Household income inequality and its impact on consumption

Although income inequality has declined and wealth levels have improved, Spanish income and consumption rates are still weak compared to pre-crisis levels. These dynamics indicate that the consequences of the financial crisis, including fewer opportunities for permanent employment and a reduction in savings, are still having a negative impact on Spanish households.

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Abstract: The great recession has had a long-lasting impact on Spanish households, with consumption still below pre-crisis levels. Given the importance consumption plays in a country's GDP, it is necessary to go beyond the analysis of aggregated statistics to identify behavioural patterns across household groups, with the goal of gleaning insight into past patterns and future projections of consumption. Interestingly, the latest data show that while income inequality has fallen, it is still higher than in 2007. On the other hand, wealth is less unequally dispersed and those households in economic hardship have fallen. That said, with the exception of retirees, Spaniards' income levels have yet to fully re-bound. The combined effect of these developments means consumption remains lower than in 2007. Interestingly, there has been a slowdown in the improvement in

consumption this year despite an increase in gross disposable income. This suggests household spending could be influenced by factors such as uncertainty emanating from global trade disputes and other factors that are remnants from the crisis still observable today.

Introduction

The use of aggregate figures to analyse an economy's performance can pose challenges for economists. As information that captures dissimilarities and the behaviour of different agents is often lost in these analyses, it is increasingly common to supplement aggregate statistics with more detailed information from government registers and surveys. In Spain's case, trends in the distribution of household incomes provide insight into past patterns and future projections of consumption. In this report, we use the most recent data on household income distribution to determine the implications for Spain's economy.

There are three sources of information on the distribution of income and wealth in Spain:

- The *Quality of Life Survey (EQLS)*. This is an annual survey that is harmonised across Europe and designed to provide information on income as well as the level and composition of poverty and social exclusion. It can also be used to make comparisons between EU countries. The 2018 edition provides a snapshot of the situation of families in 2017.

- The *Survey of Household Finances (EFF)*. This survey is published by the Bank of Spain and examines the finances of households, supplementing the aggregate information drawn from the financial accounts. The most recent publication includes data from 2014 and was used by the Bank of Spain to prepare its 2018 report on income, consumption and wealth inequalities in Spain.

- The *Luxembourg Income Study (LIS)* includes data from survey campaigns in high- and middle-income countries, which can be used to draw international comparisons of both income and wealth.

- The *World Inequality Database (WID)*. This is a free database prepared by a group of economists whose objective is to standardize and improve the quality and scope of public statistics that cover the global and evolving distribution of income and wealth. The database combines survey information with tax records and National Accounting data. The objective of the project is the preparation of National Distributive Accounts, which allow macroeconomic data to be regularly and coherently integrated with the income and wealth distribution structure.

The data show the negative impact of the crisis on the incomes of households in the lowest percentiles, with cuts in working hours having a significant effect. Exhibit 1 demonstrates how the Gini coefficient –a synthetic measure of income distribution– rose significantly when the crisis hit (indicating greater inequality) and has started to level off in recent years. This pattern is also reflected in the difference between percentiles at different points on the distribution curve. Looking at the income of the 90th percentile and the 10th percentile of income earners, the difference between the two hovered around 5 during the crisis, and has subsequently fallen in the latest data collected by the *LIS*.

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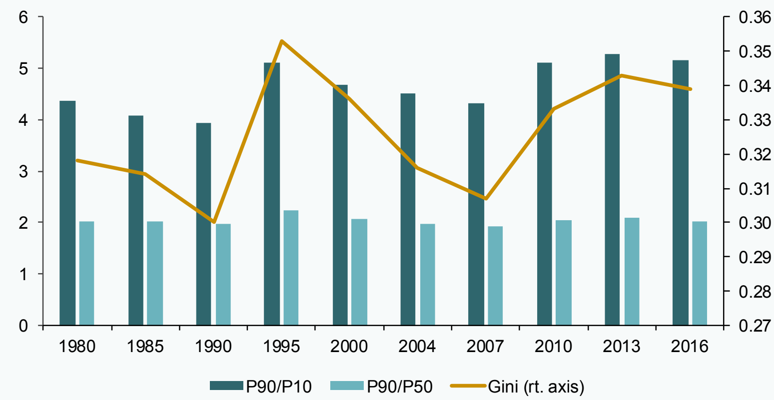
Exhibit 1

Income distribution indicators in Spain (Gini coefficient and quotients between distribution percentiles)



Source: Afi, LIS.

These dynamics partially explain why inequality in Spanish net incomes was among the highest in the EU. Conversely, due to home ownership, wealth was less unequally dispersed. The impact on consumption was partly and temporarily cushioned by pensions and government transfers such as unemployment benefits. These households had minimal savings and tight finances due to a lack of financial assets, so their propensity to consume out of wage income when they found work during the recovery was high. This incongruity warrants closer examination in light of the on-going recovery, a stronger job market and improved salaries, which have corrected the relative decline in household incomes in the lowest percentiles of the distribution curve.

Income inequality

According to the *EQLS,* the average household income per annum was 28,417 euros in 2017 – up 3.1% y-o-y. Average household incomes have been on the rise for four years in a row, although they are still lower than pre-crisis levels. This is especially true for real incomes in 2017, which remained 9% below the average in 2008 (Exhibit 2). This decline is due to the considerable reduction of household incomes at the middle and lower ends of the distribution curve. These groups are primarily composed of families with unemployed or retired members. Although the average income of retirees is in line with pre-crisis levels, this is not the case for the unemployed, whose income is 20% lower. While unemployment has fallen considerably from 26% in 2013 to below 15% today, the unemployed did not see their income begin to rise until 2016.

While household incomes have not fully rebounded, the economic recovery has reduced inequality, measured as the ratio between average incomes in the 20th and 80th percentiles. This ratio decreased by 9% in 2018 y-o-y to 6, which is almost a point below the maximum reached in 2015. Despite

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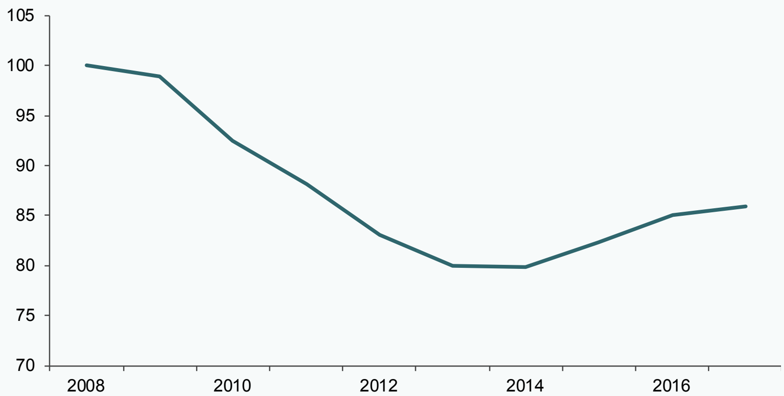
Exhibit 2 **Real median household income (2008=100)**



Source: Afi, INE.

this improvement, income inequality is still greater than before the crisis, when the ratio stood at 5.6. That said, WID data indicate that the income earned before taxes by the top one percent and the richest ten percent increased in 2015 and 2016, standing this last year at 9.8% and 30.7% of total income, respectively.

Moreover, the recovery has reduced the proportion of families facing economic hardship. This improvement has been especially intense in the lowest deciles of the distribution curve (Exhibit 3). For example, 34% of households currently report they cannot afford a weeklong vacation once a year, down from 46% in 2013. However, the change in the proportion of families without any emergency funds is less positive. Around 36% of families are without any emergency funds, compared to 42.4% in 2014.

That said, at 21.5%, the percentage of the population at risk of poverty or social exclusion (measured by the AROPE indicator) is still high, despite having fallen by half a point. As the risk of poverty and becoming severely materially deprived have not changed since the last survey, the decrease in the AROPE indicator is most likely due to job creation, which reduces the percentage of the population with low work intensity.

The wealth effect

To a lesser extent, the accumulation of wealth (both financial and real estate) has reduced inequality between families. Households have accumulated a considerable stock of net financial assets worth 187% of GDI in 2018 compared to 107% before the crisis. This increase has been largely due to the deleveraging of households together with the accumulated revaluation of financial assets. The recovery in housing prices has boosted the non-financial wealth of families through the revaluation of real estate such

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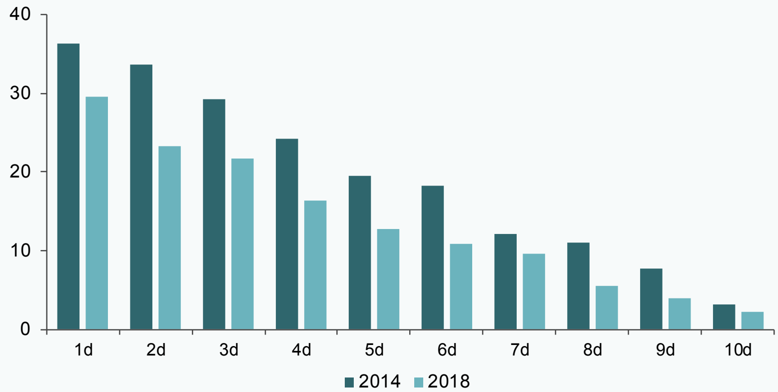
Exhibit 3

Percentage of people declaring that they struggle to make ends meet at the end of the month by decile



Source: Afi, INE.

that the real estate wealth of families in terms of GDI has increased by almost 90 percentage points since 2014 to stand at 718% in 2018.

It is important to note that wealth is usually more concentrated than income. However, the high proportion of real estate *versus* financial wealth held by Spanish households means that inequality in terms of wealth is lower than in other developed economies. The current real estate cycle is therefore helping to close the wealth gap that widened during the crisis.

Consumption

The Household Budget Survey (EPF) in Spain offers insight into families' consumption decisions. In 2017, average household spending totalled 29,317 euros – 3.5% higher than in 2016 but still down 7.5% from the 2008 figure. Looking at the evolution of spending broken down by the type of breadwinner (self-employed, employee, pensioner, *etc.*), it becomes clear that with the exception of pensioners whose spending has increase by 5.6%, all households are consuming less than in 2008. Although each group is spending considerably less in real terms, the reduction in spending among pensioners has been the least pronounced. Since 2014, spending by all groups has stabilised, with some limited increases concentrated among households with wage earners and self-employed breadwinners. In other words, spending by those cohorts most sensitive to the general economic recovery has risen the most, which fuels consumption, at least in the near term.

Figures are also available for consumption broken down by the net income of breadwinners. These data show that spending by households with net incomes of less than 1,000 euros a month fell between 2016 and 2017, while those on higher incomes spent more. However, this situation can lead to a ladder effect, *i.e.* if the main breadwinner's income increases, the household will move

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into a higher category. This is clearly shown in the distribution of households by this classification, where those with incomes of less than 1,500 euros made up 44% of the total in 2016, falling to 41.2% in 2017 – a 2.8 percentage point decrease. This scenario also supports consumption as more households find themselves in higher income categories.

Nevertheless, average spending per household broken down by quintiles shows that in real terms all cohorts are well below 2007 levels, with the third quintile experiencing the greatest cumulative decline of 25%. There has also been an 18% decrease for the lowest quintile (Exhibit 4). The poorest quintile's spending may have fallen in order to re-allocate income to cover their basic needs. However, this would mean that the propensity to consume would still be high in the event of potential increases in income.

The above analysis may be useful to understand the recent trajectory of households' final consumption expenditure. According to the Quarterly National Accounts, this spending category has weakened in the last year. Specifically, it fell from 0.6% in the third quarter of 2018 to 0.26% in the first round of second quarter data this year. Interestingly, the slowdown has coincided with an improvement in the growth rate of gross disposable income, thanks to considerable wage growth. The uncertainty derived from the global industrial recession, ongoing trade disputes, and the implications on automobile purchases derived from uncertainty over environmental standards has encouraged households to moderate their spending and slightly raise their savings, which has fallen to historical lows. Although the situation for households at the lower end of the income distribution is precarious, as employment rates improve, it is likely that consumption will pick up, too. However, the vulnerability of this component of GDP to any negative shock has probably been exacerbated.

Exhibit 4

Average spending by category (2007=100)

Source: Afi, INE.

Conclusion

In summary, despite the inevitable time lag, the data show that while employment rates and household finances in the lowest deciles of the distribution curve have improved, these households' situation remains still precarious. This is partly due to the high propensity to consume wages earned by these segments. As well, income and consumption are still weak compared to pre-crisis levels. These dynamics indicate that the consequences of the financial crisis, including fewer opportunities for permanent employment and a reduction in savings, are still having a negative impact on Spanish households.

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