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THE IMPACT OF THE SURGE IN INFLATION AND THE
WAR ON SPANISH HOUSEHOLDS' ECONOMIC
OUTLOOK

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ABSTRACT

This article examines the impact that some recent events (specifically, the surge in inflation rates and the war in Ukraine) are having on Spanish households' economic expectations, using information from the European Central Bank's Consumer Expectations Survey. The analysis shows that the upward revision to household inflation expectations since mid-2021 has fed into their nominal spending expectations, which had been on an upward trajectory until the outbreak of the war. This upward path has been interrupted since the outbreak of the war, which has significantly impacted the expectations for the determinants of household spending: households now expect their income, their financial situation and the general economic situation to fare worse than before the war. Against a backdrop of greater projected price growth, the interruption of the upward trend observed in prior months of household expectations for an increase in nominal spending (with a downward adjustment, in particular, to the projected spending on durables) would entail weaker spending in real terms. In addition, the gap between the forecast growth of nominal spending and that of income has widened since early 2022. Accordingly, households appear to be implicitly anticipating slightly lower saving rates.

The analysis also shows that, in response to higher nominal spending on energy consumed in the home, households with a modest liquidity buffer have reduced their spending on other goods. These households are mostly low-income ones which are also more exposed to changes in energy prices, given that the energy bill absorbs a greater proportion of their income. By contrast, households with a larger liquidity buffer have not significantly changed their levels of spending on other items, which they have funded by temporarily reducing their saving rates.

Keywords: spending, inflation, expectations, war in Ukraine.

JEL classification: D12, E21, P24.

THE IMPACT OF THE SURGE IN INFLATION AND THE WAR ON SPANISH HOUSEHOLDS' ECONOMIC OUTLOOK

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Introduction

Russia's invasion of Ukraine has represented a fresh global and domestic economic shock, two years after the pandemic prompted a fall in activity without precedent in recent history. Before the invasion, the Spanish economy was gradually recovering from the effects of the health crisis; however, the recovery remained partial, uneven across sectors of activity and slower than in the euro area as a whole. Yet even before the outbreak of the war, economic developments were being influenced by a significant increase in inflationary pressures that was common to the other economies. Specifically, household spending in real terms had started to become affected by price acceleration.

The outbreak of the war has, both in Spain and worldwide, weakened the recovery in activity and intensified the episode of high inflation. These effects are arising, *inter alia*, through higher commodity prices, the deterioration of the global macroeconomic environment and the uncertainty surrounding the course of the war, which have all eroded economic agents' confidence and, particularly severely, that of households. This is reflected in the European Commission's consumer confidence indicator, which in March recorded its second biggest fall in the time series (which dates back to July 1986), beaten only by that recorded at the onset of the pandemic. This indicator has held at low levels in the subsequent months. The undermined purchasing power and confidence levels and, in general, the deterioration in the economic outlook have presumably impacted household spending.

This article examines the impact that these events are having on Spanish households' economic outlook, using information from the Consumer Expectations Survey (CES) conducted monthly by the European Central Bank (ECB) since April 2020 in six euro area countries (Belgium, Germany, Spain, France, Italy and the Netherlands).¹ The survey covers a wide range of questions related to households' perceptions of and expectations for their spending, their income, inflation, economic growth,

¹ Up to July 2021 the sample comprised around 10,000 respondents. This number has risen to around 15,000 (3,250 of them Spanish) in the latest editions of the survey. For more details on this survey, see Bańkowska et al. (2021).

labour markets, housing markets, household finance and their access to credit. The CES already proved considerably useful for analysing changes in Spanish households' spending and economic outlook during the pandemic.² In the second section of this article, the CES is used to analyse the main determinants of Spanish households' spending expectations 12 months ahead (their income and their financial situation, the general economic situation, prices and the conditions to access financing). The third section examines the impact of these determinants on spending expectations.

Spanish households' expectations for prices, their income and other determinants of their spending levels

In the most recent period and particularly since the outbreak of the war in Ukraine, the determinants of household spending expectations have tended to deteriorate. Households now expect their income, their financial situation and the general economic situation to fare worse than before. At the same time, they have revised upwards their short and medium-term inflation expectations.

Consumer price inflation has risen steadily since early 2021. This increase did not initially feed into household inflation expectations. However, it has done so since the second half of 2021, more forcefully in the case of short-term inflation expectations than in the medium-term ones.

The median of the distribution of Spanish households' inflation expectations 12 months and three years ahead began to be revised upwards from summer 2021 (see Chart 1.1). The increase sharpened as a result of the war, in step with the considerable acceleration in the cost of commodities and food since then. Some of this steep increase has subsequently corrected. However, in May inflation expectations remained above their early-2022 level. A comparison of the inflation expectations 12 months and three years ahead shows that the former are far higher than the latter, indicating that households expect the current inflationary episode to ease significantly in the medium term. This pattern is not significantly different from that observed for the euro area as a whole.³

In line with the higher median inflation expectations, an analysis of the full distribution of household inflation expectations shows how it has shifted to higher values. The change is more pronounced in the inflation expectations 12 months ahead. Specifically, between June 2021 and May 2022 the share of households who expect inflation to be 2.5% or less 12 months ahead has fallen significantly

2 See, for example, Banco de España (2022) and Alvargonzález et al. (2022).

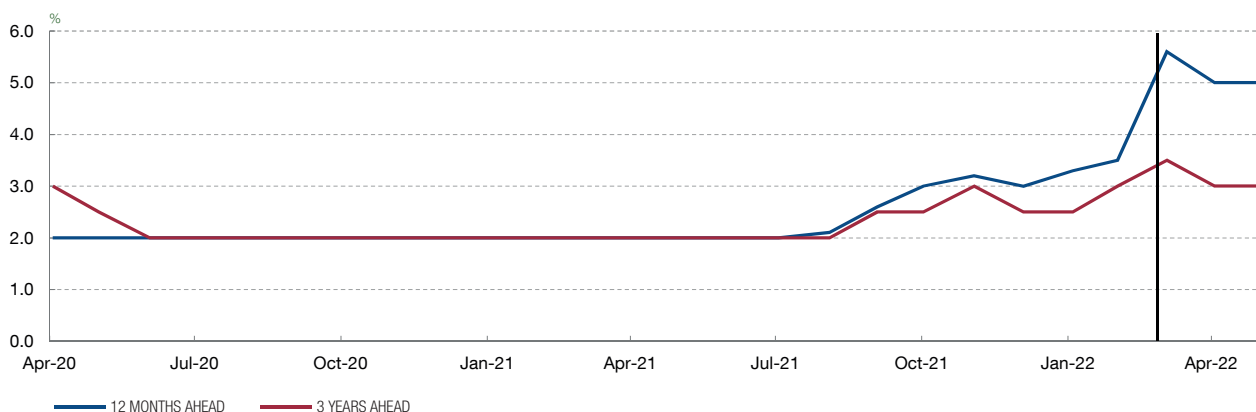
3 See Guirola and Kataryniuk (2022).

Chart 1

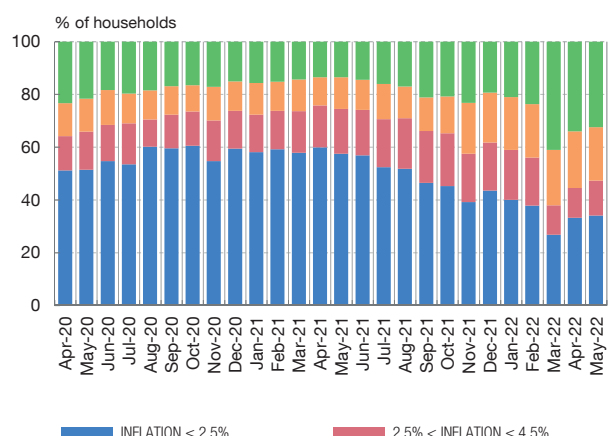
INFLATION EXPECTATIONS OF SPANISH HOUSEHOLDS

Median household inflation expectations 12 months ahead are currently much higher than median household inflation expectations three years ahead. This indicates that although these agents expect the episode of sharp price increases to remain somewhat persistent, inflation will ease significantly in the medium term. In line with the higher median inflation expectations, an analysis of the full distribution of household inflation expectations shows how it has shifted to higher values, especially in the case of the 12-month horizon.

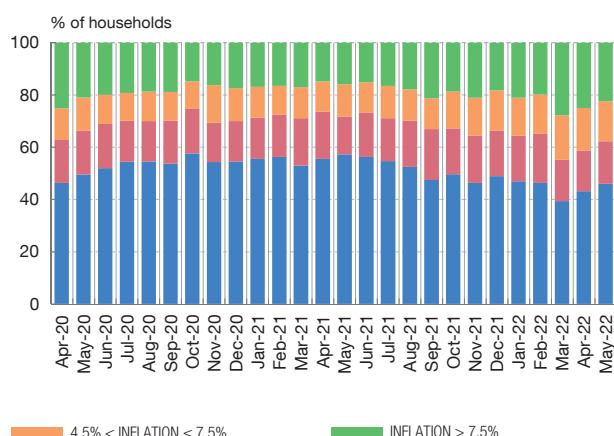
1 HOUSEHOLD INFLATION EXPECTATIONS 12 MONTHS AND 3 YEARS AHEAD (a)



2 DISTRIBUTION OF HOUSEHOLD INFLATION EXPECTATIONS 12 MONTHS AHEAD



3 DISTRIBUTION OF HOUSEHOLD INFLATION EXPECTATIONS 3 YEARS AHEAD



SOURCE: Consumer Expectations Survey (ECB).

a Median of the distribution.

– by 23 percentage points (pp) – (see Chart 1.2). In the case of inflation expectations three years ahead, the decline over that same period is significantly smaller, yet still considerable (10 pp) (see Chart 1.3). By contrast, the percentage of households whose inflation expectations exceeded 7.5% has risen, especially for the next 12 months (18 pp), but also three years ahead (7 pp).

The war in Ukraine has also impacted household income expectations and, more severely, their economic growth expectations for Spain (see Chart 2.1). Households revised downwards their income expectations and, to a greater degree, their

economic growth expectations for the next 12 months in March, after Russia launched its aggression against Ukraine. However, some of this revision appears to have reversed in April and May. The adverse impact of the war on these variables has been considerably smaller than that of the health crisis; when the pandemic broke out households expected their income and economic activity to fare much worse.

Households' perception about their access to credit has also deteriorated since the onset of the war in Ukraine (see Chart 2.2), at a time when these agents also expect the cost of loans to increase over the next 12 months, in line with the upward path of money market interest rates.

Lastly, households' expectations for their future financial situation have also gradually become less favourable since autumn 2021 and have deteriorated for all income groups following the invasion of Ukraine (see Chart 2.2). When estimating an ordered probit model to analyse which factors determine these expectations, the results show that they depend not only on household income expectations, but also on inflation expectations (which impact saving levels) and domestic economic growth expectations (see Chart 2.3).⁴ The deterioration in these factors following the outbreak of the war helps explain households' poorer outlook for their future financial situation since the invasion. By household group, those experiencing liquidity constraints and those with outstanding debts tend to have a less positive outlook for their financial situation.⁵

Spanish household spending expectations

Between end-2020 and the start of the war in Ukraine, households continuously revised upwards their expectations of nominal spending on consumer goods and services 12 months ahead (see Chart 3.1). While in the early months of 2021 this could have been associated, at least in part, with the improving epidemiological situation, from the summer onwards these revisions were made in tandem with the increase in inflation expectations, to which they are strongly linked (see Charts 1.1 and 3.2). However, the upward revisions to nominal spending expectations since mid-2021 (which are also included in the quantitative information on this aspect compiled in the CES) have been less sharp than those to inflation. As a result, in that period households implicitly expected a modest

4 The marginal effects depicted in the chart for different variables are not comparable for two reasons. First, because they are evaluated at the average value of the other determinants. Second, because the qualitative variables included in the model reflect heterogeneous changes in the concepts to which they refer. Specifically, in the current high-inflation setting, expected changes in prices will generally be larger than those in income, even for households expecting considerable increases in both.

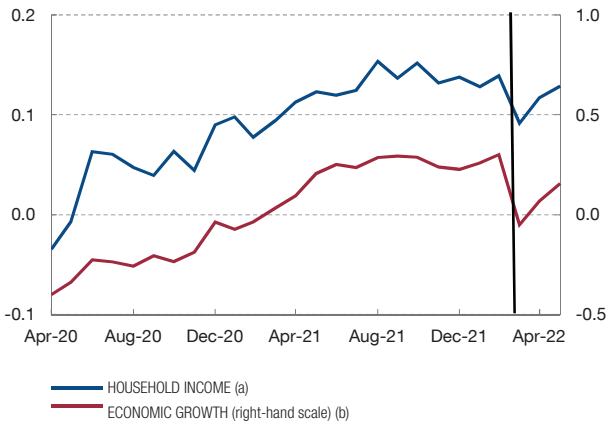
5 Households that do not have a liquidity buffer are defined as those that cannot cover an unexpected payment equal to one month of household income, either by dipping into their savings or by taking a loan from a third party.

Chart 2

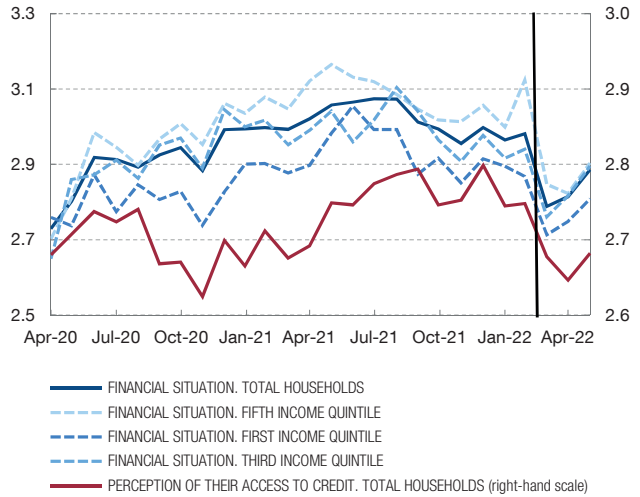
SPANISH HOUSEHOLDS' EXPECTATIONS FOR ECONOMIC ACTIVITY, THEIR INCOME AND FINANCIAL SITUATION, AND PERCEPTION OF THEIR ACCESS TO CREDIT

Household expectations for their income and economic growth have been adversely affected by the war in Ukraine. Both variables, as well as inflation expectations and, for indebted households, expectations for interest rates, influence household expectations for their financial situation, which have worsened slightly since the outbreak of the war.

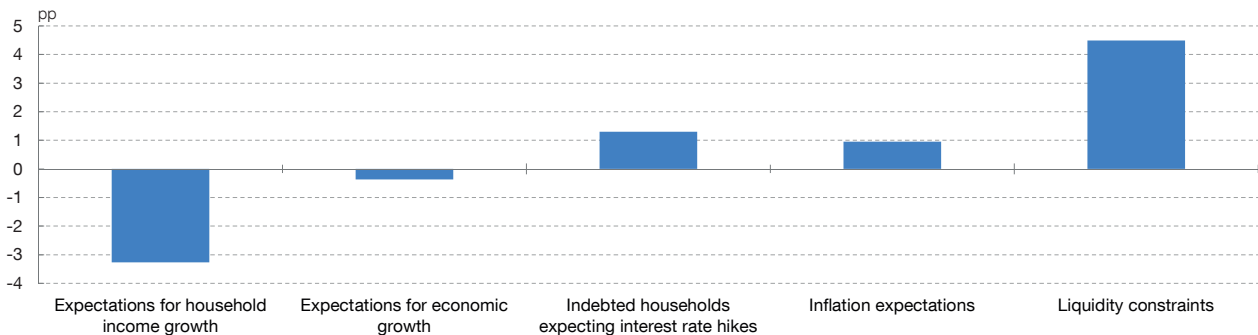
1 HOUSEHOLD EXPECTATIONS FOR THEIR INCOME AND THE ECONOMY 12 MONTHS AHEAD



2 HOUSEHOLD EXPECTATIONS FOR THEIR FINANCIAL SITUATION 12 MONTHS AHEAD (TOTAL HOUSEHOLDS AND BREAKDOWN BY INCOME QUINTILE) AND PERCEPTION OF THEIR ACCESS TO CREDIT (c)



3 MARGINAL EFFECT OF DIFFERENT HOUSEHOLD CHARACTERISTICS ON THE PROBABILITY OF EXPECTING A DETERIORATION IN THE HOUSEHOLD FINANCIAL SITUATION (d)



SOURCES: Consumer Expectations Survey (ECB) and own calculations.

- a Sample average of the indicator reflecting the expected qualitative change in household income, which is constructed as follows: it takes the value 1 (-1) if the respondent expects their household income to grow (shrink) substantially, 0 if they expect it to remain stable and 0.5 (-0.5) if they expect a modest upward (downward) change in this variable.
- b Sample average of the indicator reflecting expected macroeconomic developments, which is constructed as follows: it takes the value 1 if the respondent expects the economy to grow, -1 if they expect a decline in activity and 0 if they expect it to remain stable.
- c Indicator that takes increasing values, from 1 to 5, if the concept analysed is expected to deteriorate significantly, deteriorate slightly, remain unchanged, improve slightly and improve significantly. The indicator relating to access to credit captures the perception of recent developments (compared with a year ago).
- d Marginal effects obtained from the estimation of an ordered probit model. The impact of changes in a specific variable is evaluated at the average value of the other determinants included in the specification. This includes the variables depicted in the chart, as well as an indicator reflecting whether the household has sufficient liquidity (or the means to obtain it) to cover an unexpected payment equal to one month of household income, and different fixed effects (time, household income level and size and the respondent's gender, educational attainment level and age). In the chart, the bars that depict the marginal effect of expecting income (prices) to remain stable or increase measure the gap between the probability of expecting an improved financial situation in these two cases compared with households expecting a decline in household income (prices), where the other variables have a value equal to their sample average. The marginal effects presented in the chart for different variables are not directly comparable, given that they are evaluated at the average value of the other determinants and since the qualitative variables included in the model are reflecting heterogeneous changes in the concepts to which they refer (specifically, in a period of high inflation such as that covered in the analysis, expected changes in prices will generally be larger than those in income, even for households expecting considerable increases in both).

decline in real spending (obtained as the difference between the expected growth rates for nominal spending and for prices).

The outbreak of war subsequently had a significant impact on household spending expectations, breaking the trend of recovery in expected nominal spending (see Chart 3.1).⁶ Since March, households have revised their nominal spending plans downwards on account of the war's impact on their confidence and expectations regarding their income, financial situation and access to credit, against a background marked by a slight correction of the high inflation rates anticipated in that month. Consequently, following the start of the war, households appear to be anticipating a significant slowdown in their spending in real terms. In addition, as the gap between the forecast growth of nominal spending and that of income has widened somewhat since early 2022, households appear to be implicitly anticipating slightly lower saving rates.

In addition to the aggregate indicators for the sample as a whole, it is interesting to analyse expectations on the basis of household characteristics. This analysis shows that, since the start of the war, households' nominal spending expectations in the top two income quintiles have been more favourable than in the others, as they were in previous months (see Chart 3.3). This pattern holds when analysing spending expectations in real terms.

Various factors may help explain this. First, in times of uncertainty, higher-income households are generally more optimistic than others about future income developments, which is likely due to their incomes being more stable in the face of shocks. Second, their level of spending is comparatively farther away from the pre-pandemic mark than that of lower-income households. This is because the items that have been more affected by the pandemic (specifically, those linked to activities entailing a higher degree of social interaction, such as leisure, tourism and culture) make up a comparatively larger share of their consumption basket. The recent lifting of practically all pandemic-related restrictions would help explain why these households envisage an acceleration in their level of spending returning to pre-crisis levels. Lastly, these households have more scope to cushion the impact of higher inflation rates on their consumption by reducing their savings, for two reasons: they tend to have higher saving rates and, also, they were able to build up sizeable extraordinary savings during the pandemic, which they can now devote to current spending.

By age group, the nominal spending outlook has been somewhat less expansionary among the youngest households since mid-2021 (see Chart 3.4). This pattern, however,

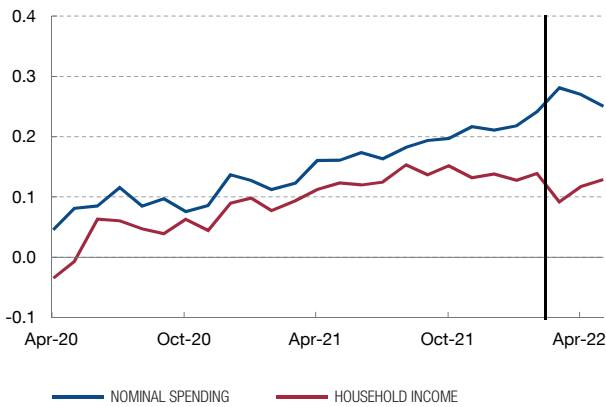
⁶ In the qualitative question on spending expectations, households are asked to select one of five possible options (whether they expect that their spending will increase a lot, increase a little, remain exactly the same, decrease a little or decrease a lot).

Chart 3

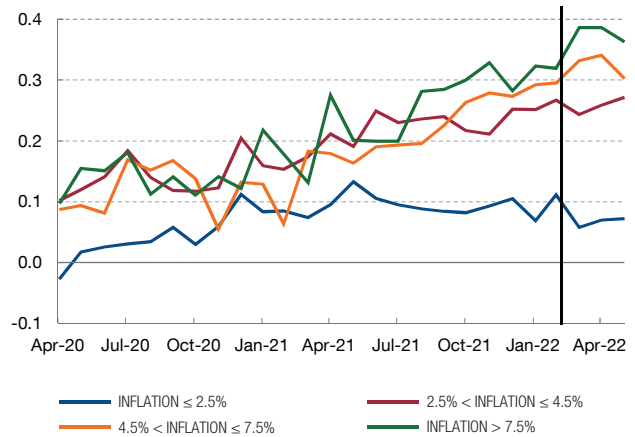
SPENDING EXPECTATIONS OF SPANISH HOUSEHOLDS

The qualitative indicator reflecting household expectations for nominal spending over the next 12 months saw a strong recovery in the months running up to the war but has since tended to slow. It should be borne in mind that the continuous upward revisions to the nominal spending expectations before the war were influenced by household inflation expectations. These spending expectations, which are strongly linked to inflation, are more favourable for higher-income households.

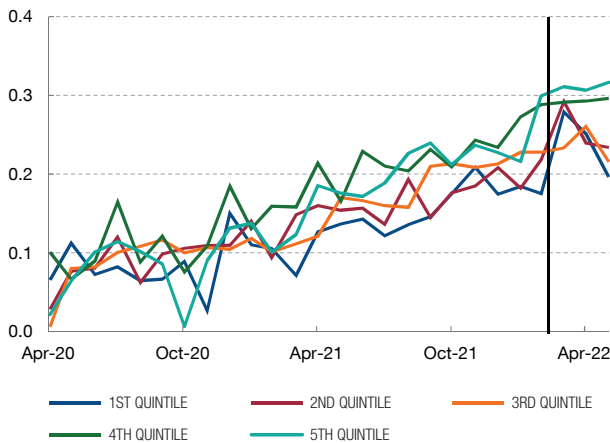
1 HOUSEHOLD EXPECTATIONS FOR CHANGES IN THEIR SPENDING AND INCOME LEVELS FOR THE 12 MONTHS FOLLOWING THE SURVEY (a)



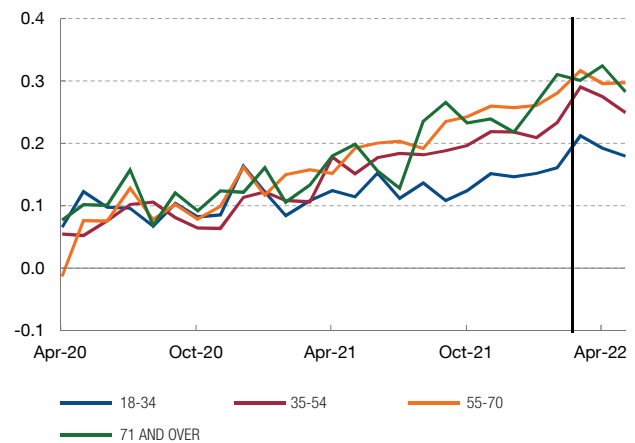
2 HOUSEHOLD EXPECTATIONS FOR CHANGES IN THEIR SPENDING LEVELS, BY INFLATION EXPECTATIONS (a)



3 HOUSEHOLD EXPECTATIONS FOR NOMINAL SPENDING, BY INCOME LEVEL (a)



4 HOUSEHOLD EXPECTATIONS FOR NOMINAL SPENDING, BY RESPONDENT'S AGE (a)



SOURCES: Consumer Expectations Survey (ECB) and own calculations.

a Sample average of the indicator reflecting the expected qualitative change in the variable concerned, which is constructed as follows: it takes the value 1 (-1) if the household expects it to grow (shrink) substantially, 0.5 (-0.5) if it expects a modest upward (downward) change and 0 if it expects it to remain stable.

is influenced by the comparatively lower inflation rates anticipated by this group of agents compared with older agents and does not appear to be feeding into spending expectations in real terms.

With a view to analysing which factors help explain developments in households' nominal spending expectations, an ordered probit model has been estimated. This

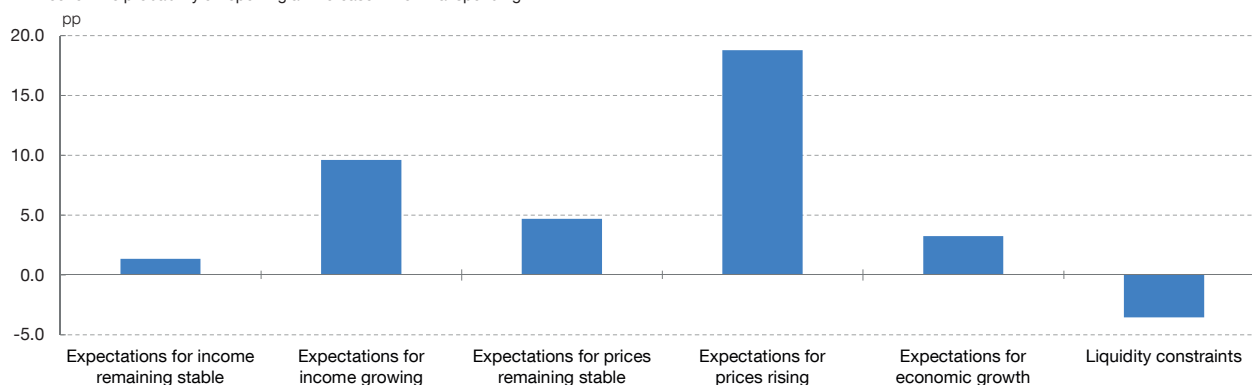
Chart 3

SPENDING EXPECTATIONS OF SPANISH HOUSEHOLDS (cont'd)

The qualitative indicator reflecting household expectations for nominal spending over the next 12 months saw a strong recovery in the months running up to the war but has since tended to slow. It should be borne in mind that the continuous upward revisions to the nominal spending expectations before the war were influenced by household inflation expectations. These spending expectations, which are strongly linked to inflation, are more favourable for higher-income households.

5 RELATIONSHIP BETWEEN EXPECTATIONS FOR HIGHER NOMINAL SPENDING AND EXPECTATIONS FOR ECONOMIC GROWTH, HOUSEHOLD INCOME, PRICES AND THE HOUSEHOLD FINANCIAL SITUATION (b)

Effect on the probability of reporting an increase in nominal spending



SOURCES: Consumer Expectations Survey (ECB) and own calculations.

b Marginal effects obtained from an ordered probit model linking spending expectations to qualitative variables (that measure expected growth in income, macroeconomic outlook and inflation expectations) and a dichotomous variable (reflecting whether the household has sufficient liquidity, or the means to obtain it, to cover an unexpected payment equal to one month of household income). The specification controls for fixed effects (time, household income level and size and the respondent's educational attainment level and age). In the chart, the bars that depict the marginal effect of expecting income (prices) to remain stable or increase measure the gap between the probability of expecting an increase in spending in these two cases compared with households expecting a decline in household income (prices), evaluated at the average value of the other variables. For the economic growth (liquidity) expectations, the bar depicts the effect of expecting growth in economic activity (insufficient liquidity) on the probability of expecting growth in nominal spending compared with households that expect economic activity to remain stable or decline (comfortable liquidity buffer available to cover unexpected payments). The marginal effects depicted in the chart for the different variables are not directly comparable, for two reasons. First, because they are evaluated at the average value of the other determinants. Second, because the qualitative variables included in the model are reflecting heterogeneous changes in the concepts to which they refer (specifically, in a period of high inflation such as that covered in the analysis, expected changes in prices will generally be larger than those in income, even for households expecting considerable increases in both).

model links these expectations to various qualitative variables (which measure expected growth in household income, economic activity and prices) and to a binary variable (which reflects whether the household has sufficient liquidity, or the means to obtain it, to cover an unexpected payment equal to one month of household income). Other additional controls are also introduced.⁷

The results show that, having undergone significant revisions in recent quarters, inflation expectations appear to be playing a key role in explaining the changes in households' nominal spending expectations in the recent period. Chart 3.5 shows the marginal effects on the probability of anticipating an increase in nominal spending as a result of changes in some of the explanatory variables included in the model. As can be seen, there is a strong link between nominal spending expectations and the inflation outlook. This suggests that, in bouts of strong inflationary pressures like the current one, households expect to absorb part of the price rise by adjusting

⁷ See footnote (b) to Chart 3.

their saving rates downwards, insofar as they have such room for manoeuvre. The results also reflect a positive impact on spending expectations derived from more favourable forecasts in terms of both household income and, to a lesser extent, the general economic situation (which, given its association with higher confidence levels, fosters greater momentum in household spending). Moreover, having a comfortable liquidity buffer translates into better spending expectations.⁸

Meanwhile, the war appears to have negatively influenced the spending expectations for certain specific items, owing to the deterioration in households' confidence and perception of their financial situation. This is the case of spending on durables, which is typically more affected by bouts of heightened uncertainty, downturns in households' financial situation or loss of purchasing power. In such circumstances, households may postpone purchases of these goods with a relatively small decline in their utility (see González Mínguez and Urtasun (2015)). In step with this historical pattern, consumers have adjusted downwards their spending expectations for home appliances and cars in recent months, specifically since the start of the war (see Chart 4.1).

Conversely, holiday spending expectations have continued to recover, in a setting in which, as mentioned, pandemic restrictions have been lifted almost entirely. By income level, the bottom income quintile – which is most exposed to the expenditure items whose price has risen the most (specifically, energy) and has less scope to absorb price rises by reducing savings – is the only stratum in which holiday spending expectations have been revised downwards since summer 2021 (see Chart 4.2).

Energy consumed in the home has the characteristics of an essential item or staple good. Consequently, if its cost increases, households will tend to make minor adjustments to their energy consumption and also reduce their spending on other goods or their level of savings. The results of a simple regression model confirm that, in the period analysed, the strategy adopted to meet the increase observed in this type of energy expenses⁹ has varied according to the type of household and, specifically, the scope they had to adjust their savings patterns. Chart 4.3 shows that, when faced with an increase in nominal spending on energy consumed in the home (presumably owing to a rise in gas or electricity prices), households with a modest liquidity buffer have reduced spending on other goods. These households are mostly low income ones which are also more exposed to changes in energy prices, given

8 Again, it should be taken into account that the marginal effects shown in the chart for different variables are not comparable for the two reasons outlined above: first, because they are evaluated at the average value of the other determinants and, second, because the qualitative variables included in the model are reflecting heterogeneous changes in the concepts to which they refer (as mentioned previously, in the current high-inflation setting, expected changes in prices will generally be larger than those in income, even for households that expect considerable increases in both).

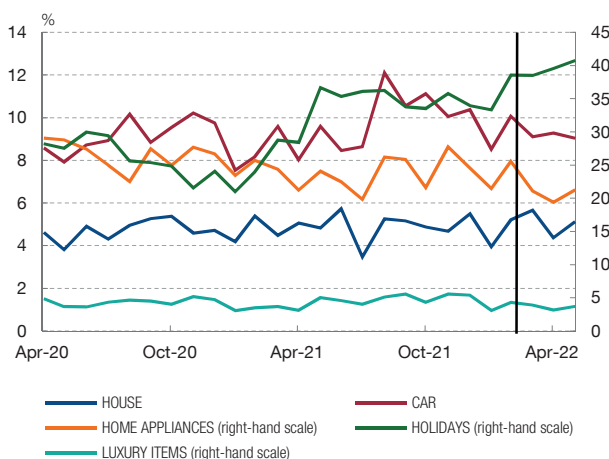
9 These expenses are proxied by drawing on total spending on electricity, gas, water, sewerage, telephony and cable television, as the survey groups spending on these items together.

Chart 4

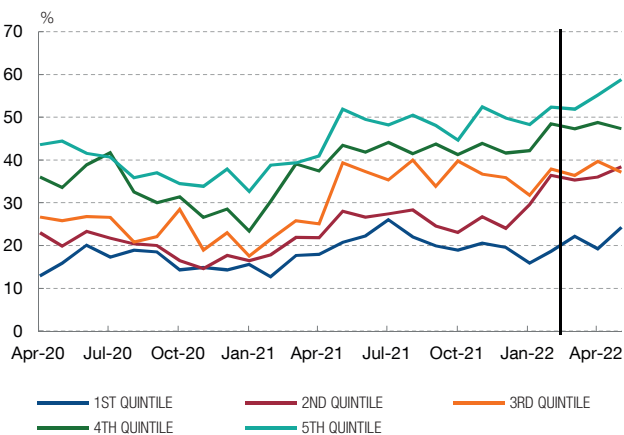
SPANISH HOUSEHOLDS' EXPECTATIONS FOR SPENDING ON MAJOR ITEMS AND SENSITIVITY OF SPENDING TO CHANGES IN ENERGY PRICES

The heightened uncertainty prompted by the war in Ukraine has resulted in households revising downwards their expectations for spending on durables. By contrast, holiday spending expectations have continued to recover even after the outbreak of the war, except for among lower-income households, which have a smaller buffer to absorb increases in inflation without lowering their spending levels and have been hit harder by the surge in energy prices. In response to higher energy prices, households with a modest liquidity buffer have reduced their spending on other goods, unlike other households, which have absorbed the higher prices by reducing their saving rates rather than by adjusting such spending on other goods.

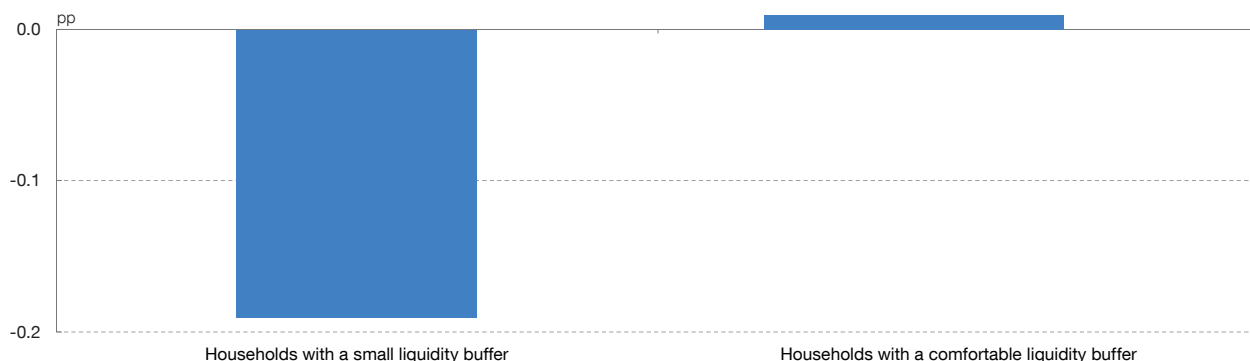
1 SHARE OF HOUSEHOLDS EXPECTING TO SPEND ON MAJOR CONSUMER ITEMS OVER THE NEXT 12 MONTHS



2 SHARE OF HOUSEHOLDS EXPECTING TO SPEND ON HOLIDAYS OVER THE NEXT 12 MONTHS, BY INCOME QUINTILE



3 ADJUSTMENT TO THE SHARE OF HOUSEHOLD INCOME SPENT ON NON-ENERGY GOODS AND SERVICES IN THE EVENT OF A 1 PP INCREASE IN THE RATIO OF ENERGY SPENDING TO HOUSEHOLD INCOME (a)



SOURCES: Consumer Expectations Survey (ECB) and own calculations.

a Results obtained from the estimation of a fixed-effects linear regression model that, in addition to the change in the share of household income spent on energy, also incorporates the following explanatory variables: share of income spent on energy, a dichotomous variable that reflects whether the household has a small liquidity buffer, and time and other fixed effects controlling for the respondent's age. Households with a small liquidity buffer are defined as those that do not have sufficient liquidity (or the means to obtain it) to cover an unexpected payment equal to one month of household income. The estimation is performed for households whose spending is less than or equal to household income, and whose spending on energy is positive. The latter is proxied by drawing on total spending on electricity, gas, water, sewerage, telephony and cable television, as the survey groups spending on these items together.

that, for these households, the energy bill absorbs a greater proportion of their income.¹⁰ By contrast, households with a larger liquidity buffer have not significantly changed their levels of spending on other items due to an increase in these costs and, therefore, appear to have funded it by temporarily reducing their saving rates.

9.8.2022.

¹⁰ See Banco de España (2022).

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