BANCO DE ESPAÑA
Eurosistema

ECONOMIC BULLETIN
2023/Q2

The accrual and use of the excess savings built up by Spanish households since the onset of the pandemic

https://doi.org/10.53479/30229

Article 08
12/06/2023

Rationale

Households overall built up a large stock of excess savings during the pandemic. The use of these excess savings and the potential amount currently available for spending are relevant to understanding how they may support consumption over the coming quarters.

Takeaways

- To end-2022, households had barely used the excess savings accumulated during the pandemic for purchases of consumer goods and services. The bulk of these funds have been channelled towards financial investments, specifically deposits and investment funds.
- A more modest proportion of these savings – albeit one that has been increasing since 2021 – has been used to purchase non-financial assets (in particular, property) and to repay home loans.
- A large share of the excess savings accumulated during the health crisis is concentrated among higher-income households, to such an extent that households in the bottom income quintile barely increased their savings in this period.

Keywords

Saving, households, consumption, financial assets, housing, repayments, deposits, investment funds.

JEL classification

D14, D31, E21, G51.

Authors:

Pana Alves
Macro-financial Analysis and Monetary Policy Department. Banco de España

Carmen Martínez-Carrascal
Economic Developments Department
Banco de España

THE ACCRUAL AND USE OF THE EXCESS SAVINGS BUILT UP BY SPANISH HOUSEHOLDS SINCE THE ONSET OF THE PANDEMIC

Developments in household savings since the onset of the pandemic

Households in Spain as a whole built up, as in the rest of the euro area,[1] a very large stock of savings during the pandemic. For the most part, these were forced savings, as the restrictions on activity and mobility to contain the health crisis led to a collapse in consumption, while incomes were supported through social protection measures.[2] At the same time, some savings were accumulated for precautionary reasons, owing to the high level of uncertainty (Cuenca, Martínez Carrascal and Río, 2021).

As a corollary, Spanish households' saving rate stood at nearly 18% of their gross disposable income (GDI) in 2020 (see Chart 1.a), more than double the 2019 level. In 2021, although the pandemic containment measures were progressively eased, the saving rate remained at very high levels, at nearly 14% of GDI, second only in the time series to the 2020 peak. By contrast, in 2022 the saving rate fell to below 2019 levels as a result of the recovery in household spending, coupled with the surge in the prices of consumer goods and services.

Quantifying the excess savings built up since the start of the pandemic and analysing the potential amount currently available for spending are relevant to understanding how these funds may support consumption over the coming quarters. In this context, this article first presents simple quantifications of the amount of excess savings built up by households during the pandemic and describes the behaviour of these savings over time, before going on to discuss how such funds have been used.

Measurement and behaviour of excess household savings since the onset of the pandemic

While the pandemic saw the household saving rate reach very high levels, in excess of those that would have been observed in the absence of the health crisis, quantifying the stock of excess savings accumulated in this period is complex as the counterfactual scenario of no pandemic cannot be observed.

As a simple first approach to quantifying the quarterly excess saving *rate* after 2019 Q4 (i.e. the quarter preceding the outbreak of the pandemic), we can calculate the difference between the saving rate in the quarter in question and that observed in the same quarter in 2019 (see the bars in Chart 1.b). The year 2019 is used as a reference period because the saving rate in that year stood at around the 2000-2019 average. Under this approach, the excess saving *flows* in each

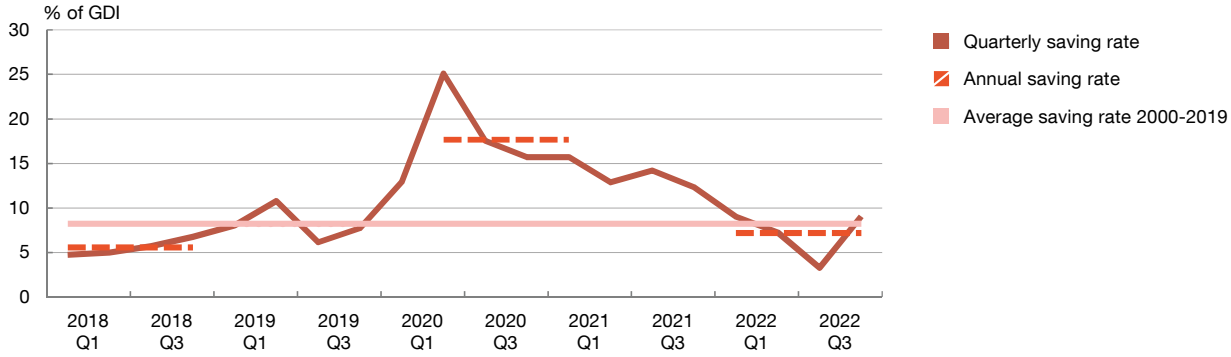
1 See, for example, Dossche, Krustev and Zlatanos (2021).

2 In aggregate terms, the sector's gross disposable income decreased by 2% in 2020, but returned to 2019 levels in 2021.

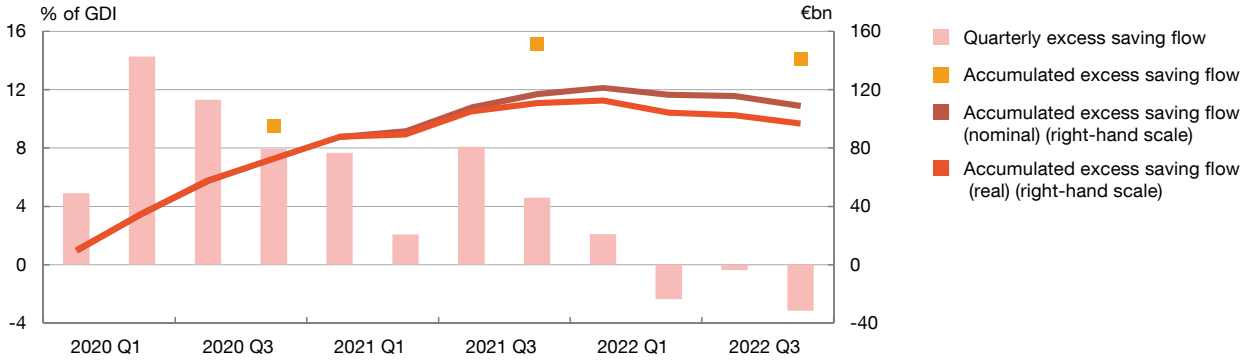
Chart 1

Changes in household savings since the onset of the pandemic

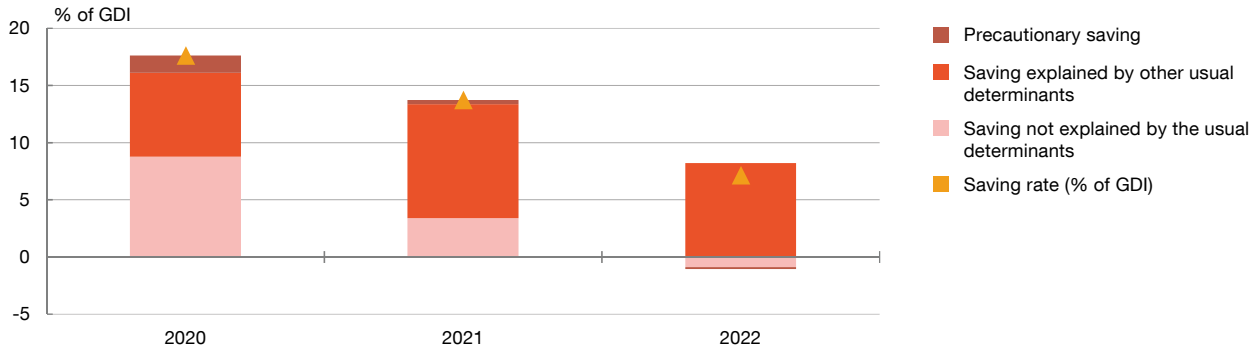
1.a Saving rate of households and NPISHs (a)



1.b Excess saving flow (b)



1.c Determinants of saving rate. Breakdown (c)



SOURCES: INE and Banco de España.

a NPISHs: non-profit institutions serving households.

b For each quarter, the ratio of excess saving flows to GDI is calculated as the difference between the ratio of savings to GDI in that period and that observed in the same quarter in 2019. This is multiplied by GDI to obtain the amount of the excess saving flow in euro for the quarter, the sum of which up to quarter Q is the accumulated excess savings up to quarter Q. For each year, the accumulated excess savings as a percentage of GDI are calculated as the sum of the annual excess savings in that year (normalised by GDI in that year) and in previous years (going back to 2020). Accumulated excess savings in real terms are obtained by deflating nominal excess savings by the harmonised index of consumer prices.

c Breakdown obtained drawing on the MTBE consumption equation. The contribution of precautionary saving is obtained on the basis of the contribution of the unemployment rate and the economic growth outlook to consumption growth.

quarter are defined as the difference between the household savings in that quarter and those that would have been observed if the saving rate had been that in the same quarter of 2019.[3] For their part, the excess savings accumulated up to quarter Q are defined as the sum of the quarterly excess saving flows (as just described) from 2020 Q1 to quarter Q (see the brown line in Chart 1.b). Lastly, the annual excess saving rate is calculated by dividing the sum of the quarterly excess saving flows accumulated in the year concerned by the GDI in that year. By adding these annual values, we obtain the excess savings built up over several years as a percentage of GDI (see the orange squares in Chart 1.b).

The excess saving flow in 2020 Q1 was not excessively high in the quarter as a whole, as the pandemic only affected the last few weeks of the quarter (see the first bar of Chart 1.b). These excess savings mainly reflected households' inability to carry out certain types of spending during the lockdown period, but also, to a lesser extent, their more cautious attitude towards purchases of goods and services, amid the heightened uncertainty. As shown by the second bar of Chart 1.b, excess savings rose considerably in 2020 Q2, initially owing to the lockdown extension and, towards the end of the quarter, to stringent restrictions being maintained. Positive excess saving flows were generated in all of the subsequent quarters up to 2022 Q1 (when virtually all the pandemic restrictions were lifted), resulting in a sustained increase in accumulated excess savings to around €120 billion (or, in terms of GDI, close to 16%).

Since 2022 Q1, the saving rate has fallen to below its 2019 level, thus generating negative excess saving flows based on the proposed measurement approach, on account of the boost in consumption (deriving from the complete lifting of the health restrictions), along with the notable erosion of households' purchasing power (due to the rapid increase in inflation). One possible interpretation of these developments is that some households have partially used their accumulated excess savings as a way to cushion the impact of the sharp price growth on their consumption (which, in real terms, remains below pre-pandemic levels).[4] As a result, the stock of accumulated excess savings declined to 14% of GDI (or around €100 billion) at end-2022, although inflation has eroded the purchasing power of these funds by over 10%.

By way of comparison, the euro area household saving rate, which tends to be higher than in Spain, also fell in 2022, to 15% of GDI, but remained above pre-pandemic levels. However, at end-2022 the stock of the excess savings built up since the start of the pandemic was similar to that observed in Spain, standing at around 12% of GDI.

Similar results are obtained using an alternative quantification of the stock of excess savings, based on the consumption equation forecasting error of the Quarterly Macroeconometric Model of the Banco de España (MTBE, by its Spanish abbreviation). Specifically, based on this approach,

3 That is to say, in quarter Q (after 2019 Q4) the excess saving flow is the difference between the saving rate in Q and that observed in the same quarter in 2019, multiplied by households' GDI in Q.

4 Nevertheless, the saving rate might have fallen to below its 2019 level even if households had not financed spending out of their accumulated savings.

the saving flow not explained by its usual determinants stood at 11% of GDI at end-2022. If this amount is added to the increase in precautionary saving prompted by the sharp rise in uncertainty surrounding the economic and health situation,[5] the stock of the excess savings that had not been used for current spending at end-2022 is estimated to have amounted to 13% of household GDI (see Chart 1.c).

These excess savings did not accrue equally to the various household groups, but rather tended to be concentrated in higher-income households. These households structurally have higher saving rates, which appear to have increased more strongly during the pandemic, for two reasons.

First, workers on higher incomes were less exposed to the losses in income in 2020, as they are under-represented in the workforce of the sectors hit hardest by the pandemic (in which employment fell most). Indeed, on the information at household level in the Living Conditions Survey, the average income of households in the top quintile of the income distribution increased slightly in 2020, whereas it fell by nearly 7% among those in the bottom quintile (see Chart 2.a).

Second, the spending suppressed by the pandemic containment measures (generally linked to goods and services requiring greater mobility and social interaction), and which thus gave rise to the savings generated, accounts for a larger proportion of higher-income households' consumption.

As a result, in 2020, 20% of lower-income households were barely able to build up any excess savings, defined as the difference in the saving rate in that year vis-à-vis 2019 (see Chart 2.b).[6] Other households were able to accumulate such savings, and to a larger extent the higher their income was. In 2021, as the impact of the pandemic on economic activity and consumption eased, the excess saving rates of households in the middle income quintile and, to a lesser extent, of those in the top two quintiles declined, but remained above 2019 levels. Conversely, 40% of lower-income households increased their excess saving rate in 2021. Specifically the bottom income quintile was able to accumulate excess savings thanks to the recovery in their incomes, despite the increase in nominal spending (attributable in part to the higher costs of energy and, in particular, of electricity, which represent a larger share of this household group's total spending).[7]

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5 Precautionary saving is estimated on the basis of the contributions of the unemployment rate and the economic growth outlook in explaining developments in consumption, based on the MTBE equation for this aggregate. An adjustment has been made to the unemployment rate used, to take into account job retention schemes. A higher unemployment rate or a lower economic growth forecast increases workers' perceived probability of losing their job and, therefore, prompts a rise in precautionary saving.

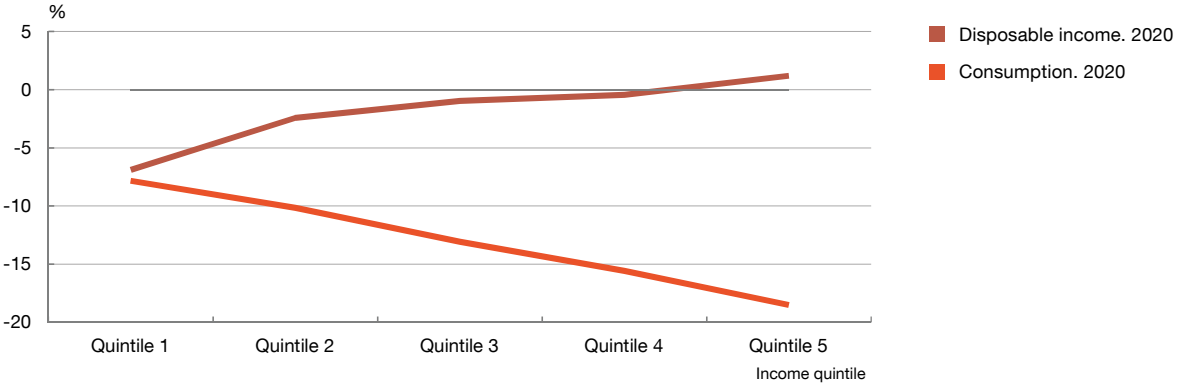
6 The data in this chart are obtained by combining the information on consumption in the Household Budget Survey with information on household income from the Living Conditions Survey. In 2020, the change vis-à-vis 2019 in the aggregate saving rate under this approach is very similar to that observed in the National Accounts data. However, that for 2021 is wider than indicated by the National Accounts. Moreover, according to the European Central Bank's Consumer Expectations Survey, the net proportion of households that reported having saved between mid-2021 and mid-2022 was lower than that observed between early 2020 and March 2021, with the decline being most pronounced among the higher income brackets.

7 Martínez-Carrascal (2022a).

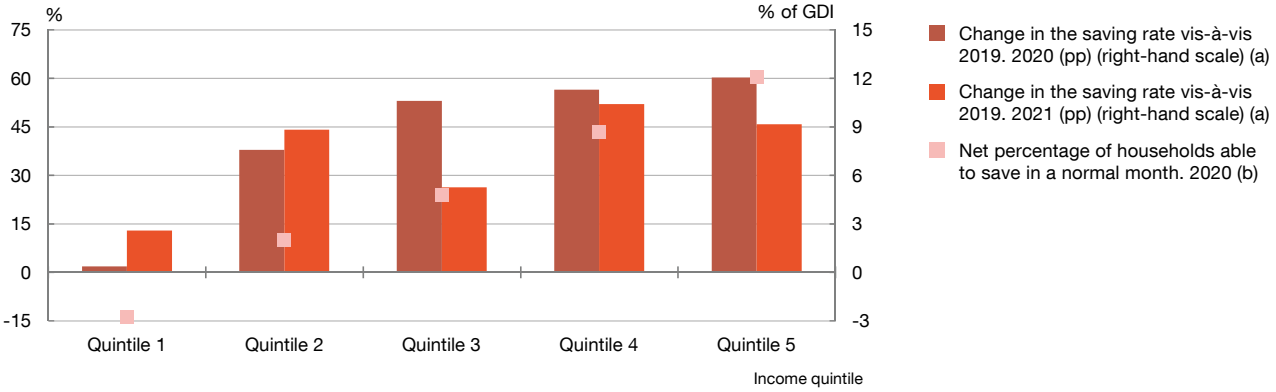
Chart 2

Changes in household income, consumption and savings during the pandemic. Breakdown by income quintile

2.a Change in consumption and income in nominal terms in 2020 vis-à-vis 2019 levels. Breakdown by income quintile in 2020



2.b Household savings. Breakdown by income quintile



SOURCES: Encuesta de Condiciones de Vida and Encuesta de Presupuestos Familiares.

a Proxied for each income quintile based on the difference between aggregate income and consumption in that segment of the population.
b Difference between the proportion of households able to save and those that have to resort to using their assets or borrow.

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Use of the stock of excess savings built up since the onset of the pandemic

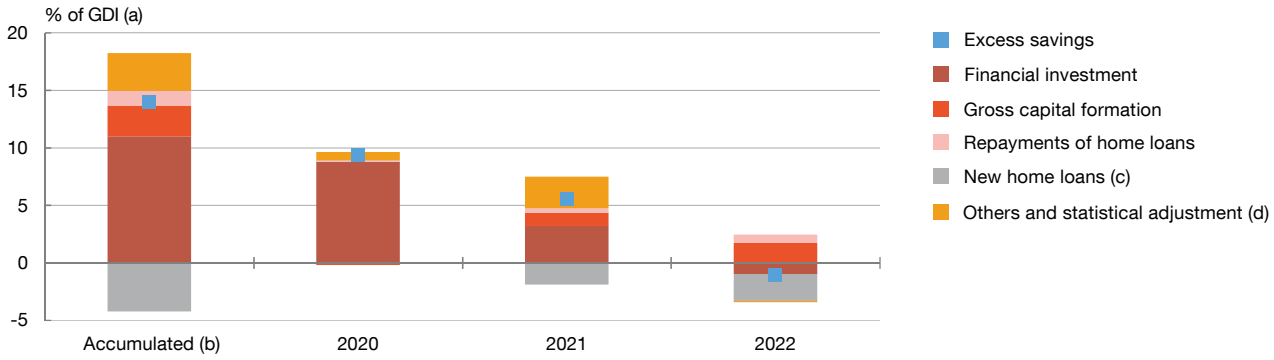
By combining household sector information from the non-financial accounts (which include consumption, gross savings and gross capital formation) and financial accounts (which include net financial investment flows and the net volume of new loans obtained), it is possible to identify the use (or counterpart entry) of the aggregate excess savings accumulated since the onset of the pandemic at the sectoral aggregate level. The funds obtained by households in a certain period (income and new loans) may be put towards consumption, the net change in financial assets, gross capital formation (whose main component is investment in new dwellings and the renovation of existing ones)[8] and the repayment of existing loans. Accordingly, any analysis of

8 Gross capital formation encompasses household investment in non-financial assets. Therefore, in addition to housing investment, it includes fixed capital investment by the self-employed, among others. For a definition of gross capital formation and its components, see Regulation (EU) No 549/2013 of 21 May 2013 on the European system of national and regional accounts in the European Union.

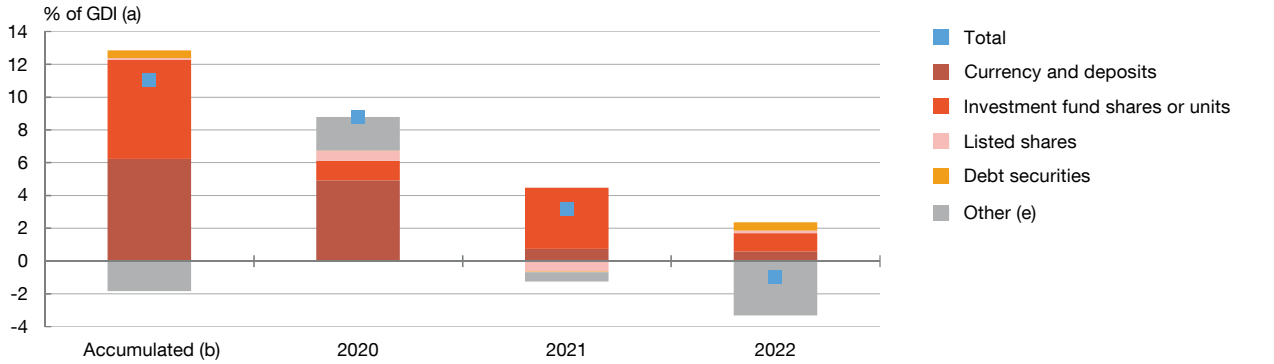
Chart 3

Use of excess saving flows accumulated between 2020 and 2022

3.a Excess savings accumulated during the pandemic and saving and investment flows, compared with 2019



3.b Excess flows channelled towards financial assets, compared with 2019



SOURCES: INE and Banco de España.

a For each year, the ratio of excess flows to GDI is calculated as the difference between the ratio of flows to GDI in that year and that observed in 2019.
b Calculated as the sum of the ratios of excess flows to GDI in all years.
c New loans for house purchase are presented with a negative sign, indicating that they exceed 2019 levels.
d Includes repayments of loans other than those for house purchase, new loans for purposes other than house purchase, other liabilities other than loans, statistical discrepancies between the financial account and the capital account, net capital transfers and net acquisitions of non-produced assets.
e Includes other financial assets, specifically: insurance, pension schemes, unlisted shares and other equity, financial derivatives, trade credits and other accounts receivable.

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the link between households' savings and their real and financial investment must also take into account the changes in financing flows.[9]

As in the previous section, our analysis takes as a reference the 2019 flows (as a percentage of GDI) in the form of the different types of real assets and financial assets and liabilities. According to this reference, around 80% of the excess savings built up between early 2020 and end-2022 went towards the net acquisition of financial assets (see Chart 3.a). A smaller share, albeit one

9 By accounting identity, the equation to equate the resources of households and the uses thereof, based on the financial and non-financial accounts, is as follows: savings + new loans + statistical adjustment = financial investment + gross capital formation + repayment of loans. The statistical adjustment captures other liabilities other than loans, statistical discrepancies between the financial account and the capital account, net capital transfers and net acquisitions of non-produced assets.

that grew over time, was used to finance gross capital formation and to repay mortgage loans. The excess financial investment was largely concentrated in 2020 and declined significantly in 2021, but fell below 2019 levels in 2022. The reverse trend was seen in gross capital formation and repayments of loans for house purchase, with the excess relative to 2019 increasing in 2021 and 2022 for both of these components. The following paragraphs analyse the behaviour of each of these items in more detail.

First, the excess net financial investment built up between the onset of the pandemic and end-2022 was concentrated mainly in two assets: currency and deposits (6.2% of GDI) and investment fund shares or units (6% of GDI) (see Chart 3.b).[10] However, the financial instruments into which the excess savings were channelled varied over time. For instance, in 2020 more than half of the excess financial investment (equivalent to 4.9% of GDI) took the form of currency and deposits. This appears at least partially attributable to the prevailing uncertainty at the time, which inclined households towards accumulating their excess savings in more liquid assets. In 2021, as the pandemic-related restrictions were eased and the uncertainty declined, the relative excess financial investment primarily took the form of investment fund shares or units, driven by the favourable performance of domestic and international financial markets. Thus, the changes in excess flows in the form of deposits and investment fund shares or units appear to partly reflect a portfolio rebalancing effect during the period.

In 2022, the overall net acquisition of financial assets fell below 2019 levels, which is consistent with both the drop in the saving rate in that year and the growing prominence of some alternative uses for those savings, such as gross capital formation. This lower level of financial investment as a percentage of GDI was consistent with a modest increase in the flows channelled towards investment funds and currency and deposits. In 2020, the amounts channelled into currency and deposits (as a share of GDI) in Spain were similar to those observed in the euro area, but in the period 2021-2022 were significantly higher in Spain. As a result, the country now has a much higher share of the excess savings held in currency and deposits (44%, 20 pp more than in the euro area). Meanwhile, investment in debt securities (as a percentage of GDI) was up by 0.5 pp on 2019 levels. This increase essentially materialised in 2022 Q4, driven by such assets becoming more attractive to retail investors as a result of the rise in interest rates.

Second, household gross capital formation gained momentum during the period in question, in step with the behaviour of housing investment. Although housing investment suffered in the early months of the pandemic (during the lockdown), the housing market moved into an upswing from late 2020. Initially this owed to the release of pent-up demand, i.e. transactions that had been prevented by the restrictions. As this demand was gradually absorbed, other factors filled the gap to keep the housing market buoyant. These included low interest rates (reaching all-time lows), the pandemic-induced shifts in housing preferences,[11] the recovery in household income

10 Other financial instruments that recorded positive gaps (albeit more moderate) in cumulative net investment flows in the period 2020-2022 as compared with 2019 were unlisted shares and other equity (1% of GDI) and debt securities (0.5% of GDI). Conversely, the excess savings used for the net acquisition of financial assets in the form of insurance and pension schemes between end-2019 and end-2020 (included in "other") had a negative sign (equivalent to 5% of GDI).

11 Alves and San Juan (2021).

(particularly for higher-income households) and the concentration of excess savings among higher-income households (as described in the previous section). The housing market remained robust until the final stretch of 2022, when it slowed significantly as tightening credit standards and the rising average cost of new loans began to curtail demand.[12]

The cumulative excess household investment in gross capital formation (2.7% of GDI) was accompanied by a larger excess in new loans for house purchase (4.2% of GDI). This is because new credit flows are used to purchase both new and second-hand homes, but only the former are included in gross capital formation (together with investment in home renovation). Conversely, sales of second-hand homes between households, which comprise the bulk of housing market transactions, entail a mere transfer of these assets among different households. If these sales are financed with credit, they increase the sector's aggregate debt along with its financial assets, initially in the form of deposits placed by the seller.

Third, households have also used a growing, albeit small, portion of the excess savings built up since the onset of the pandemic to repay existing loans for house purchase (equivalent to 1.3% of GDI). In 2020 such loan repayments (as a proportion of GDI) were similar to those in 2019. However, they exceeded 2019 levels in both 2021 and, in particular, 2022. The higher cost of variable rate mortgages increased the incentives to make early repayments, compounded by the fact that the remuneration of some liquid assets, such as deposits, had barely increased.

All told, the excess savings built up since the onset of the pandemic have translated into higher net household wealth because they have helped households to accumulate financial and real estate assets and make debt repayments.[13] That said, although the excess savings built up far exceed the usual flows, their contribution to increasing household net wealth since the start of the pandemic has been modest (1.4 pp). Ordinary saving flows (i.e. those in line with the historical averages) have made a larger contribution (3.1 pp), while the increase in the value of real estate has contributed 8.5 pp (see Chart 4.a). Around 70% of gross household wealth is in the form of real estate assets; therefore, changes in real estate prices have a significant bearing on household net worth. Between end-2019 and end-2022 house prices rose by 13.8%.

Our analysis indicates that the bulk of the excess household savings built up during the pandemic is held in financial assets and, in particular, liquid assets. Specifically, close to €50 billion of those excess savings (5.8% of GDI in 2022) is in the form of currency and deposits. Nonetheless, and in line with developments to date, various factors suggest that this stock of excess savings is unlikely to provide a very significant boost to aggregate household consumption in the coming quarters.[14] The outlook for household spending itself points in this direction (Martínez-Carrascal, 2022). In addition, the significant increase in the cost of debt in recent quarters may encourage households to channel a larger share of the accumulated savings towards loan repayments and

12 For an analysis of recent developments in the housing market, see San Juan (2023).

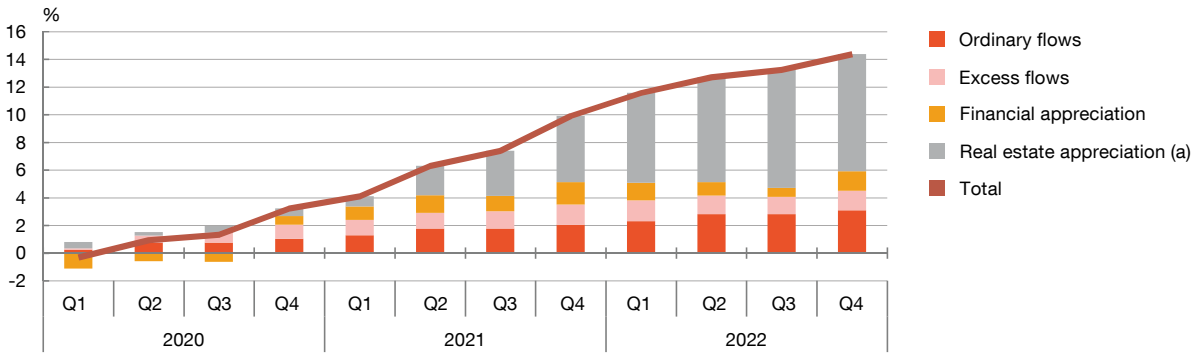
13 Household liabilities grew slightly between end-2019 and end-2022, owing to the excess bank loan repayments being outstripped by the excess new loans in that period.

14 In addition, households have €52.4 billion in other financial assets (specifically investment fund shares or units, listed shares and debt securities) that are less liquid and exposed to financial losses in the event of liquidation, although they could potentially be put towards consumption.

Chart 4

Excess saving flows have only made a modest contribution to the increase in net household wealth

4.a Contributions to the cumulative rate of change in net household wealth



SOURCES: INE and Banco de España.

a Only includes dwellings.

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away from other alternatives, as has been the case recently, and may also foster the shift from more liquid assets to those offering higher returns.

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How to cite this document

Pana Alves and Carmen Martínez-Carrascal. (2023). "The accrual and use of the excess savings built up by Spanish households since the onset of the pandemic". *Economic Bulletin - Banco de España*, 2023/Q2, 08. https://doi.org/10.53479/30229

ISSN 1695-9086 (online edition)