the foundation of most of the analyses carried out; (ii) and the statistics of the OECD, Eurostat, and INE, the data of which is used to analyse in greater depth or put into perspective and improve the interpretation of results.

1 INTRODUCTION

Based on the diagnosis of the level of resilience (vulnerability) that Spanish households have to face the COVID-19 crisis (which we already anticipated is daunting), we reflect on what questions are still pending and whose answers will be essential to find, through new research, to facilitate the design of actions which promote a true savings culture in Spanish households, reaching all levels of society. According to the postulates of behavioural economics, achieving a change in behaviour requires much more than just to inform and advise, since behaviour is conditioned by a complex set of psychological, social and contextual factors (knowledge, attitudes, beliefs, social interaction, environment, personality, etc.) which it will be necessary to act upon.

The remaining sections of this paper are organised under the following headings. Section 2 describes the Household Finance and Consumption Survey (HFCS) and suggests the precautions that need to be taken when working with it and interpreting the findings obtained from it for the different countries. Section 3 analyses -for the six European countries selected, including Spain- the situation of households in relation to their financial savings, as well as the greater or lesser inequality in the distribution of these savings in society as a whole. Section 4 presents an assessment of the savings that households possess in real estate, which also constitutes an element of resilience in the face of economic emergency. Section 5 introduces a proposal that integrates both types of wealth to measure the resilience (vulnerability) of households under COVID-19. Finally, Section 6 presents the conclusions, discussions and final thoughts of the study.

2 HOUSEHOLD FINANCE AND CONSUMPTION SURVEY (HFCS)

To carry out most of the analyses in this study, we have used the micro data provided by the HFCS, which is run in a decentralised manner by the 22 European countries that make up the survey sample under a common methodology. This survey is managed by the European Central Bank, and to date, three waves of the survey have been carried out, in 2011, 2014 and 2017 [2].

Given the cultural and institutional differences between the different European countries, there is some flexibility in the formulation of the survey questions. So, although the participating institutions yield harmonised findings for all countries, they do not necessarily use identical interview forms. However, a common survey template is used as a reference point for country-specific surveys, as well as for establishing the desired outcome.

In this research analyses the penetration of savings in the household population of the different countries and the distribution of households' investment.

The HFCS consists of two main parts. The first part of the survey has questions related to individual household members, and covers demographic variables for members over 16, such as their employment situation, income, or future pension rights. The other part contains questions related to the household as a whole, and includes questions on consumption and savings, on the ownership of real estate assets (including the primary residence) and their financing, and on the ownership of financial assets, among other variables.

Particularly, this research analyses the penetration of savings in the household population of the different countries, and more specifically, the distribution of households' investment portfolio around the two differentiated groups of assets: property assets (including their main residence) and financial assets, which include any type of financial asset (deposits, funds, savings insurance, shares, etc.). Among all the countries contributing to the HFCS, we selected six of them for this study, Germany, Belgium, Spain, France, Italy and Portugal, representing 80% of the population and GDP of the Eurozone. The sample size for this group of countries amounts to nearly 41,000 households. Some of the analyses also deal with the aggregate behaviour of the 19 countries that make up the Eurozone[3].

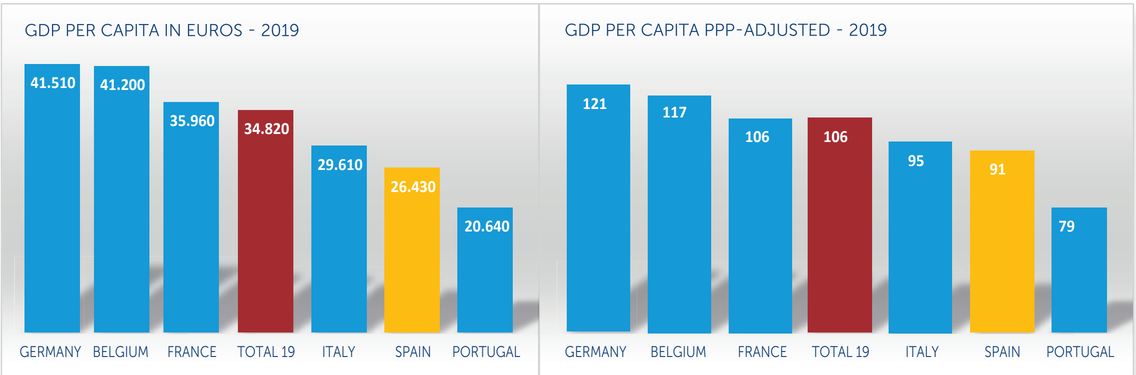
2 The fourth wave started in 2020, and its data will be made public in 2021-2022. For the 2017 wave, some disaggregated data for some of the variables are not available. When this happens, we resort to data from the previous wave, 2014, as in general the trend in these countries for the variables analysed has been relatively stable over these three waves.

3 Countries that make up the Eurozone: Belgium, Germany, Estonia, Ireland, Greece, Spain, France, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Austria, Portugal, Slovenia, Slovakia, and Finland.

2 HOUSEHOLD FINANCE AND CONSUMPTION SURVEY (HFCS)

When interpreting and comparing results between countries, it will be necessary to consider the different institutional and socio-demographic characteristics. For example, the selected countries differ substantially in terms of GDP per capita, both considering the absolute value of GDP per capita and the adjustment to purchasing power, taking into account the price level of each country (see Chart 2.1). On average, citizens in Germany or Belgium have a GDP per capita that doubles the same measure for citizens in Portugal, is 60% higher than for citizens in Spain, 40% higher than Italians, and 14% higher than that of the French. And although in terms of GDP adjusted by purchasing power parity the differences decrease, they are still significant (Germany and Belgium show a value 50% higher than Portugal, about 30%-25% higher than Spain or Italy and more than 10% higher than France). If we took the average salaries of these countries' citizens, they would reflect the same differences.

Chart 2.1. GDP per capita in € and GDP per capita index according to the PPP in 2019.

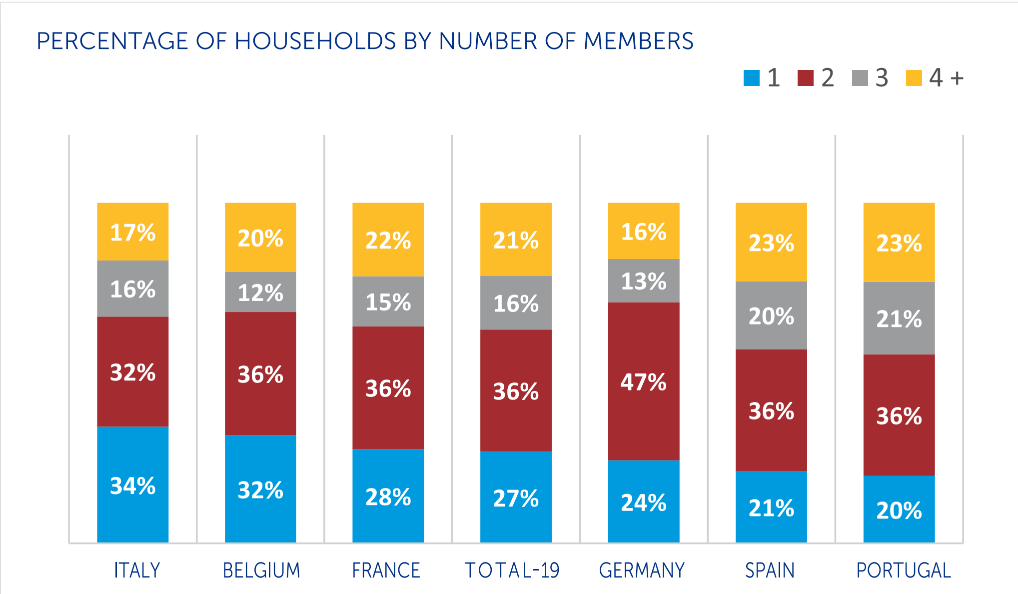


Source: Prepared by the authors based on Eurostat data (https://ec.europa.eu/eurostat/web/national-accounts/data/main-tables). The PPP-adjusted GDP per capita index is 100 for the average of the 27 EU countries as a whole.

Another caution that should be raised concerns the fact that the unit of study in the HFCS is the household, so differences in household size across countries in terms of the number of members should be considered when interpreting the results in a comparative analysis. To this end, the study corrects the household data using the measure proposed by the OECD "equivalent consumption units", which takes into account the economies of scale that occur for certain consumption in the household and which assigns a weight of 1 to the first member of the family, and 0.5 to the subsequent ones (0.3 to children under 14).

Chart 2.2 shows the distribution of households in each country in relation to household size. In Spain and Portugal, for instance, larger households (three or more members) have a high prevalence, while the number of single-person households is very low, and conversely, in countries such as Italy and Belgium, the rate of single-person households is very high in detriment to that of larger households. It is therefore important to consider this variable in data interpretation adjusting the result by this variable when possible.

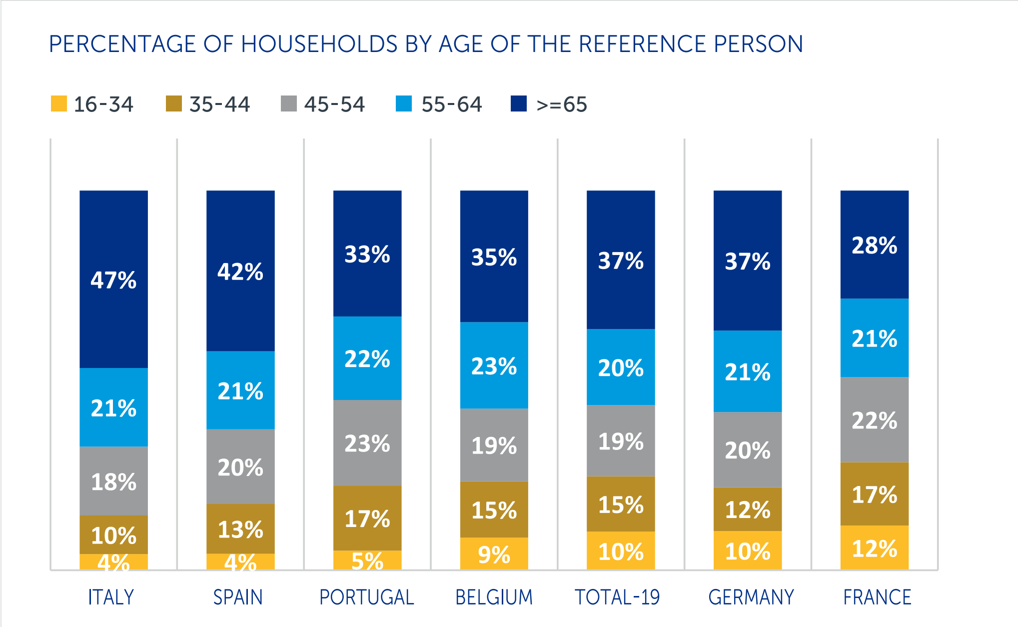
Chart 2.2. Household distribution based on the number of members in the family.



Source: Prepared by the authors from HFCS data.

On the other hand, Chart 2.3 shows the distribution of households in relation to the age of its reference person. Spain and Italy have an older household population (for about 45% of the total, the reference person is over 65). In contrast, French households are the least aged (only 28% of the total are households where the reference person is over 65) being the country with the highest rate of young households (the reference person is under 35 years old in 12% of the households). The low prevalence of young households in Spain, Italy and Portugal, where the reference person is under 35 years old, is particularly noteworthy, with a rate that barely reaches 5% of all households. This differential characteristic between the countries in Southern Europe and those further North is probably a reflection, in part, of a deeply-rooted family concept in Southern Europe, but also of the greater difficulty that young people have in these countries in accessing housing.

Chart 2.3. Household distribution based on the age of the reference person.

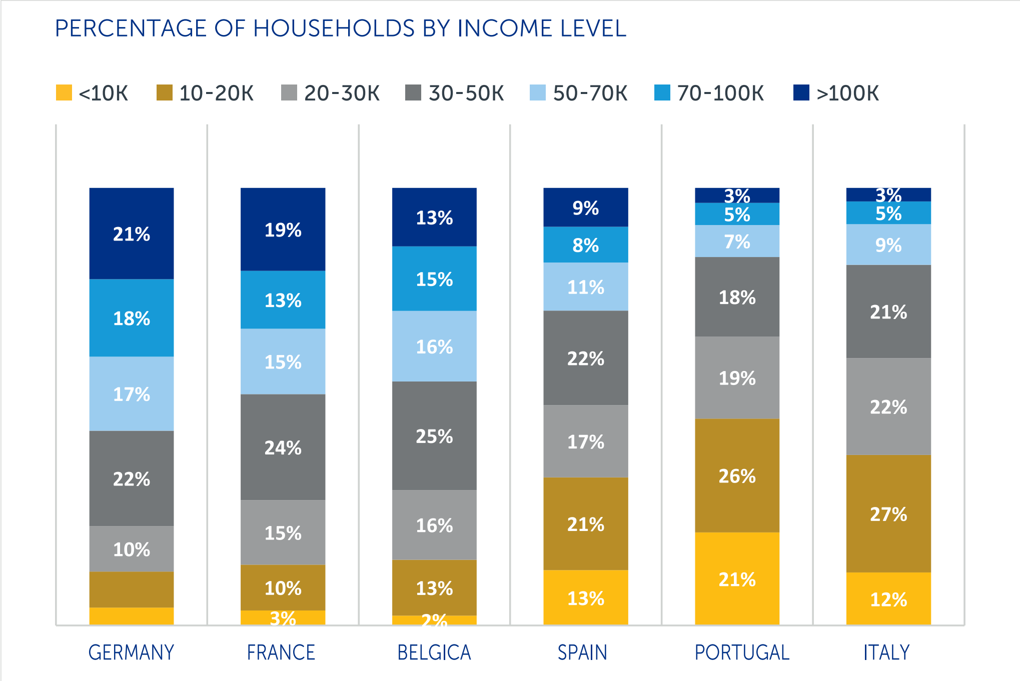


Source: *Prepared by the authors from HFCS data.*

Finally, it is important to note that although the methodology used in the HFCS is common to all countries and the country sample is designed to ensure the representativeness of the results, both for the country and for the Eurozone, there are discrepancies in the sampling carried out for households with a higher level of wealth/income. Some countries over-sample this segment, which is the one that mostly participates in the financial sector, to ensure that the survey reflects investor behaviour. This over-sampling must be amended, by means of certain weights that compensate for it, when obtaining the aggregate values of the variables that make up the database, so as to obtain representative results. Nevertheless, the results must be cautiously interpreted, especially when comparing results between countries. Chart 2.4 shows the distribution of households in the sample based on their income level.

2 HOUSEHOLD FINANCE AND CONSUMPTION SURVEY (HFCS)

Chart 2.4. Household distribution by income level.



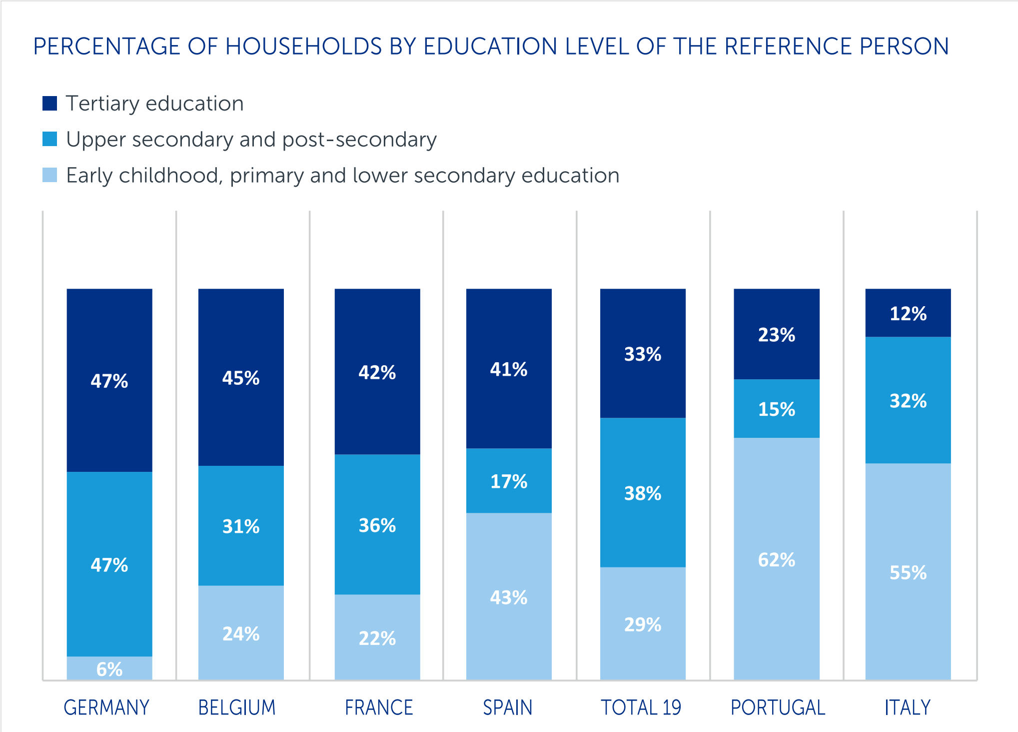
Source: *Prepared by the authors from HFCS data.*

Indeed, countries such as Germany, France and Belgium, and to a lesser extent Spain, have a higher representation in the sample of high-income households, which goes beyond the elevated per capita income of these countries[4]. In contrast, this is not the case in Portugal, as this country does not over-sample this household segment.

Chart 2.5 shows the household distribution based on the education level of the reference person, which according to the literature, is closely related to income level. Indeed, this distribution is correlated with that found for the income level, and the countries with the highest proportion of high-income households are also those with the highest proportion of households with higher education in the sample.

4 This statement is based on the development of analyses that compare the income levels of the sampled households with the average wages and per capita income of the country, and which take into account the household size. They are not included in the study due to space limitations, but are available upon request.

Chart 2.5. Household distribution based on the education level of the reference person.



Source: *Prepared by the authors from HFCS data.*

Hence, when interpreting the results, it is necessary to keep in mind all these concerns derived from both the sampling and the different social, economic and cultural characteristics of each country.

3 THE 'FINANCIAL' SAVINGS THAT SPANISH HOUSEHOLDS HAS TO FACE THE COVID-19 CRISIS

To date, very few academic analyses have been conducted on the capacity of households to cope with the COVID-19 crisis from the point of view of their accumulated savings or wealth, and not just from the perspective of the loss of labor income. An exception is the work of Gambacorta et al. (2020), which analyzes whether households are able to remain above the poverty line (equivalent to 60% of three months of the country's average disposable income[5]) using their accumulated savings or wealth, in the face of the adversity of losing any other source of income. Those who are not able to remain above this threshold are referred to by the authors as "financially poor households".

Based on the HFCS data, we obtain the distribution of the savings accumulated by the household that are invested in any type of financial asset

To determine this situation, these authors focus exclusively on the assessment of the assets that they consider to be the most liquid, deposits, bonds and listed shares, excluding for example pension funds and life-savings insurance. In our view, this approach suffers from an important limitation, namely the non-consideration of financial assets, which although not liquid, such as pension funds and a significant part of life-savings insurances, contain options that enable them to be converted into liquidity in the face of adverse situations (loss of employment, serious illness, etc.) and which, therefore, in our opinion, should be included. Our study differs in this regard, since, when we analyze the accumulated savings capacity of households in the face of the crisis, we consider the entire set of financial assets in which the savings of families may be invested.

Based on the HFCS data, we obtain the distribution of the savings accumulated by the household that are invested in any type of financial asset, which in the survey are classified as follows: deposits, cash, investment funds, pension funds and life-savings insurances, bonds, listed shares, and other financial assets. It is worth noting that between 95% and 100% of the households in the countries analyzed own at least one of these financial assets in some amount.

5 This is the threshold the European Commission proposes in its Europe 2020 strategy. The OECD sets the subsistence threshold at 50% of median income.

Table 3.1 shows the median and average values of household financial savings in each country. The average or median value is the value that indicates that 50% of households in each country have savings above that amount, while for the other 50%, accumulated financial savings are below that amount. This value is a better reflection of household behaviour than the average value, since the latter may be distorted by the existence of a small number of households with exaggeratedly high or excessively low financial wealth.

Table 3.1. Average and median values of the distribution of household financial savings (data in euros).

FINANCIAL SAVINGS	MEDIAN	MEAN
Belgium	25.800	90.100
Germany	16.900	56.800
France	11.000	54.000
TOTAL 19	10.300	50.700
Spain	9.000	56.300
Italy	7.000	31.500
Portugal	4.600	23.800

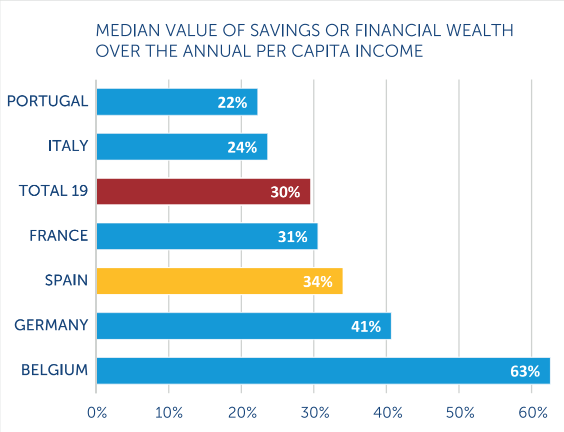
Source: Prepared by the authors with HFCS data.

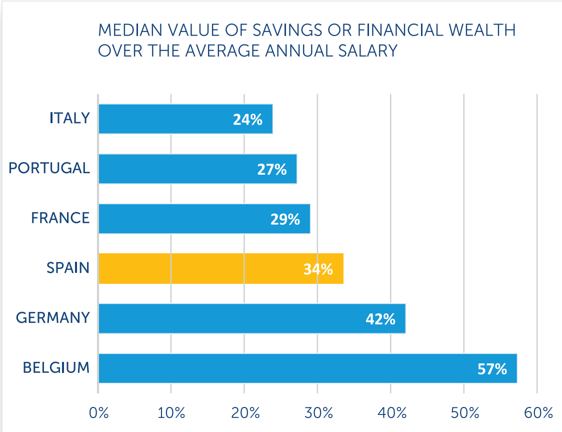
It is noted that financial savings held by households in different countries differ significantly. Households in Belgium have the highest amount of financial savings, both in average and median value, followed quite far behind by German households, while in Portugal, households have the lowest financial wealth within the group of countries studied. Spain, (with an average of €56,300 per household and a median value of €9,000) together with France, is around average for the Eurozone, with Italy lagging slightly behind.

As these differences between countries could be explained, at least in some part, by cross-country variations in per capita income and salary, we have corrected the figures obtained previously for financial savings, by both variables. Figure 3.1 shows this effort, which puts the data into perspective and allows a better interpretation of the results.

3 THE 'FINANCIAL' SAVINGS THAT SPANISH HOUSEHOLDS HAS TO FACE THE COVID-19 CRISIS

Chart 3.1. Median value of financial savings held by households in terms of income per capita (left) and countries' average annual salary (right)





Source: Prepared by the authors with data from HFCS and OECD.

After these adjustments, inequalities between countries persist. The two countries whose households have the highest levels of financial savings continue to be Belgium and Germany (where 50% of households have savings in excess of 60% for the former and 40% for the latter, of GDP per capita and annual salary). At the other end are Portugal and Italy, with the poorest households in the sample, and in the middle France and Spain with 50% of households having financial savings below one third of their GDP per capita and annual salary (standing at €26,821 for Spain [6]) –indicating that in both countries the financial savings of half of the households are below 4 months of average salary.

At first sight, the above evidence seems to indicate that the position of Spanish households in terms of savings is relatively good in comparison with that of other countries around us, for example Italy, despite Spain's lower per capita income and wage level, which obviously reduces saving capacity [7].

We know that cross-country household size differs, as seen in section 2. In Spain and Portugal, households with more members are more numerous. Hence, the above conclusion could be considered premature, since the same amount of savings does not generate the same resilience in a one-person household as it does in a four-member household. On the other hand, some economies of scale do exist for certain household consumption, so when we adjust household savings by the number of family members, we use the so-called "equivalent consumption unit" proposed by the OECD, which assigns a weight of 1 to the first family member and only 0.5 to the subsequent ones [8].

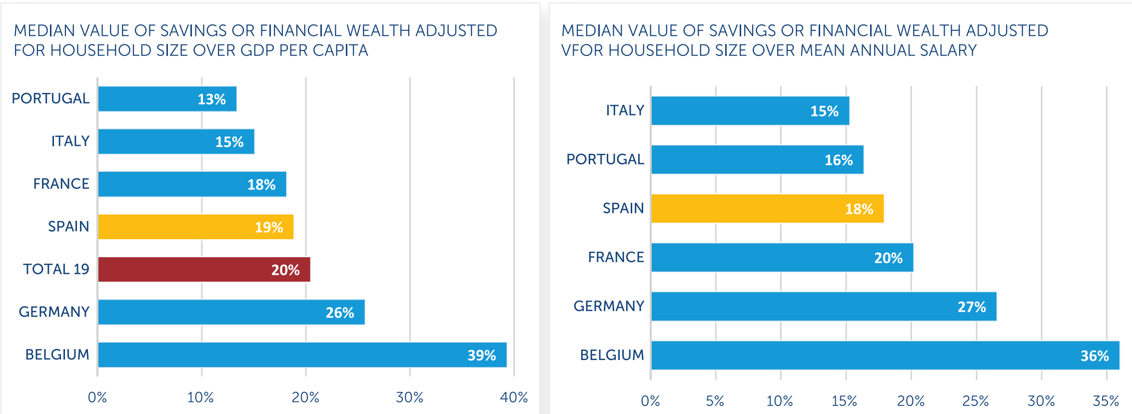
6 Harmonised data at European level published by the OECD for 2017. The figure published for 2019 is €27,468. (https://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE#). Salary data for all the countries analysed was taken from this source.

7 However, this comparison should be taken with caution because the over-sampling of high-income households in the HFCS is different for each country. In the case of Germany and France, households with higher income are over-represented in the sample, so the result may be somewhat biased upwards, and the reality less rosy than is shown, while in the case of Italy, as there was no over-sampling of higher income households, the result may be biased downwards. Although these effects are corrected by weightings that compensate for such over-sampling, some bias may still remain.

3 THE 'FINANCIAL' SAVINGS THAT SPANISH HOUSEHOLDS HAS TO FACE THE COVID-19 CRISIS

Chart 3.2 shows this new analysis, in which we have prorated the financial wealth of the household based on the family's equivalent consumption units, and adjusted it again taking into account the annual per capita income and the country's average wage.

Chart 3.2. Median value of financial savings per unit of equivalent household consumption in relation to income per capita (left) and average annual salary (right)



Source: Prepared by the authors with data from HFCS and OECD.

Indeed, when average household size is incorporated into the analysis, it can be seen how the reality of Spanish families (and also of French families) becomes much worse, bringing their financial wealth closer to that of households in the worst positioned countries (Portugal and Italy) than to that of the best off households (Germany and Belgium). In 50% of Spanish families, financial savings per equivalent consumption unit are less than 20% of the average annual salary or GDP per capita, or in other words, below a maximum slightly higher than two months' salary.

In order to better assess the role of savings as a mechanism of resilience to face the COVID-19, it is important to broaden our study of the average and median household to the most vulnerable segment of households in terms of financial wealth. To this end, we estimated the lower percentiles (10%, 20% and 30%) of the distribution of savings [9], which enables us to calculate the level of savings of the 10%, 20% and 30% of households with the least savings, and to estimate how much this represents in terms of the average salary in each country. Table 3.2 presents the data. Section A shows the financial savings (in terms of the country's average salary) of households in the 10%, 20% and 30% percentiles, while section B shows the savings per equivalent consumption unit within these households (also in relation to the country's average wage), which is logically lower.

8 Children under 14 are assigned 0.3.

9 The percentile is a statistical measure that gives us the value that positions individuals below or above it. For example, the value of the 10th percentile indicates the value below which the 10% of the population with the lowest value in the variable examined is situated, while the 90th percentile indicates the value above which the 10% of the population with the highest value in this variable is situated.

Table 3.2. Values of the 10th, 20th and 30th percentiles of household financial savings distribution in relation to the average annual salary in the country[10].

A. A. Data per household

Percentile 10%	% of annual salary	days of salary
Portugal	1.2%	4
Belgium	1.1%	4
France	1.1%	4
Germany	0.7%	3
Spain	0.7%	3
Italy	0.7%	2

Percentile 20%	% of annual salary	days of salary
Belgium	6.4%	24
Italy	5.1%	19
Germany	5.0%	18
Spain	3.4%	12
France	3.2%	12
Portugal	3.0%	11

Percentile 30%	% of annual salary	days of salary
Belgium	14.4%	53
Germany	12.5%	45
Italy	10.3%	37
Spain	8.2%	30
France	7.4%	27
Portugal	5.9%	22

B. B. Data by equivalent consumption unit in the household

Percentile 10%	% of annual salary	days of salary
Portugal	0.7%	3
Belgium	0.7%	3
France	0.7%	2
Germany	0.5%	2
Spain	0.4%	2
Italy	0.4%	2

Percentile 20%	% of annual salary	days of salary
Belgium	4.0%	15
Italy	3.3%	12
Germany	3.1%	11
Spain	2.0%	7
France	2.0%	7
Portugal	1.8%	6

Percentile 30%	% of annual salary	days of salary
Belgium	9.1%	33
Germany	7.9%	29
Italy	6.5%	24
Spain	4.9%	18
France	4.6%	17
Portugal	3.6%	13

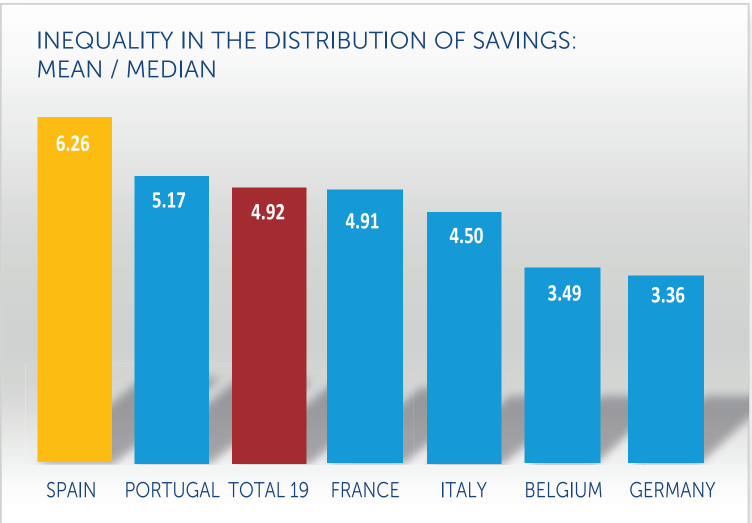
Source: Prepared by the authors with data from HFCS and OECD.

We observe that savings of the 10% most vulnerable households (10th percentile) are almost non-existent in all countries (equivalent to the salary of four days). If we extend the threshold of vulnerable households to the most disadvantaged 20%, their financial wealth remains extremely low, with savings below the salary of two weeks for three out of the six countries (Spain, France and Portugal) and below three weeks for the others (Germany, Italy, and Belgium). If we finally extend the analysis to the 30% most vulnerable households in terms of financial wealth, households in Spain, France and Portugal hold less than a month of salary in savings, and those in Germany, Italy and Belgium less than two months. As shown in section B of that table, these data are even more alarming if we account for the size of the household by estimating the savings per unit of equivalent consumption.

10 The average harmonised salaries in euros obtained from the OECD used in the analyses carried out in this study are as follows: Belgium, 44,995; Germany, 40,151; France, 37,860; Italy, 29,256; Spain, 26,821; Portugal, 16,885. See https://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE#

To conclude this analysis on financial wealth in European households, it is important to examine the extent of inequality in savings distribution, as high inequality will undermine social cohesion and increase conflict. Moreover, this factor must somehow be considered in social, economic, fiscal and monetary policies aimed at encouraging savings. Chart 3.3. shows the ratio between the average and median value of household savings, which is an indicator of inequality in their distribution. This is because the average value is affected by extraordinarily high or low levels of savings that households in countries with a highly unequal distribution of savings may have, while the median value of savings represents the value above and below which, half of households are situated. Therefore, the difference between the two values, average and median (which is measured by the proposed ratio) gives us an idea of the savings distribution inequality in each country. The higher the value of this indicator or ratio, the greater the inequality. The highest value is observed for Spain (ratio of 6.3), revealing a higher inequality in the distribution of financial savings in Spain than in the neighbouring countries studied. On the other extreme are Germany and Belgium, countries with the least inequality in household financial wealth, with values around 3.4 for this indicator. If we look at the original data in table 3.1, used to calculate this ratio, we notice that the median value of Spanish households' savings is practically half that of German households. But however, the household's savings average coincides for both countries.

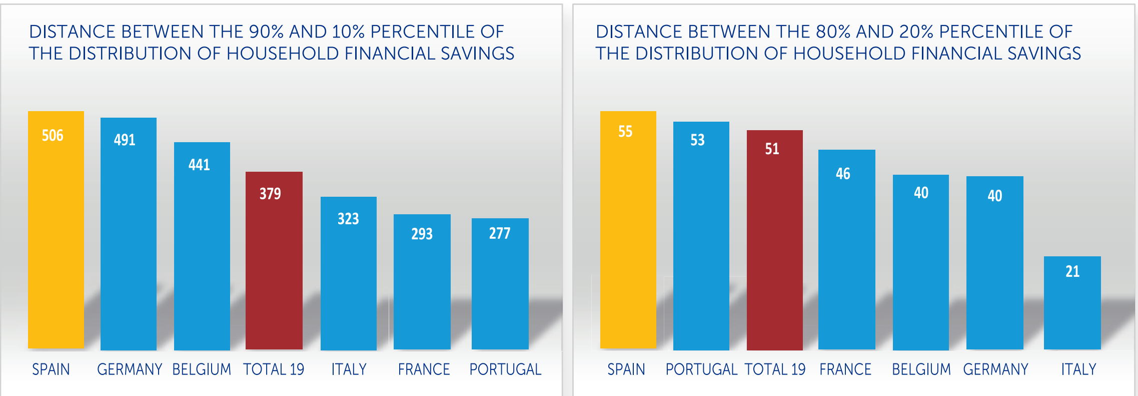
Chart 3.3. Inequality in the distribution of savings: average value over median value of household financial savings.



Source: *Prepared by the authors with HFCS data.*

Another way of measuring inequality is to compare the situation of the most vulnerable households in terms of savings with that of the wealthiest. To this end, we compared the lowest percentiles (10% and 20%) of the distribution of household savings in each country with the highest ones (90% and 80%). In other words, we contrasted the value of savings below which the 10% of households with the least savings are situated (10% percentile) with the value above which the 10% with the most savings are situated (90% percentile) by estimating the ratio between the two. We then made the same calculation again, but using the 20% and 80% percentiles, which indicates the level of financial savings below which the 20% of the population with the least savings are found, and the level of financial savings above which the 20% of the population with the most savings are found. Chart 3.4 shows the findings.

Chart 3.4. Inequality in household financial savings distribution. Times the highest percentile exceeds the lowest percentile. Data for percentiles 90% over 10% (left) and 80% over 20% (right)



Source: Prepared by the authors from HFCS data.

The 10%-90% percentiles reflect population values that are very extreme on both sides, which may not represent society in general (since they only include 20% of it) although undoubtedly it measures inequality. We observe this extreme inequality between the 10% of households with the highest savings and the 10% with the least, reaches the maximum level for Spain, followed by Germany and Belgium, although somewhat less so in the latter. In these three countries, households with the most savings have around 450-500 times more savings than those with the least. This inequality at the extremes of distribution is somewhat more modest in Portugal, France and Italy, where the 10% of households with the most savings have around 300 times more savings than the 10% with the least[11].

The ratio comparing the 20-80% percentiles is more indicative of the degree of inequality in the distribution of savings throughout the whole of the population, since it considers 40% of the families in each country. The data show, that once again, Spanish's households exhibit the greatest inequality in terms of financial savings. In conclusion, and based on the three indicators estimated, average value over median value, and percentiles 90th and 80th over 10th and

11 Again, caution is needed when interpreting these results, particularly for some countries. For example, in the case of Italy, its sample features an under-representation of high-income households compared to other countries, which could be biasing its result as to a less unequal distribution of savings. The opposite would happen in Germany, which is the country with the highest representation of high income in its sample. On the other hand, such high ratios are mainly the result of the almost non-existent savings of 10% of households with less financial wealth (which, for example, in Spain amounts to less than €200). Compared to the above, 10% of households with greater financial wealth in Spain exceed €101,000 (for the other countries, this level lies between €55,000 and €220,000).

20th respectively, Spanish's households display greater inequality in the distribution of financial savings than other European countries.

Interestingly, for the other countries the position in the inequality ranking changes depending on whether we use percentiles 90th-10th or 80th-20th. Some countries result in strong inequality by the 90th-10th ratio, but more homogeneity when the 80th - 20th extremes are analyzed (e.g. Germany and Belgium). In contrast, other countries show less inequality in the distribution of savings at the 90th-10th percentiles, but greater inequality at the 80th - 20th percentiles (e.g. Portugal and France).

It may be more appropriate to conclude about overall inequality by comparing the 80th - 20th percentiles, as not only do they encompass a much larger part of the households, but this result is also less affected by high income over-sampling. Notwithstanding, Spanish households, are placed at the top of the inequality ranking in terms of savings distributions by all the indicators used.

The main insights from the analysis conducted in this section on the financial wealth of Spanish households are:

(i) 30% of Spanish families hold savings which are below the equivalent of one month of the country's average wage, and the savings of an additional 20% of households are between one and four months in terms of the average salary.

(ii) When household's savings are adjusted by size using the equivalent consumption units, the situation becomes even more dramatic. In 30% of the Spanish's households, the financial savings per unit of consumption are below the equivalent of two weeks of the country's average wage, and for an additional 20% of households between two weeks and two months of the country's salary.

(iii) Spain is in the group of countries with the greatest vulnerability, in terms of household financial savings, showing less resilience than countries such as Germany and Belgium, and even Italy.

(iv) Spain is also the country that displays the greatest inequality in the distribution of households' financial savings within the group of Eurozone countries analyzed.

Not having studied yet the ownership of real estate assets by Spanish families, these results already highlight the vulnerability of a very important part of Spanish society.

4 THE ROLE OF SPANISH HOUSEHOLD'S REAL ESTATE WEALTH IN THEIR RESILIENCE TO COVID-19

Property assets are less liquid than financial assets, especially in times of crisis. However, they provide liquidity, directly, in the case of rented properties to third parties, or indirectly, in the case of the main residence ownership (through the amount the family ceases to pay in rent). In addition, if properties are not tied to mortgages, they contribute to the household's solvency as they can be transformed into liquidity by means of mortgages. Consequently, the consideration of property ownership is important when it comes to assessing the resilience or vulnerability of households to face the current crisis caused by the COVID-19. In this regard, our work differs again from that of Gambacorta et al. (2020), in that they assess the resilience of households on the basis of a very limited set of liquid financial assets, without considering the holding of property assets.

In Spain the median value of leases is in the range of 20% to 25% of the average disposable income, while that of mortgage payments is around 15-20%

In Spain the median value of leases is in the range of 20% to 25% of the average disposable income, while that of mortgage payments is around 15-20% (Bank of Spain, 2020). Thus, we assume that if the main residence is mortgaged, the mortgage burden would be approximately equivalent to the rental value, or even a slightly lower amount. Based on this, a workable hypothesis, when evaluating the level of households' vulnerability, would be to put the situation of households with a mortgaged property on a par with that of those with no property, assuming both have to face an equivalent payment in concept of mortgage payments or alternatively leases [13]. It seems evident that owing the main residence without burdens adds resilience to the household, and we propose to estimate this resilience at least in the amount equivalent to the implicit saving of the lease or mortgage expense.

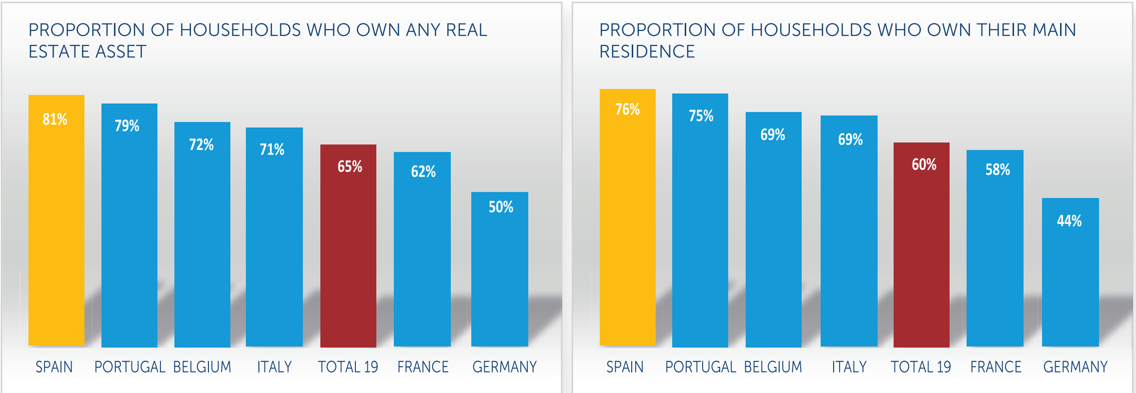
In line with these arguments, we examined the situation of Spanish and European households in relation to real estate property in an attempt to provide a more accurate indicator of household resilience/ vulnerability than those based solely on financial wealth. To this end, we carried out several analyses below.

13 Although in this paper we start from the above-mentioned hypothesis as an estimation, we recognize that this analysis is rather more complex than the proposed simplification, as many other factors come into play. Not paying the mortgage, for example, generates more serious legal and economic consequences than not paying the lease, and the sale value of the property does not always cover the value of the mortgage, as the 2008 crisis made clear. However, this situation now seems less likely, given the greater prudence that banking entities have shown in granting mortgages in the last decade, and the moderate prices that property has maintained in recent years. However, the current economic crisis is of a magnitude not previously seen (the fall in the Spanish economy's GDP in the second quarter of 2020, 18.5%, was the largest in the historical series), therefore it is difficult to anticipate whether property prices will fall below the value of their mortgages in the future.

4 THE ROLE OF SPANISH HOUSEHOLD'S REAL ESTATE WEALTH IN THEIR RESILIENCE TO COVID-19

As a first approximation, we studied the proportion of families who own their main residence (chart 4.1, right), as well as that for households owning any real estate property, whether or not it is their home (chart 4.1, left). The results show that most of the families who do not own their home, do not have any other property either, with the exception of a very low fraction of households ranging from 3% to 6% depending on the country.

Chart 4.1. Percentage of households that own their housing (right) or any property asset, including housing (left).



Source: Prepared by the authors from HFCS data

Spain and Portugal are the countries where most families own the house they live in (around 75%) or any other property, whether or not it is their main residence (around 80%). However, we should be somewhat cautious when interpreting these data, since, on the one hand, in these countries the larger households (three or more people) carry more weight in detriment of single person households, and on the other hand, the prevalence of young households is more scarce, so the high level penetration of home ownership may be masking a problem of access to housing by the youngest, who would continue to live in the parents' home until later ages [14]. Belgian and Italian households also display a high participation in the property sector, with about 70% of families owning their main residence. However, these countries have the highest rate of single-person households in the sample, to the detriment of larger households with three or more members[15].

14 In Spain, 53% of young persons between 25 and 29, and 25% of those between 30 and 35, still live with their parents (see Arce, 2019).

15 We deduced that single-person households in Italy are mostly made up of elderly people (since only 15% of households have a head under 45, while 50% are over 65). In Belgium, by contrast, single-person households are likely to be composed of young people, as in 25% of households the head is under 45.

On the opposite side, Germany stands out, with only 44% of families owning their primary residence – this percentage rises slightly to 50% when other property assets are included – followed by France, with a percentage of home owners also much lower than in the aforementioned countries (58% for the main residence and 62% when including other property).

To see how household savings are distributed between property and financial investment, in table 4.1 we estimated the average value of property assets held by owner families and the median value of said investment, that is, the value above which 50% of owner families would be, and below which the other 50% would be. These data, together with those presented in section 3 (table 3.1), which estimated these values for financial assets owned, allow us to examine the composition of household wealth in terms of both types of assets.

Table 4.1. Average and median household investment in property assets conditional on owning those assets. Data in €.

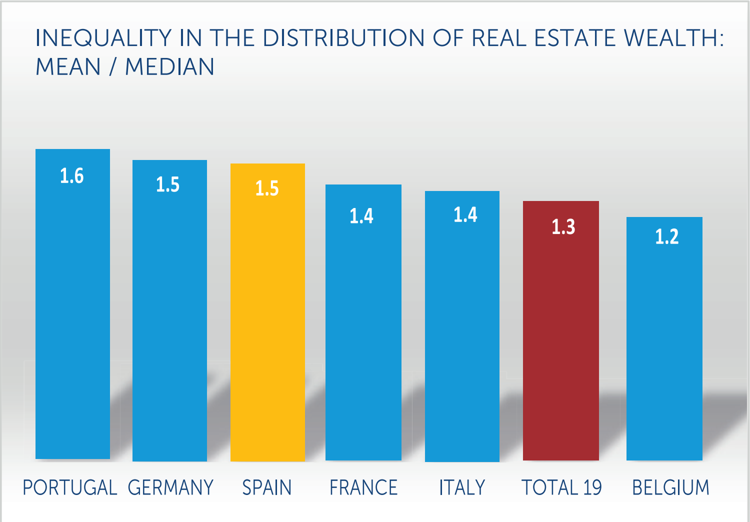
REAL ESTATE INVESTMENT	MEDIAN	MEAN
Belgium	299.000	368.000
Germany	220.700	335.800
France	204.600	283.900
TOTAL- 19	185.500	244.200
Italy	180.000	245.000
Spain	157.400	236.100
Portugal	100.100	158.400

Source: Prepared by the authors from HFCS data.

Spanish's households hold an average investment in real estate assets equivalent to 236,100 euros (table 4.1) compared to the average investment they hold in financial assets, which is 56,300 euros (table 3.1). In other words, the value of the average investment in housing is slightly more than four times the value of the average investment in financial assets. If we analyze the median value of both type of investments, which indicates the threshold that separates in two halves the households with such assets, it stands at 157,400 Euros for the real estate properties (table 4.1) and 9,000 Euros for financial assets (table 3.1). In this case we are talking about a value seventeen times higher for real estate wealth compared to financial wealth. We also look at the Spanish households' portfolio composition in aggregate terms, finding that the real estate assets of Spanish families account for 78% of the portfolio, while financial assets make up the remaining 22%.

The comparison of the average and median values of households' real estate wealth, also provides insights about the existence of greater or lesser inequalities in the distribution of this type of wealth. As it was the case with financial savings, Spanish households are among those with the greatest inequality in the distribution of real estate wealth (Chart 4.2).

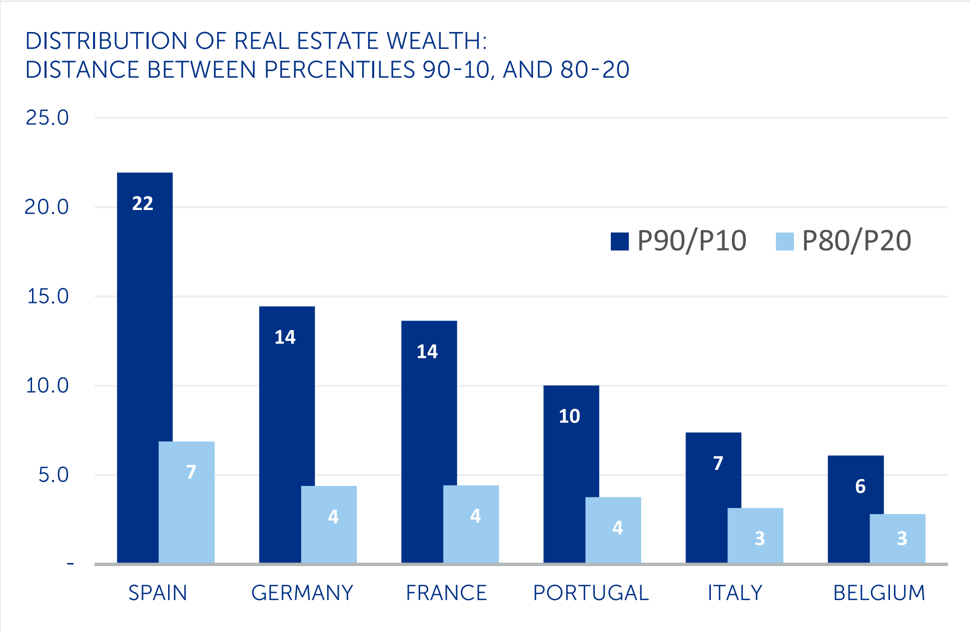
Chart 4.2. Inequality in the distribution of household property investment: average value over median value.



Source: Prepared by the authors from HFCS data.

We also analyzed for all countries the distance between the 90th - 10th and 80th – 20th percentiles of the distribution of real estate wealth, and observed that, once again, Spain is the country with the greatest inequality, as shown in chart 4.3. If we compare the 20th and 80th percentiles of the distribution - which are not affected by the different sampling of high-income households carried out by each country - we observe that the value of the properties of the 20% of Spanish families with the highest investment in real estate is 7 times higher than the real estate savings of the 20% of families with the lowest investment in real estate. This ratio of 7 compares to values of 4 and 3 for the rest of the countries in the sample.

Chart 4.3. Inequality in the distribution of property investment by households: distance between the 90th - 10th and 80th -20th percentiles.



Source: Prepared by the authors from HFCS data.

We have seen that the percentage of households that have their own home is only slightly lower than that owning any real estate investments. For this reason, it is worthy to further investigate whether the bulk of real estate investment is in fact the primary residence, which would indicate that families are not considering the acquisition of real estate assets as an investment alternative, but as a life option.

As the analyses in table 4.2 show, Spain is the country with the highest participation of its households in real estate assets other than their main residence, with 45% of Spanish families being owners in this sense, whereas this percentage falls for the rest of the countries to rates between 19% for Belgian households, and 29% for Portuguese ones, going through 22% in Germany and France and 21% in Italy. On the other hand, table 4.2 also provides an estimate of the weight that, on an aggregate level, investment in main residence has over total real estate investment in each country. Approximately 40% of the investments made by Spanish households in real estate are aimed at assets that are not their residence, a ratio that is much higher than in other countries.

Table 4.2. Percentage of households with investment in real estate other than their main residence and percentage of this investment over total real estate assets.

INVESTMENT IN REAL ESTATE ASSETS OTHER THAN THE MAIN RESIDENCE	PERCENTAGE OF HOUSEHOLDS WITH INVESTMENT	PERCENTAGE OVER INVESTMENT IN REAL ESTATE
Spain	45%	39%
Portugal	29%	29%
Germany	22%	33%
France	22%	26%
Italy	21%	20%
Belgium	19%	24%

Source: Prepared by the authors from HFCS data

Finally, we extend this analysis on the role of investment in main residence in the real estate wealth of households, estimating what is the average and median investment of families in their residence compared to the average and median investment in any type of property, whether or not it is the main residence. Table 4.3 shows this comparison.

Table 4.3. Average and median value of main residence investment, compared to average and median value of households' total real estate portfolio. Data in €.

A. Average investment

	MEAN VALUE OF MAIN RESIDENCE OWNED	MEAN VALUE OF THE SET OF REAL ESTATE ASSETS OWNED	RATIO BETWEEN THE TWO VALUES
Spain	163.900	236.100	69%
Portugal	119.200	158.400	75%
Germany	258.800	335.800	77%
France	226.400	283.900	80%
Belgium	294.900	368.000	80%
Italy	201.600	245.000	82%

B. A. Median investment

	MEAN VALUE OF MAIN RESIDENCE OWNED	MEAN VALUE OF THE SET OF REAL ESTATE ASSETS OWNED	RATIO BETWEEN THE TWO VALUES
Spain	120.200	157.400	76.4%
Italy	156.000	180.000	86.7%
Belgium	270.000	299.000	90.3%
Germany	200.000	220.700	90.6%
France	192.400	204.600	94.0%
Portugal	99.700	100.100	99.6%

Source: Prepared by the authors from HFCS data.

Once again, the evidence shows that Spain is the country where the average and medium values of investment in main residence bear less weight on the whole of real estate investment. It appears evident, then, that Spanish families consider investing in real estate, not only as an option to acquire their home, but also as an investment alternative to financial assets, and this represents a differential pattern of behavior with respect to our closest European neighbors.

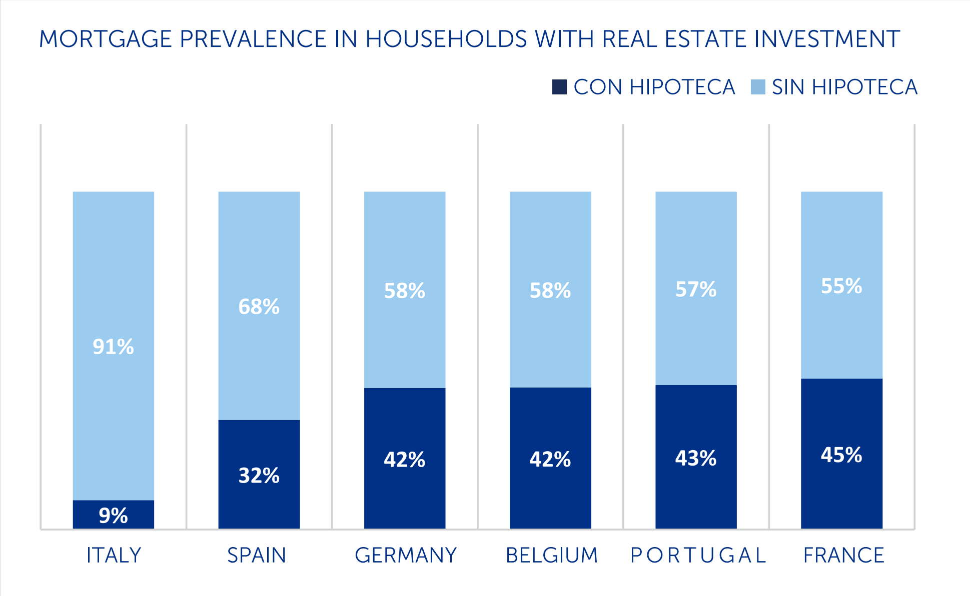
The high participation of Spanish families in the property sector, despite the high interest rates that were in force during the 80s and 90s, may be due to various historical, cultural or institutional reasons. As regards the main residence, two factors may have had an important effect: on the one hand, the fiscal incentive applied for many years in Spain for the purchase of the main residence; and on the other hand, the perception of owning the residence as a 'refuge' of protection for the family in moments of economic crisis and loss of employment (Spain has always been one of the Eurozone countries with the highest unemployment rates). In the latter sense, conventional wisdom says it is better to pay a mortgage than to pay a lease, as ultimately the mortgage gives access to home ownership, while rent does not, and is for this reason considered 'throwing money away'. To the extent that mortgage payment is equivalent to, or even lower than lease payment (currently it is), this thought will remain in the popular imagination.

Nevertheless, the data in tables 4.2 and 4.3 reveal that a large part of the savings of Spanish households has been allocated to properties that are not intended for the primary residence, and which include other dwellings for rent or second residences, parking spaces, commercial and office properties, plots of land, etc. Two factors may have influenced this behaviour, which does differ from that in Europe: (i) the late popularisation of investment funds in Spain, which are an alternative investment vehicle to direct purchases of shares and bonds, and which developed earlier in other European economies; (ii) the higher historical inflation rate recorded by Spain's economy compared to nearby countries, and the scarce or non-existent supply of inflation-linked fixed-income assets (which do exist in other countries), which would make investment in property assets a good alternative investment to hedge against the loss of purchasing power.

Finally, to determine the relevance of property savings in the resilience of households, it is necessary to examine their link to mortgage loans. Chart 4.4 shows the percentage of households with properties linked to mortgages, on the one hand, and with properties free of mortgage obligations, on the other [16].

16 In Spain, mortgage credit to households represents a proportion 3.7 times higher than that for credit to consumer goods (https://www.bde.es/f/webbde/Secciones/Publicaciones/InformesBoletinesRevistas/InformesEstabilidadFinancera/20/ficheros/IEF_2020_1_Rec1_2.pdf)

Chart 4.4. Prevalence of mortgage in household property investment.

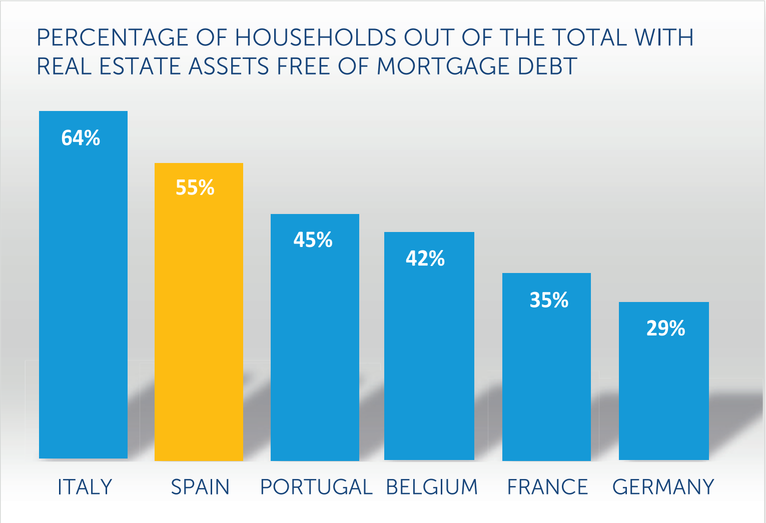


Source: Prepared by the authors from HFCS data.

In Spain, 68% (over two thirds) of households with property do not have a mortgage [17]. With 81% of Spanish families owning property, this means that more than half of Spanish households (55%) own real estate assets without financial burdens. Chart 4.5 shows the estimate of this data for all the countries in the study. Spain and in particular Italy are the two countries in which the highest percentage of households would have this element of resilience: owning a property without financial burdens. In contrast, Germany and France are the countries where the least proportion of households have this resource to cope with the crisis, and in an intermediate situation would be Belgium and Portugal.

17 For the 32% who have a mortgage, the average value of the outstanding mortgage is around €125,000, a figure similar to the average for the Eurozone.

Chart 4.5. Percentage of households with property assets free of mortgage burdens.



Source: Prepared by the authors from HFCS data.

We can summarize the most relevant findings of the analysis carried out in this section on the Spanish households' property assets, in the following points:

(i) Spanish households have the highest participation in real estate among the European countries analyzed, both in terms of ownership of their main residence and in terms of investment in other real estate assets.

(ii) 81% of Spanish families own at least one real estate asset and less than one third of these families have a mortgage associated with it.

(iii) 75% of Spanish families own their main residence. However, this percentage may be biased upwards because of the difficulty of young persons to become independent due to the high rate of unemployment and low salaries among the youth, which, together with high housing prices, make it unaffordable for this demographic. 53% of young Spaniards between 25 and 29 years old, and 25% of those between 30 and 35 years old, live with their parents (Arce, 2019).

(iv) In aggregate terms, approximately 60% of the real estate investment of Spanish households is devoted to their main residence and the remaining 40% to other real estate assets. Most of this investment in other real estate assets is held by families who already own their home. The percentage of Spanish families owning a real estate asset which is not their main residence is 45%.

(v) There is a great inequality in the distribution of property wealth in Spain, which is greater than in neighboring countries. Nevertheless, the inequality in the distribution of Spanish households' property savings is less than that of financial savings.

(vi) Only 32% of Spanish households' property investment is linked to a mortgage, while the remaining 68% is free of charges. Considering that 81% of households have property assets, this implies that 55% of Spanish families have some property that is free of financial burden, which may constitute an element of resilience to the crisis, in addition to that estimated on the basis of financial savings. The remaining 26% households (up to 81%) have property assets but are subject to mortgage loans.

5 MEASURING HOUSEHOLD RESILIENCE / VULNERABILITY IN THE FACE OF COVID-19

From the analysis carried out in the previous sections, we have learnt that: (i) 30% of Spanish families are in a very vulnerable situation in terms of financial savings - less than 1 month of the country's average wage or 2 weeks if measured by equivalent consumption unit within the household; (ii) 19% of Spanish households do not own any property; (iii) 26% of households have property that is linked to mortgage burdens. It is essential to know to what extent the first segment of households (those in a situation of extreme vulnerability in terms of financial savings) overlaps with the second and third segments (those that do not own property or have it linked to mortgages). If they overlap, the vulnerable situation of these families would be exacerbated. If, on the contrary, this segmentation were the result of different choices made by families, some having opted for real estate savings, and others having opted for financial savings, the overall wealth would be more distributed among all households and the resilience of society as a whole would be greater.

30% of Spanish families are in a very vulnerable situation in terms of financial savings, 19% do not own any property and 26% of households have property that is linked to mortgage burdens.

To examine this potential overlap, we have estimated the distribution of financial savings in each of the three household segments: (a) those who have some property free of burdens (55% of the total); (b) those who have some property, but tied to mortgages (26% of the total); (c) those who have no property at all (19% of the total). Panel A in Table 5.1 displays the median values of the distribution of financial savings in these three segments and the differences between them; Panel B shows these median values of financial savings in terms of the countries' average wages, both as a wage percentage, and as the number of months' salary.

Table 5.1. – Median values of financial savings for three categories of households: those with properties free of mortgages, those with mortgaged properties and those without properties.

A. Median values in € and differences between the three household segments.

MEDIAN VALUE OF FINANCIAL SAVINGS	HOMEOWNERS WITHOUT MORTGAGE (A)	HOMEOWNERS WITH MORTGAGE (B)	NON-OWNERS (C)	A/B	A/C	B/C
Germany	65.432	49.023	7.910	1	8	6
Belgium	56.228	31.647	2.364	2	24	13
France	47.744	24.772	2.359	2	20	11
Spain	31.128	11.827	790	3	39	15
Italy	8.124	5.835	1.494	1	5	4
Portugal	7.444	5.496	664	1	11	8

B. Median values in terms of countries' average wages.

MEDIAN FINANCIAL SAVINGS ON MEDIAN SALARY	HOMEOWNERS WITHOUT MORTGAGE		HOMEOWNERS WITH MORTGAGE		NON-OWNERS	
	% OF SALARY	MONTHS OF SALARY	% OF SALARY	MONTHS OF SALARY	% OF SALARY	MONTHS OF SALARY
Germany	163%	20	122%	15	20%	2.4
France	126%	15	65%	8	6%	0.7
Belgium	125%	15	70%	8	5%	0.6
Spain	116%	14	44%	5	3%	0.4
Portugal	44%	5	33%	4	4%	0.5
Italy	28%	3	20%	2	5%	0.6

Source: Prepared by the authors from HFCS data y OCDE.

The figures show that the distribution of property wealth and financial savings are highly correlated, and that families who do not own any property exhibit a high level of vulnerability, because to the lack of real estate assets from which to obtain a rent or a home in property (to avoid paying a rent) they add the lack of financial savings. On the contrary, households that own some property and do not have mortgage burdens accumulate the most financial savings. Half of these households in Germany, Belgium, France and Spain have saved more than fourteen months' wages, while in Portugal and Italy this figure is merely five and three months. Families who own a property tied to a mortgage have somewhat lower financial savings, yet higher than non-owner families: in Germany, half of them exceed a year's salary, in France and Belgium six months, in Spain and Portugal four months, and for Italy just two months' salary. In all countries, except Germany, 50% of non-owner families hold financial savings below one month's salary, reveling an extreme vulnerability.

The data above refer to the median value of financial savings distribution in the three segments of the population analyzed - owners of properties without burdens, owners of mortgaged properties, and non-owners. This value is the threshold of financial savings above and below which the two halves of households in each segment are situated, and serves to give a first, very revealing, picture of the situation.

A more in-depth study is however required to determine how many households in each country are below what we might consider a minimum threshold of financial subsistence, integrating in this threshold the concept of owning a mortgage-free property, which undoubtedly provides greater resilience. This more detailed analysis could help guide the economic and social policies that need to be put in place immediately to safeguard families who are extremely vulnerable and who if affected by the COVID-19 pandemic (loss of employment, temporary lay-offs, business closure, etc.), would not be able to cope without help. Secondly, but no less important, this analysis should provide an opportunity to reflect on what policies and actions need to be implemented in the medium and long term to enable and encourage all households to increase their savings so as to build up their own resilience, both to tackle future eventualities and to deal with the stage in the life cycle when income falls, i.e., retirement.

To this end, and in line with the recommendations of the European Commission in its 2020 strategy, we defined the threshold of vulnerability or financial subsistence as follows: a vulnerable household is that with savings per unit of equivalent consumption below 60% of three months of the country's average salary. As a novelty, we propose to adjust this vulnerability threshold downwards, for those households that either do not need to pay the rent or a mortgage because they own their main home and do not have a burden on it, or they have other real estate assets from which they can receive an income. Both types of households, which fall into the unencumbered ownership segment, are more resilient to equal financial savings. To estimate this adjustment, we used the information provided by the Bank of Spain on rents and mortgage burdens, which indicates that rental payments are around 20-25% of disposable income, while mortgage burdens are around 15%-20% of disposable income (Bank of Spain, 2020). As an approximation for both costs, rent and mortgage, we took 20% of the average salary in each country.

Table 5.2 presents the estimate of the vulnerability threshold per equivalent consumption unit and per household, both for non-owner households or households with mortgaged property, on the one hand, and for households with mortgage-free properties (in this case the threshold is adjusted downward for the equivalent to the mortgage or rental costs).

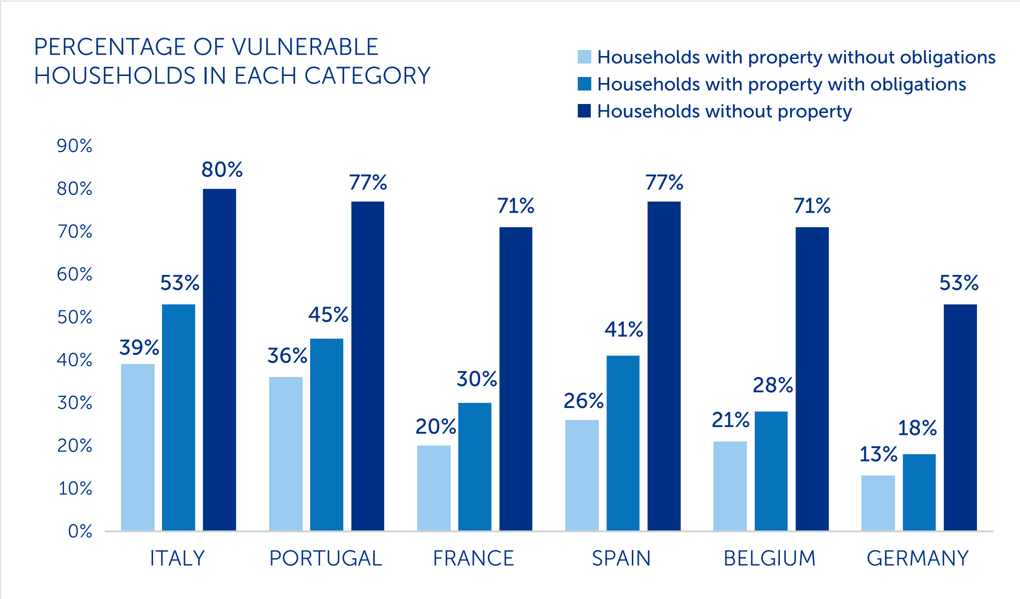
Table 5.2. Vulnerability or financial poverty threshold.

	SALARY	60% OF SALARY	VULNERABILITY THRESHOLD PER EQUIVALENT CONSUMPTION UNIT	EQUIVALENT CONSUMPTION UNITS PER HOUSEHOLD	THRESHOLD OF VULNERABILITY PER HOUSEHOLD (NON-OWNER HOUSEHOLD OR OWNER WITH MORTGAGE DEBT)	VULNERABILITY THRESHOLD PER HOUSEHOLD (HOMEOWNER WITHOUT MORTGAGE DEBT)
Belgium	44.995	26.997	6.749	1.59	10.743	7.162
Germany	40.151	24.091	6.023	1.58	9.534	6.356
France	37.860	22.716	5.679	1.62	9.194	6.130
Italy	29.256	17.554	4.388	1.57	6.870	4.580
Spain	26.821	16.092	4.023	1.66	6.685	4.456
Portugal	16.885	10.131	2.533	1.66	4.213	2.809

Source: Prepared by the authors from HFCS data y OCDE.

Knowing these financial vulnerability or poverty thresholds allows us to determine how many households fall below these values, in terms of accumulated savings. To carry out this exercise, we obtained the percentiles of the distribution of financial savings in the three household segments into which we have divided the sample in this section: mortgage-free owners, mortgaged property owners, and non-owners, and we estimated the percentage of households below the financial poverty line in each category. Chart 5.1 presents these findings:

Chart 5.1. Percentage of households in each segment below the financial poverty threshold.



Source: Prepared by the authors from HFCS data y OCDE.

The greater financial vulnerability of non-owner households is evident in all the countries, as well as the greater resilience of ownership households with no mortgage burdens.

But the fact stands out that even in this last segment of households (debt-free owners) there is a non-negligible percentage of households below the financial vulnerability or subsistence threshold, and this despite the fact that it has been taken into account that these households do not need to pay rent or mortgage. More than 25% of Spanish families in this category of households (debt-free owners) - which is actually the largest - are below this financial subsistence threshold.

Within the category of households with properties tied to loans, the percentage of families that do not reach this financial subsistence threshold is higher than for mortgage-free owners, in all the countries, but especially in Italy, Portugal and Spain where more than 40% of the families in this segment would be below the financial subsistence threshold [18]. In Spain, households with mortgaged properties account for 26% of the total, and 41% of these, as shown in the chart, are below the vulnerability threshold.

18 Some of the families in this tranche may have the option to extend the mortgage on the property, or sell it and obtain liquidity - provided that the real value of the asset exceeds the value of the mortgage burden - which would allow them to use that liquidity to subsist. But this liquidity would take several months to materialize, so in the short term they are vulnerable families.

The figures for the non-owner household segment are disheartening. In all countries (with the exception of Germany) more than 70% of non-owner households are below the financial subsistence level we have set (in the case of Spain this figure rises to 77% of households in this segment). Moreover, these households have no possibility of transforming a property asset into liquidity, since they do not own it, as other households can do, at least in the medium term.

Finally, for the purpose of calculating the total number of households below this financial subsistence threshold in each country, based on the three segments analyzed related to real estate ownership, we need to consider the different distribution of households across these segments in each country. Table 5.3 presents this estimate.

Table 5.3. Percentage of households below the financial vulnerability or poverty threshold in each country.

	ITALY	PORTUGAL	FRANCE	SPAIN	BELGIUM	GERMANY
DISTRIBUTION OF HOUSEHOLDS IN SEGMENTS						
Homeowners without obligations	65%	45%	34%	55%	42%	29%
Homeowners with obligations	6%	34%	28%	26%	30%	21%
Non-owners	29%	21%	38%	19%	28%	50%
	100%	**100%**	**100%**	**100%**	**100%**	**100%**
VULNERABLE HOUSEHOLDS IN THEIR SEGMENT						
Homeowners without obligations	39%	36%	20%	26%	21%	13%
Homeowners with obligations	53%	45%	30%	41%	28%	18%
Non-owners	80%	77%	71%	77%	71%	53%
VULNERABLE HOUSEHOLDS IN THE SAMPLE						
Homeowners without obligations	25%	16%	7%	14%	9%	4%
Homeowners with obligations	3%	15%	8%	11%	8%	4%
Non-owners	23%	16%	27%	15%	20%	27%
TOTAL PERCENTAGE OF VULNERABLE HOUSEHOLDS	52%	48%	42%	40%	37%	34%

Source: Prepared by the authors from HFCS data y OCDE.

Regrettably, we observe that in all countries there is a high percentage of households below the financial vulnerability threshold, and therefore households who, with their savings, would not be able to maintain subsistence conditions beyond three months, in the event of a 100% drop in income. The countries with the fewest households below this threshold are Germany and Belgium, which, as has been proven in section 3 of this report, are the countries in which households have the highest levels of financial savings. The case of Germany is perhaps most striking, as it is the country with the fewest number of families with home ownership, and unencumbered home ownership adds to resilience, which has been considered in our estimations. In the case of Spain, the percentage of financially vulnerable families stands at 40%, and of these approximately 60% have some property in their possession (more than half of them debt-free), while the remaining 40% have no property at all.

The financial fragility detected would be further exacerbated if we were to include any adjustment to the vulnerability threshold that takes into account household consumer loans, as has been done in the case of loans tied to property. In Spain, around 30% of households have this type of loan, which are used for the purchase of vehicles, durable goods, home renovations, etc. and have an average outstanding value of € 5,500. Overall, non-mortgage loans account for around 15% of Spanish household debt (Banco de España, 2019).

In short, these data reflect the fragility of European society in the face of an eventuality such as the one caused by COVID-19 and the need for immediate institutional support to enable all families who need it to get through. They also call for a reflection on the need to implement policies and actions that in the medium term strengthen European households' financial resilience.

6 CONCLUSIONS AND FINAL THOUGHTS

This report by the Household Savings Observatory, entitled *"Resilience/vulnerability of Spanish households in the face of COVID-19. Disparities in the distribution and composition of savings in Europe"* presents highly relevant findings, not only for drafting the actions that it will be necessary to implement immediately, to alleviate the devastating social and economic effects of the current crisis, but also for the definition of long-term policies that promote a change in citizens' behaviour towards a culture of sustainable savings.

The findings show the financial fragility of a significant proportion of European households which, in the event of a total loss of income, would find it difficult to survive beyond three months

Based on the micro data from the Household Finance and Consumer Survey carried out by all EU countries under a common methodology centralized by the ECB, we conducted a comprehensive study on the behavior of European households with regard to savings, answering questions such as: What is the composition of the savings portfolio of European households related to financial and property assets? How imbalanced is the distribution of both types of wealth financial and real estate, across households in Europe? Is the bulk of real estate investment allocated to the purchase of the main residence? How many households in each country have savings below the minimum financial subsistence threshold? It is a unique study, because of its extent - it includes six countries from the Eurozone, Germany, Belgium, Spain, France, Italy and Portugal, which together account for 80% of the area's population and GDP - and because of its novel approach in considering property, when not tied to a mortgage, as an element of resilience in the calculation of households' vulnerability or financial subsistence threshold.

Overall, the findings show the financial fragility of a significant proportion of European households which, in the event of a total loss of income, would find it difficult to survive beyond three months. The proportion of these financially fragile households ranges from 34% in Germany to 52% in Italy. These households are not necessarily insolvent, as some have property assets, but in all cases losing 100% of their income for over three months would prevent them from meeting their living expenses in the short term.

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For each country, the study provides a detailed snapshot of the composition and distribution of savings across households, which makes it possible to identify behaviors that are sometimes common and sometimes different from one country to another. Specifically, for Spain, the main findings that make up the snapshot are:

- Financial savings of 30% of Spanish families do not reach the equivalent of one month of the country's average salary (the savings of these families per unit of equivalent consumption are below the two weeks of salary).
- The real estate wealth of Spanish's households is on average four times greater than the financial wealth they possess, and in median seventeen times greater.
- Among the countries analyzed, Spanish families are the ones who participate most in the real estate sector. In Spain 81% of the families have some kind of real estate property, and in 93% of the cases, at least one of these properties is the main residence
- On an aggregate level, only 60% of Spanish households' property investment goes to their main home, the remaining 40% is allocated to other property assets and most of them are owned by those households who already have their main home.
- Only a third of families with property assets have mortgage loans tied to them.
- Spain is at the top of the countries with the greatest inequality in distribution, in both financial and real estate wealth. For all countries, including Spain, inequality in the distribution of financial assets is greater than that for property assets.
- Real estate and financial wealth of household are highly correlated, which results in almost 80% of Spanish families with no property assets having practically no financial savings, leaving them below the financial subsistence threshold. The good news in this regard is the low percentage of households without property assets in Spain (19%).
- About 40% of Spanish families would have serious problems coping with a loss of 100% of their income, extending beyond three months. Their savings would not be enough to cover their minimum living expenses. For many of these families, the survival period using only their savings would be even less than three months. Almost 40% of them do not have any property assets. The remaining 60% of these vulnerable families do have property assets, but almost half have them tied to a mortgage. In the event of losing their income, households without any element of solvency to be able to convert into liquidity (that is, that do not have property assets, or have them mortgaged) would represent the group of families at greatest risk of poverty.

6 CONCLUSIONS AND FINAL THOUGHTS

These data illustrate the dramatic situation that many Spanish households are facing in this pandemic due to their lack of savings. There is an excessively high percentage of vulnerable households in all the countries, and our 'welfare state' won't have sufficient capacity to face the social and economic cost of the pandemic if it last for a longer period, especially if the effects impact mostly on these "financially poor" or most vulnerable households.

Certainly, many questions remain unanswered, particularly relevant are those concerning the socio-economic characteristics of the most vulnerable families. What profile of households are the most fragile? those headed by the youngest, by families with children, by retired people, by widows or widowers? those with less education? those with higher unemployment? those who are self-employed or employed? those with a lower income? Those living in large cities, or those in less urban or more rural areas?

In the long term, other questions concerning the barriers to saving which make savings almost non-existent for a large part of Spanish households would also be relevant: is there a lack of financial education, or financial information, or both? is there a lack of social awareness that emphasizes savings over consumption? is the existing fiscal framework suitable for promoting an appropriate savings culture? is excessive consumption less penalized socially or politically than the accumulation of wealth resulting from systematic saving over time? is there a lack of trust in financial institutions, advisors, intermediaries, etc.? why have Spaniards opted for property rather than financial savings? are there gender differences in behavior towards saving? does the low interest rate monetary policy of the last decade discourage savings? does it make sense that a large proportion of fixed income assets offer returns far below their risk levels, even under low inflation scenarios, or is it the result of the monetary policy and financial sector regulation?

It is essential to advance in the research of the elements that make up the savings behavior (or lack thereof) in order to build a solid body of knowledge that serves as a basis for the authorities to design effective social, economic, fiscal and monetary policies that promote a culture of sustainable savings across European households.

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As an example, the huge inequality in the distribution of savings across Spanish households, particularly with regard to financial savings, suggests that a regressive incentive system for savings could have a positive effect on reducing these inequalities. In other words, a system in which incentives or tax exemptions were more generous for the first tranches of savings or capital gains, and which progressively disappeared as financial wealth reached higher tranches.

Promoting a savings culture must be one of the priorities of the welfare state, because savings are a springboard for contingencies (loss of employment, illness, etc.) and for levelling out income and expenditure throughout the life cycle (children's education, retirement).

It is imperative to encourage a positive attitude and a change in behavior in order to raise the level of systematic saving among Spanish households in the medium and long term. This would help to reduce levels of poverty, inequality and social exclusion, which are coming to the fore once again due to the current economic crisis caused by the COVID-19.

We would like to end this report with a quote: 'Reducing financial vulnerability is not just a matter of increasing income. Financial resilience is also about managing personal finances throughout the lifecycle. This requires structural policies that promote conscious planning for the future among households' (Arellano and Cámara, 2020).

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