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CONSUMPTION AND SAVING PATTERNS IN ITALY DURING COVID-19

by Elisa Guglielminetti* and Concetta Rondinelli*

Abstract

Following the outbreak of the Covid-19 pandemic, household consumption fell dramatically and the propensity to save rose to unprecedented levels. In this paper we investigate the drivers of households' behaviour in Italy from a macro and microeconomic perspective. At the aggregate level, we find that only half of the slump in private consumption can be explained by the deterioration in economic conditions. The residual contribution can be traced back to other pandemic-related factors – such as the fear of infection, the lockdown policies and increased uncertainty about the future – whose relevance varies between expenditure categories. By complementing the macro analysis with microdata from the Bank of Italy's Special Survey of Italian Households, we find that, apart from any economic reasons, spending is held back more by fear of infection and uncertainty about the future than by the restrictive measures. Households where the head is self-employed are mainly discouraged by the fear of infection and uncertainty, whereas those where the head is unemployed are more concerned about their economic situation.

JEL Classification: D14, D15, E21.

Keywords: Covid-19, household consumption, saving, fear of infection, uncertainty, lockdown policies.

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Contents

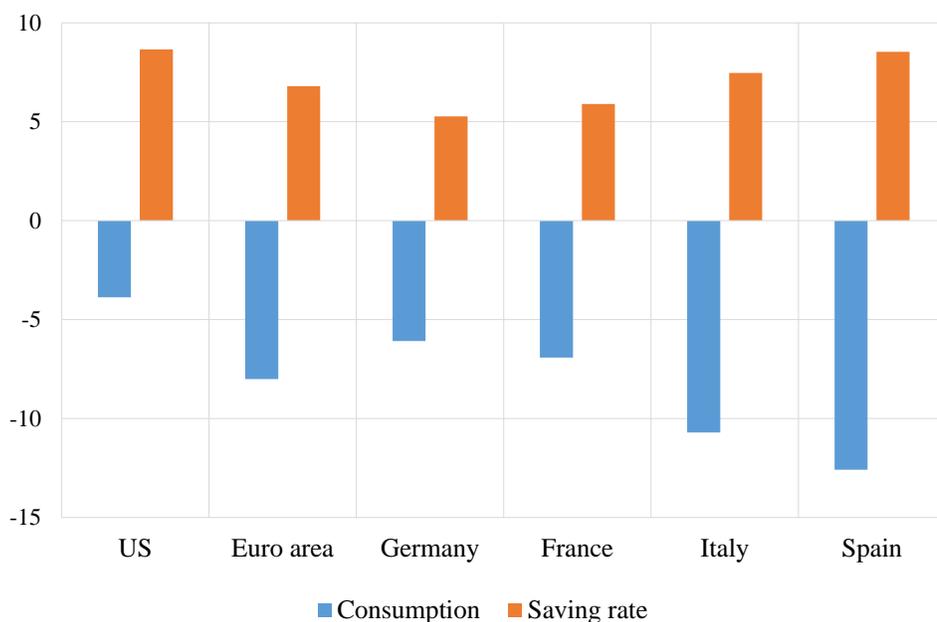
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1 Introduction*

Following the outbreak of Covid-19, private consumption fell dramatically and the saving rate spiked, both in the US and in the euro area. Among the euro-area countries, Italy and Spain recorded the sharpest drop in consumption and the strongest increase in the saving rate (Figure 1). In Italy spending by households declined significantly in 2020, by about 10% (Figure 2); this unprecedented drop was coupled with a milder contraction of about 3% in households' real disposable income, that was sustained by the stimulus package implemented by the government since the outbreak of the pandemic. Therefore the saving rate, after the historically high levels attained in the spring (above 20%), remained well above pre-pandemic figures at the end of 2020.

Figure 1: Changes in household consumption and the saving rate between 2019 and 2020

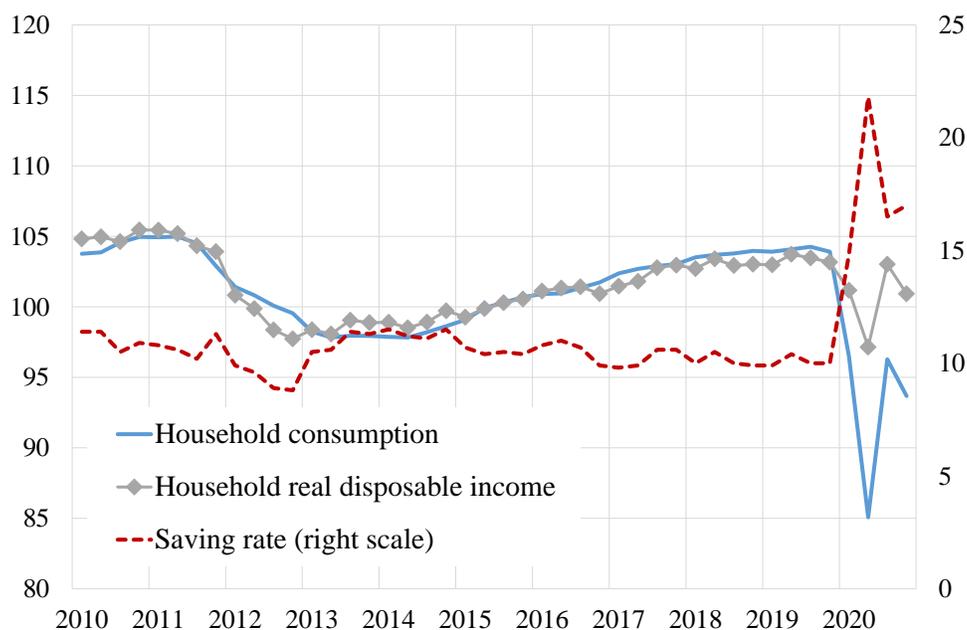


Source: FRED and Eurostat. Consumption is the percentage difference between the final consumption expenditure of households from the Annual National Accounts in 2019 and 2020. Saving is the gross household saving rate from Quarterly Sectoral Accounts.

Several factors can be held responsible for these consumption and saving patterns. First, the fall in disposable income and the job losses may have induced households to cut spending; at the same time, the effect of economic hardship on savings is unclear, as liquidity constraints may impair the possibility of putting resources aside irrespective of the desire to save. Second, households may

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Figure 2: Household consumption, real disposable income and saving rate in Italy



Source: Istat. Consumption and disposable income in real terms are represented as indexes = 100 in 2015. The saving rate is the saving rate of total households and non-profit institutions serving households (NPIH) from the Quarterly Sectoral Accounts.

want to increase their saving buffer for precautionary reasons, because they are more uncertain about the evolution of their economic situation or because they perceive a higher health risk. Third, lockdown policies prevent some kinds of expenditure (restaurants and travel above all), generating forced savings. Fourth, the risk of infection may prevent households from consuming certain types of goods and services that require social contacts. At the current juncture, all these factors are likely to play a role, albeit with different intensities for each spending category and for different types of households. For instance, precautionary motives are likely stronger for low income individuals, possibly unemployed or with a high probability of losing their jobs. The health risk and related fears of infection, instead, affect individuals across the whole income distribution, but mainly apply to the spending categories which expose consumers to higher risks of infection.

The aim of this paper is to investigate the drivers of Italian household behaviour, which have important policy implications. If the driving forces of the high levels of savings piled-up in 2020 are transitory, as is plausibly the case for lockdown measures and fears of infection, we expect them to sustain domestic demand with the easing of policy measures and the reduced health risk. Even in this more favourable case, however, pressures coming from pent-up demand would be limited, as expenditure cuts have been mostly concentrated in services (Beraja and Wolf, 2021). If precautionary reasons prevail, households may prefer to preserve a saving buffer even after the epidemic comes

under control, for as long as households remain uncertain about their economic situation and the possibility of new pandemic events (Ercolani, Guglielminetti, and Rondinelli, 2021). Understanding the consumption and saving drivers is thus important to forecast future economic developments and implement effective policy actions to shore up demand and sustain the economy overall.

To shed light on this issue we combine a macro and a micro approach. On the macro side, we estimate a consumption equation *à la* Ando and Modigliani (1963) by regressing private consumption on its traditional determinants, such as income, wealth, interest rates and expectations. By comparing the actual evolution of consumption in 2020 with our estimates, we can quantify the contribution of each factor to the spending cut. We interpret the unexplained part as driven by pandemic-related factors not explicitly included in the regression, such as the fear of infection, lockdown policies and increased uncertainty about the future. Moreover, by performing the same analysis on different consumption items, we investigate the heterogeneous impact of the pandemic by expenditure category. As expected, the unexplained share of the drop in consumption is larger for those items directly affected by lockdown policies and for which the perceived risk of infection is higher, such as restaurants, hotels and clothing.

The macro approach, however, does not allow us to distinguish the role of the fear of infection from the direct impact of lockdown policies. Moreover, using aggregate data we cannot study how the contribution of different drivers varies with households' characteristics. Hence, we complement the macro analysis with a micro approach, by exploiting data from the Bank of Italy's Special Survey of Italian Households (SSIH hereafter), which was recently launched to gather information on developments in households' financial situation and expectations during the Covid-19 epidemic. In particular, we use the second and third waves of the survey, conducted between August and September and in November 2020, respectively. The survey contains questions on the respondent's financial situation, occupational status, saving possibilities, consumption choices and expectations on future income changes and labour market prospects. Moreover, the survey asks questions about the changes and motivations for spending behaviour during the pandemic. Therefore, this unique data source allows us to build individual-level measures of financial situation, uncertainty and fear of infection and to analyse their contribution to the expected evolution of consumption. Moreover, we capture the impact of containment measures by leveraging heterogeneous restrictions between Italian regions during the autumn of 2020. The microeconomic evidence shows that, apart from economic reasons, which explain a big chunk of the probability of cutting spending in the following three months, the fear of infection is the largest contributor, followed by heightened uncertainty about the future due to economic and health concern; once controlling for the previous factors, restrictive measures do not play a significant role. However, such drivers are differentiated across consumers' occupational status and the expected possibility of saving. Fears of infection and uncertainty account for a larger share

of the drop in consumption for self-employed household heads; the fall in expenditure for unemployed household heads, instead, depends mostly on economic reasons. Moreover, uncertainty is a relevant factor only for liquidity constrained individuals, namely those who do not expect to be able to put resources aside in the following year.

1.1 Review of the literature

The analysis of consumption and saving patterns after the outbreak of Covid-19 has been at the center-stage of the academics' and policymakers' agenda since the early stage of the pandemic. High-frequency bank and credit card transaction data show that households reacted to the spread of the virus with sizeable cuts in spending.¹ Spending cuts were not evenly distributed across consumption categories: non-essential items such as travels, accommodation and restaurants were the most hardly hit, whereas in an initial phase food consumption increased as households stockpiled essential goods and substituted food away from home with home consumption. Furthermore, these cuts were much larger than those that could be explained by the job and income losses occurring at the same time.² The drop in consumption regarded households' across the whole income distribution: Bachas et al. (2020) and Chetty et al. (2020) find that in the US rich individuals cut spending more aggressively and resumed it more slowly compared to low income individuals. This evidence suggests that the consumers' behaviour during the pandemic was affected not only by economic and precautionary motives but also by restrictive policies and infection concerns. However, it is hard to discriminate between the latter factors, since they are both driven by the spread of contagion almost simultaneously.

Indeed, the extent to which spending in non-essential items was influenced by formal stay-at-home orders (lockdowns) is controversial. Using US transaction-level data from a non-profit Fintech company, Baker et al. (2020) find that the overall drop in spending at the outbreak of Covid-19 was approximately twice as large in states that enforced stricter lockdowns, but the authors do not attempt to estimate the causal effect of policy prescriptions. This exercise is instead carried out by Alexander and Karger (2020), who use consumer spending data and cell phone records and exploit the variation in stay-at-home orders across US counties. They find that stay-at-home orders caused large reductions in spending in sectors associated with mobility but they explained only part of the behavioural response to Covid-19. Using high-frequency US transaction data, Chetty et al. (2020) find that state-ordered re-openings had a small impact on spending, suggesting that consumption

¹For the US, see Baker et al. (2020), Chetty et al. (2020) and Bachas et al. (2020); for Scandinavian countries see Andersen et al. (2020).

²As pointed out by Bachas et al. (2020), the spending drop in March 2020 is roughly eight times larger than the average household credit card spending drop in the first month of unemployment for UI recipients in normal times, as estimated by Ganong and Noel (2019) on US data.

was rather constrained by health concerns. This conclusion is shared by Andersen et al. (2020), who compare consumers' behaviour in Denmark and Sweden, exploiting the fact that the two countries were similarly exposed to the pandemic but only Denmark imposed significant restrictions on economic activity. Using a different methodology applied to Italy, our work complements the evidence on the importance of the fear of contagion for consumption choices, independently of government mandated restrictions.

Survey data are another important source of information on consumption and saving dynamics. Using a survey on US consumers, Coibion, Gorodnichenko, and Weber (2020) analyse consumers' behaviour in response to the one-time transfer provided by the federal government in March 2020 (CARES Act). They document that only a small fraction of recipients planned to spend most of the transfer. Average responses, however, masked significant differences across households, as the lower-income ones were more likely to spend their stimulus check, confirming the importance of liquidity constraints. Based on the Consumer Expectations Survey (CES) conducted in the six largest euro area economies, Christelis et al. (2020) find a strong effect of financial concerns due to Covid-19 on spending in non-durables, consistent with an important role of precautionary motives during the first peak of the pandemic and its immediate aftermath. Using the same data, Coibion et al. (2021) show that higher macroeconomic uncertainty induce households to reduce their spending in the subsequent months. Our results confirm and complement the evidence obtained through CES data, as we highlight the importance of both economic reasons and idiosyncratic uncertainty for the consumer's behaviour. As far as we know, Immordino et al. (2021) is the only other paper that elicits individual-level indicators of fear of contagion using a survey on Italian households. Consistently with our results, the authors find that consumption drops and increased savings are positively associated to the fear of contagion. They also show that the infection concern is mostly related to shopping, traveling and eating out, more than working or meeting relatives and friends. Compared to them, our focus is not limited to the fear of contagion but we compute the contributions of different factors to reduced spending for different households' categories. Furthermore, our macro approach provides an estimate of the impact pandemic-related factors on aggregate consumption and offers complementary evidence on their heterogeneous importance for different expenditure categories.

The rest of the paper is organized as follows. In Section 2 we present the estimates of the aggregate consumption function by expenditure category. In Section 3 we describe the Bank of Italy's Special Survey of Italian Households and investigate the reasons for cutting spending using micro data. Section 4 concludes.

2 The macroeconomic approach

2.1 The econometric strategy

In this Section we investigate the consumption pattern during Covid-19 in Italy from a macro perspective, by estimating a consumption equation *à la* Ando and Modigliani (1963), as adapted to the Italian economy by De Bonis et al. (2020). Our goal is to broadly quantify to what extent standard drivers can explain consumption dynamics in 2020, rather than estimate the precise elasticity of household spending to each factor by taking into account their long-term relationships. Hence we estimate a simple OLS regression³:

$$c_t = \alpha + X_t' \beta + \varepsilon_t \quad (1)$$

where c_t is the log of household consumption in real terms, α is a constant and X_t is a vector of covariates including the log of permanent income, income volatility, the log of real wealth, the log of financial wealth, the interest rate, hours worked, unemployment expectations and uncertainty. In this way, we control for all the main determinants of consumption, that we can group in the following categories: i) permanent income; ii) current income, proxied by hours worked; iii) wealth (both real and financial); iv) the intertemporal rate of substitution, proxied by the interest rate, v) unemployment expectations and vi) consumers' disagreement about the evolution of the economic situation. The evolution of permanent income is given by the four-terms moving average of the household real disposable income; we also control for its volatility, computed as the standard deviation of income growth on a rolling backward window of two years.⁴ We capture current income through hours worked, that provide a better signal of the cyclical position of the economy compared to employment-based measured. This is of primary importance for 2020, when the government put restrictions on layoffs to safeguard jobs during the pandemic crisis.⁵ Real wealth is the value of dwellings owned by households and thus depends on the evolution of housing prices. Financial wealth is the collection of net financial assets held by households, both liquid and illiquid. Using the same definition of De Bonis et al. (2020), liquid assets include deposits, bonds, mutual funds and quoted shares net of total liabilities, whereas illiquid financial wealth is the sum of unquoted shares and other equity plus holdings of insurance and pension fund instruments. We include the long-term

³De Bonis et al. (2020) instead adopt a Vector Error Correction Model as they are interested in providing precise estimates of the elasticity of consumption to different components of wealth using a longer sample period.

⁴Using different definitions of permanent income, such as the 8 or 12-terms moving average of household disposable income, lead to a reduced significance of the elasticity of consumption to this factor and to an increase in the magnitude of the coefficient on hours worked. The other results are almost unchanged.

⁵Even in normal times the fit of the consumption equation improves moving from an employment-based measure to the one based on hours worked.

interest rate at 10-years maturity to control for borrowing conditions. Finally, we introduce other two variables that may hold back spending, namely consumer' expectations and their dispersion. Unemployment expectations, taken from the consumer survey of the European Commission, account for consumers' mood about the overall evolution of the labor market. A rise in unemployment expectations, everything else equal, suggests rising concerns about the economic situation that should induce households to save more. Lastly, we build a measure that reflects the dispersion of consumers' responses in the survey of the European Commission. We consider the principal component of such indexes based on the expectations about the own financial situation, the national economic situation and the labor market.⁶

Regarding the dependent variable, we consider several alternatives. First, we estimate equation (1) on real consumption of resident households, from National Accounts data. Then we consider a breakdown by five expenditure category: i) hotels and restaurants, ii) clothing and footwear, iii) furnishing and house equipment; iv) personal care; v) food and beverage.⁷ This distinction can provide interesting insights about the heterogeneous impact of the pandemic and the importance of different motives underlying spending patterns. Government restrictions should have the strongest impact on the travel and accommodation industry. Health concerns may possibly regard a wider range of goods and services that require social interactions. Changes in households' habits, above all the surge in teleworking, may have also shifted their preferences towards different goods, like furnishing and house equipment. As shown by other works on US data (Chenarides et al., 2021), food and beverage consumption could be positively affected by substitution effects between restaurants and home production and, at the outbreak of the pandemic, by consumers' panic about possible disruptions in the food supply chain. Moreover, food consumption should be the least impacted by the plausible intensification of precautionary attitudes.

2.2 The results

We estimate the model by OLS on quarterly data over the period 2001Q2–2019Q4 (74 observations).⁸ We exclude on purpose the pandemic period from the estimation sample because it likely represents a structural break in the historical correlations among the selected variables that would distort the

⁶The dispersion index for question q is computed as: $I^q = \sum_{j=1}^{j=5} F_j^q(1 - F_j^q)$, where F_j^q is the cumulated frequency of responses of type j at question q , where j ranges from 'very negative' to 'very positive'. Hence, the index ranges from 0 (no dispersion) to 1 (maximum dispersion). The indexes are also standardized to have 0 mean and unitary standard deviation.

⁷For personal care spending we take the data from Confcommercio.

⁸The choice of the sample period is motivated by data availability. Household real disposable income is available since 1999Q1, hence the q-o-q growth rate starts in 1999Q2 and the first observation of the volatility of income is two years later.

estimated coefficients if not properly taken into account. Our aim is to show how much of the drop in consumption can be explained by standard drivers according to their pre-pandemic relationships. In this way the unexplained part of the spending cut can be interpreted as related to the pandemic, either directly through the fear of contagion, government mandated restrictions and heightened uncertainty about the future due to economic and health concerns, or indirectly through an amplification of the importance of standard drivers and changes in households' preferences. The estimates show that the income channel is stronger for non-essential items such as restaurants and furnishings, while food consumption is less sensitive to changes in permanent income or hours worked.⁹ The impact of real and financial wealth is overall modest. The interest rate is negative and significant for total consumption, restaurants and hotels and personal care. Unemployment expectations and consumers' disagreement about economic prospects weight negatively on all categories except furnishings and food.¹⁰

To assess the contribution of the different factors to consumption dynamics during the pandemic, we apply the estimated β coefficients to the y-o-y changes of the covariates in the four quarters of 2020. In this way, we get the contribution of the different drivers to the predicted y-o-y change in household consumption.¹¹ We expect a modest impact of permanent income and wealth, as they are slow-moving variables, as well as of financial conditions, that could not be eased much further given the low-interest rate environment in place already before the outbreak of the pandemic. In contrast, changes in hours worked and in the survey-based measures, which are more responsive to cyclical conditions, could have had a stronger influence on spending patterns in 2020.

As expected, given the sharp economic contraction caused by the spread of the virus the income effect proxied by hours worked explains about 70% of the predicted drop in spending in 2020 (Figure 3). Consumers' worries and divergent expectations about economic and labour market prospects also play a relevant role, accounting for more than 20% of the consumption cut. The accommodative monetary policy stance, which maintained interest rates low (here included in the 'Other' factors), gave instead a small positive contribution. Notice that the model can explain only half of the dramatic slump in consumption in the first half of 2020, and about 40% of the y-o-y variation in 2020Q3, while predicted consumption growth is much closer to the realized figure for 2020Q4.¹²

The unexplained share of the drop in spending over the year is due to the peculiar features of the

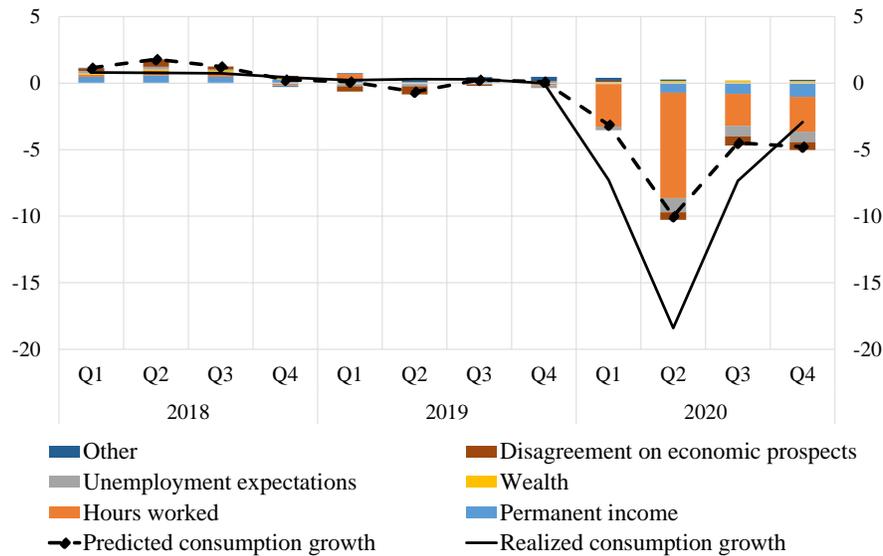
⁹The estimates of the model coefficients are reported in Appendix Table A.1.

¹⁰Food consumption is positively affected by unemployment expectations and negatively impacted by consumers' disagreement.

¹¹We report the y-o-y instead of q-o-q changes to make more transparent the drop in spending compared to the previous year; in fact, for some consumption categories the q-o-q change is milder in Q2 than in Q1 just for a level effect.

¹²The difference between realized and predicted consumption growth rates (in absolute values) amounts to 4.3 percentage points in Q1, 8.6 points in Q2, 3.0 points in Q3 and 1.4 points in Q4.

Figure 3: Household consumption growth and main drivers
(y-o-y growth rates and percentage points)



Source: our computations on Istat, Bank of Italy and ECB data. The dashed line represents y-o-y consumption growth predicted by regression (1). The category ‘Precautionary motives’ includes unemployment expectations and uncertainty. The category ‘Other’ includes the volatility of income and the interest rate.

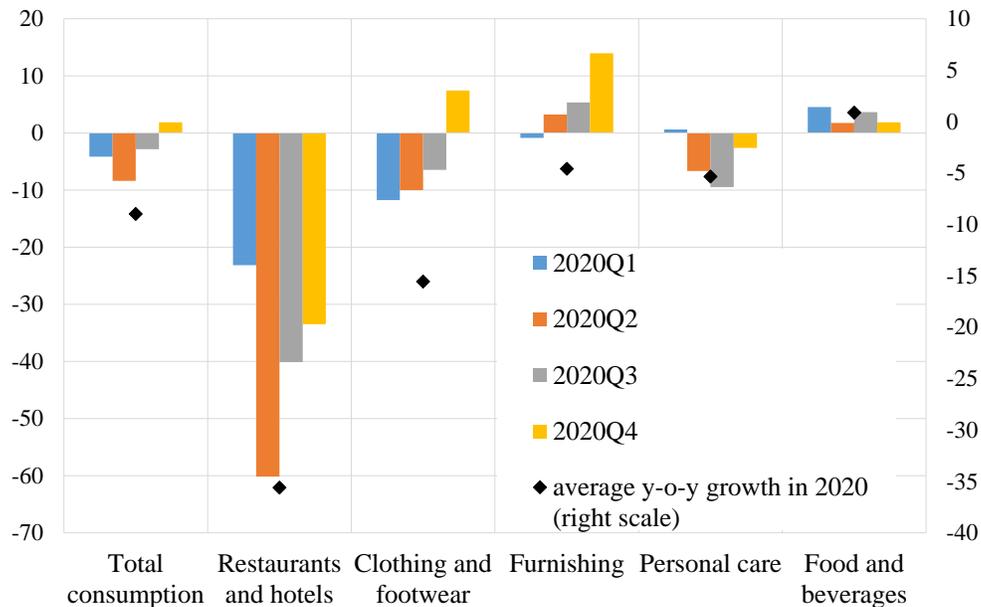
Covid-19 shock, that cannot be captured the standard determinants of consumption included in the model. As in Dossche and Zlatanov (2020) we can interpret the residual of the estimated model as the contribution of pandemic-related factors, such as fears of contagion, restrictive policy measures and heightened uncertainty about the future associated either to economic or health concerns. Although this aggregate approach does not allow us to disentangle these factors, we can gather additional information by observing how the share of unexplained spending drop varies by expenditure category (Figure 4).¹³

Given the nature of the shock, we expect the difference between predicted and actual growth rates in total consumption to be higher for the consumption categories which suffered the most from the Covid-19. Indeed the residual is very sizable for restaurants and hotels, whose expenditure decreased by 40.6% in 2020. Additionally, the standard drivers cannot explain more than half of the drop in clothing and footwear in the first three quarters; at the same time, the fall in income during the last months of the year would have suggested another cut in this spending category which instead did not materialize (the residual is positive). Expenditure in furnishings and house equipment reduced by about 7% in 2020, much less than what one would have expected on the basis of the historical

¹³Appendix Figure A.1 represents actual and predicted consumption growth for different categories.

correlations with hours worked and permanent income; residuals are hence positive for this category. This result is probably due to the change in life style determined by the Covid-19 shock, which forced households to spend more time at home, inducing them to reallocate some of their expenditures to furnishings. Spending in personal care items fell by 6.2%; in this case, however, the model would have predicted a milder drop, as evident from the negative residuals. Lastly, food and beverages consumption is the only spending category which registered a positive variation in 2020 (1.9%), higher than the model prediction. In terms of shares, the largest variations were recorded by spending in restaurants and hotels, whose share almost halved in 2020Q2, and by food consumption, which instead increased by almost 6 percentage points (Figure A.2). In conclusion, the model overestimates spending in restaurants and hotels, clothing and personal care; at the same time, it underestimates the expenditure in furnishings and food consumption. Notice that the “abnormal” fall in consumption was larger but not limited to the first half of the year, characterized by a strong lockdown, and to restaurants and hotels, the category mostly affected by the policy measures. This suggests that other factors, like the fear of contagion and uncertainty about the future, do play a role in the pattern of aggregate consumption. In what follows we dig deeper into these factors using micro-data.

Figure 4: Unexplained consumption growth in macro regressions (realized – predicted)



Source: our computations on data from Istat, Bank of Italy, ECB and Confcommercio. For each consumption item we estimate the regression (1) and compute the difference between realized and predicted y-o-y consumption growth (residual).

3 The microeconomic approach

Complementing the analysis with micro data allows us to overcome two limitations of the macro approach. First, we can dig deeper into the share of the exceptional drop in consumption not explained by the standard determinants and disentangle the relative importance of pandemic-related factors. Secondly, by building individual-level measures of such drivers we can study how their contribution varies with households' characteristics.

3.1 The Bank of Italy's Special Survey on Households

Since the outbreak of the Covid-19 pandemic, the Bank of Italy has been conducting a Special Survey of Italian Households to collect information on the impact of the epidemic on the financial situation and expectations of Italian households. The survey is conducted every three months and covers the period heavily affected by the first lockdown measures (April 2020, 1st wave), the Summer (2nd wave), characterised by less stringent containment measures, and the Autumn (3rd wave) when the restrictive measures for the containment of the second pandemic wave were becoming more and more stringent, though less restrictive compared to April.¹⁴ Apart from the main demographic variables (sex, age, education, area of residence) the survey contains questions on the respondent's financial situation, occupational status, saving possibilities, consumption choices and expectations on future income changes and labor market prospects.

We use the second and third waves of the survey to elicit consumption and saving expectations. In particular households are asked about their saving intentions, i.e. whether over the next twelve months they plan to spend less than the entire yearly income and succeed in saving (see Appendix B for the exact wording). More than 40% of households expect to spend less than their annual income in the next 12 months (Table B.2); this holds both for households that expect their income to increase (67%) and for those that expect their income to fall (just under 20%). Two considerations are in order. First, this question provides information on the extensive margin of saving, allowing us to distinguish (expected) savers from non-savers. However, it does not tell anything about the

¹⁴In the first edition of the survey, carried out between the end of April and the start of May 2020, two other survey techniques (namely interviews over the phone and the web) were used in addition to the touchscreen device, which was the only method used for the second and third editions. The main findings and the methodology are described in Neri and Zanichelli (2020), and in the box 'Italian households' assessments and expectations during the current public health emergency', Chapter 5, Annual Report for 2019, 2020. The second edition of the survey was carried out from late August to early September 2020; the main findings and the methodology are described in Rondinelli and Zanichelli (2020), and in the box 'Italian households during the epidemic: the Bank of Italy's survey', in Economic Bulletin, 4, 2020. The third edition of the survey was carried out at the end of November 2020; the main findings and the methodology used are described in Rondinelli and Zanichelli (2021), and in the box 'Italian households during the epidemic: the Bank of Italy's survey', in Economic Bulletin, 1, 2021.

intensive margin of saving, namely if the individual expects to save less or more compared to the past (conditional on being a saver). Second, the saving response is the net effect of income and consumption developments. Therefore, respondents may expect to succeed to save for very different reasons: because they rely on a safe income which more than satisfies their usual needs, because they actively decide to save some resources to face unexpected events, or rather because they choose or are forced to cut consumption, for instance because they fear to be infected or because policy restrictions reduce the availability of some goods and services. Hence, to shed light on the channels through which the pandemic altered the saving behaviour of Italian households, we start by focusing on the changes in spending decisions, which are more directly affected by the spread of the virus and fully under the households' control.

We thus exploit the question about expected spending in non-durable goods and services over the following three months.¹⁵ A little less than one third of Italian households think that they will reduce their consumption; about half of them plan to cut their spending by more than 20%. The decrease is seen largely among households in the regions most exposed to the health emergency. The reasons for cutting expenditure seem to be not only economic: over one fourth of individuals that expect their income to increase in 2021 plan to cut spending.

Additional evidence on the reasons for cutting expenditure comes from a specific question introduced in the third wave of the survey, where households compare their spending in the previous month to the one before the Covid-19 pandemic. The question is asked separately for different categories: food, clothing, furniture, bars, restaurants, hotels and personal services. Consistent with the macroeconomic evidence, around 80% of households report that they have patronized some establishments less regularly – hotels, coffee bars and restaurants – and have made less frequent purchases in clothing stores than prior to the pandemic; about two thirds have cut spending on beauty and personal care services.¹⁶ The decline in these categories of consumption items is greater in the regions hit the most by the public health emergency. If households report to have reduced spending in at least one category of “non-essential goods”, they are asked the motivations of this choice.¹⁷ Just under half of the households say that the reduction in consumption is due to diminished economic resources. Among the other reasons given, fear of infection is the main driver (around 40%), regardless of the severity of the restrictions imposed in the interviewees' regions of residence. The forced reduction in spending due to measures taken to contain the epidemic has a lesser impact overall (32%), although it is greater for households that reside in “red zones”.¹⁸ Putting money aside for unexpected events

¹⁵Question 2 of the questionnaire (see Appendix B).

¹⁶Question 1 of the Covid-19 module (Appendix B).

¹⁷Questions 2-3 of the Covid-19 module (Appendix B).

¹⁸Starting from the beginning of November, Italian regions were differentiated on a weekly basis according to the degree of restrictions in place, identified either by a yellow, orange or red color (with increasing severity).

accounts for about 29% on average, with a higher importance in “yellow zones”.

3.2 Reasons for cutting expenditure

Despite being primarily a qualitative Survey, SSIH allows us to estimate a micro version of equation (1), with the goal of disentangling the drivers of the expected consumption pattern over the following three months at the individual level. We take advantage of the rich set of information included into the survey to control for both standard and pandemic-related determinants of consumption choices, all considered at the individual level. Among the standard factors, we control for: i) age and education, which capture the stage of the individual’s life-cycle; ii) actual income, proxied by the occupational status; iii) wealth, captured by the difficulties in making ends meet; iv) expectations about future resources, which are assumed to be a function of individual expectations on income and labour market developments.

Moreover, we are interested in disentangling the other channels behind the exceptional drop in consumption and increase in saving. To do so, we build individual-level measures, which are either exacerbated by the pandemic (like economic reasons and uncertainty about the future) or directly linked to it (like the fear of contagion and containment measures). The three questions on the reasons that induced households to patronize some establishments less regularly help in this regard. Rather than using directly these responses as regressors, which would limit the sample size, we first try to isolate which other variables are mostly associated with the four reasons.

Households may want to put money aside for unexpected events to smooth the uncertainty they will face in the future. This uncertainty might be primarily affected by labour market events. For this reason we construct a measure of individual uncertainty as a dummy variable equal to one if the self-reported probability of (i) losing the job is higher than 25% for employed household members and (ii) finding a job is lower than 25% for unemployed individuals.

Restrictive measures are more stringent in the regions most severely hit by the epidemic at the time of interview, the so called red and orange zones.¹⁹

Households that decided to cut drastically spending in all types of non-essential goods and services requiring social interactions, like hotels, bars and restaurants and purchases in physical stores selling clothing and footwear or furniture and appliances, might be signalling a strong fear of contracting the virus. For this reason we create a variable indicating fear as a dummy variable equal to one when

¹⁹When the survey began, the red zones were the Autonomous Province of Bolzano and the regions of Calabria, Campania, Lombardy, Piedmont, Tuscany and Valle d’Aosta; the orange zones were Abruzzo, Basilicata, Emilia-Romagna, Friuli Venezia Giulia, Liguria, Marche, Puglia, Sicily and Umbria. All the other regions and the Autonomous Province of Trento were designated yellow zones (Prime Minister’s Decree (DPCM) of 3 November 2020 and subsequent ordinances).

the household answers “1” to questions 1.2, 1.3 and 1.5 in Appendix B (FEAR).²⁰ As a robustness, we also construct an alternative measure using a different survey question: in this case we consider how spending would vary depending on the number of contagion per day in the own region. Fearful households would eliminate or strongly reduce their spending in hotels, coffee bars and restaurants even in a more favourable epidemiological scenario. Our alternative measure of fear is thus a dummy variable equal to one if the household decides to eliminate or strongly reduce spending in hotels, coffee bars and restaurants even when in the region of residence there are fewer than 10 new cases per day (FEAR CASES).²¹

To select the households’ characteristics associated the most with the reasons for cutting expenditure we estimate probit regressions for the probability of reporting any of these motivations as particularly relevant. For the probit model related to economic reasons, the dependent variable is a dummy equal to 1 when the household reported to have reduced purchases because of lower financial resources (question 2 of the Covid-19 module). For the other motivations, we instead created dummy variables which take value of 1 if the score that the respondent assigns to a given motivation is higher than the median.²²

Table 1 reports the results of the probit models, where each of the four reasons for cutting expenditure is regressed against age, occupational status, making ends meets, expectations on income and labour market and the three variables described above that we expect to be correlated with the motivations other than the economic ones.²³ First, cutting expenditure because of economic reasons appears, as expected, to be positively correlated with occupational status: self-employed are about 22% more likely to cite economic reasons compared to pensioners, in line with the evidence that the pandemic affected self-employment the most. Those experiencing difficulty in making ends meets cite more frequently economic reasons compared with those not experiencing that difficulty. Additionally, compared to those with a more optimistic view, households with less favourable expectations for the labour market and income mention economic reasons 10% more often. Economic reasons are also positively correlated with the fear of contagion and uncertainty. Second, in the model for the probability of mentioning the fear of contagion as an important reason for reducing consumption, the variable FEAR is highly significant, as expected; the same evidence applies with a narrower definition of fear (FEAR CASES); employees mention less often the fear of contagion compared to

²⁰We do not consider answers to question 1.4 because purchases for furniture and appliances are usually done less often and may be driven by needs that could not be postponed. Hence, it is unclear whether reducing this type of purchases would actually capture the fear of being infected.

²¹The question is the same irrespective of the size of the region of residence.

²²In theory we could classify individuals depending on the prevalent motivation; however cases where the respondent assigns equal weights to at least two motivations are not infrequent.

²³Coefficients, instead of marginal effects are reported in Appendix C in Table C.3.

pensioners. Third, households mentioning that the drop in spending was related to the restrictive measures are more likely to live in red zones at the moment of the interview. The coefficient of FEAR is instead negative and significant, signalling that our approach is able to clearly distinguish between households concerned with the possibility of infection and those that are forced to reduce purchases because of the containment measures. Fourth, putting money aside for unexpected events is positively correlated with our uncertainty measure and the difficulty in making ends meets.

Thus, we can conclude that among the four reasons for cutting consumption, making ends meets, occupational status and expectations are mainly correlated with the economic reasons; FEAR correctly captures the fear of contagion; the red zone is a good predictor for mentioning restrictive measures, and putting money aside to face unexpected events depends on the uncertainty on the own employment prospects.²⁴

3.3 Disentangling the drivers of consumption

Having described the survey variables that capture both the standard and the pandemic-related factors that could affect consumption choices, we can now estimate a micro-version of the consumption function:

$$ncexp_{it} = \alpha'V_i + \beta'Z_{it} + \gamma'Y_{it} + \delta'W_{it} + \eta'EXP_{it} + \Theta'reason_{it} + \varepsilon_{it} \quad (2)$$

where $ncexp_{it}$ is a dummy variable equal to one for households expecting a decrease in their consumption for food, clothing and footwear, home goods and services in the following 3 months (see Appendix B question 2); V_i is a deterministic time invariant component, which includes education, and Z_{it} is deterministic time-varying component (second order polynomial of age) capturing different stages in the life-cycle consumption profile. Individual actual income Y_{it} is proxied by the occupational status (employee, self-employed, unemployed, pensioner), while wealth (W_{it}) is approximated by self-reported difficulty in making ends meets. The individual expectations about income and the evolution of the labour market are other important determinants of spending decisions. Among the four reasons for cutting consumption, the economic ones are captured by income, wealth and the self-reported expectations about income and labour market developments. The other three reasons for cutting consumption ($reason_{it}$) are based on the variables identified in the previous Section, namely the fear of contagion (FEAR), the restrictive measures (red and orange zone) and uncertainty.

In Table 2 we report the estimates of equation (2), starting from a simple specification of a linear probability model and gradually enriching it. In column (1) we see that expenditure has

²⁴Results are broadly unchanged when we estimate a multinomial probit with all the reasons and with only non-economic reasons (see Appendix C, Tables C.4 and C.5, respectively).

Table 1: Determinants of the reasons for cutting expenditure (probit models)

	Economic reasons	Fears of contagion	Fears of contagion	Restrictive measure	Deal with unexpected events
	(1)	(2)	(3)	(4)	(5)
Age	-0.001 (0.011)	-0.012 (0.014)	-0.012 (0.014)	0.008 (0.013)	-0.000 (0.013)
Age sq.	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)
Employee	0.108 (0.075)	-0.182** (0.085)	-0.206** (0.084)	-0.004 (0.092)	0.046 (0.088)
Self-Employed	0.223*** (0.076)	-0.129 (0.091)	-0.144 (0.090)	-0.017 (0.102)	0.060 (0.100)
Unemployed	0.130 (0.088)	-0.145 (0.110)	-0.161 (0.107)	-0.040 (0.122)	-0.051 (0.120)
Making ends meet (very difficulty)	0.494*** (0.041)	0.012 (0.093)	0.002 (0.092)	-0.185** (0.089)	0.036 (0.091)
Making ends meet (difficulty)	0.391*** (0.047)	-0.056 (0.061)	-0.052 (0.062)	-0.029 (0.062)	0.169*** (0.059)
Making ends meet (easily)	0.098* (0.055)	-0.081 (0.054)	-0.078 (0.054)	-0.060 (0.055)	0.102* (0.054)
Expectation on Y (decrease)	0.119*** (0.045)	0.006 (0.068)	0.005 (0.068)	-0.052 (0.063)	-0.009 (0.068)
Expectation on LM (decrease)	0.093** (0.038)	0.021 (0.044)	0.028 (0.044)	-0.037 (0.044)	-0.037 (0.045)
Red zone	0.031 (0.048)	0.027 (0.055)	0.046 (0.054)	0.160*** (0.053)	-0.011 (0.055)
Orange zone	0.072 (0.047)	0.071 (0.057)	0.066 (0.057)	0.077 (0.054)	0.061 (0.058)
FEAR	0.098** (0.041)	0.147*** (0.052)		-0.143*** (0.052)	0.050 (0.052)
Uncertainty	0.144*** (0.042)	0.035 (0.062)	0.040 (0.062)	-0.008 (0.062)	0.114* (0.061)
FEARS CASES			0.080* (0.044)		
N	1238.000	685.000	685.000	685.000	685.000
Average probability	0.48	0.46	0.46	0.59	0.54

Notes: Marginal effects. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Our calculation from wave 3 (November 2020). LM indicates labour market, Y=income, C=expenditure. Dependent variable is a dummy equal to 1 when the household reported to have reduced purchases because of lower financial resources (question 2 of the Covid-19 module; column 1). For the other motivations, the dependent variable is a dummy variable which takes value of 1 if the score that the respondent assigns to a given motivation is higher than the median (columns 2-5). Reference category for occupational status is pensioner; reference category for making ends meet is very easily; reference category for expectation on Y and LM is increase or stay the same. Red/Orange zone are dummy variables equal to one for regions in red/orange areas at the moment of the interview (reference yellow area). Uncertainty is a dummy variable equal to one if the self-reported probability of (i) loosing the job is higher than 25% for employed household members and (ii) finding a job is lower than 25% for unemployed individuals. FEAR is a dummy variable equal to one whether the households answered "1" to the questions 1.2, 1.3 and 1.5 (see Appendix B). FEAR CASES is a dummy variable equal to one if the household decided to eliminate or strongly reduce their spending in hotels, coffee bars and restaurants even when in the region of residence there are fewer than 10 new cases per day.

an inverse U-shape profile over the life cycle, as demonstrated by the coefficients in age and age squared. Those with none or primary or middle school education are more likely to cut consumption compared to the highly educated. Unemployed and self-employed are more likely to expect a fall in consumption compared to pensioners. In column (2) we insert a variable aiming at capturing household wealth, i.e. the capability in making ends meets: those finding it very difficult are more likely to expect a drop in consumption in the following three months compared to more affluent households; the introduction of this variable makes the one related to education not significant. In column (3) we also include individuals' expectations on income and the labour market: as expected, those foreseeing a drop in income or a worsening of the labour market mention more frequently a spending cut. Because education is not significant once controlling for the difficulty in making ends meets and expectations, we drop it from the other specifications, which include the other potential reasons for cutting expenditure. The fear of contagion is positively related to the drop in spending, both using the narrow and broad definition of fear of contagion (columns 5 and 6); according to the broader classification (FEAR), a household that attributes high importance to the fear of contagion is 23% more likely to reduce purchases. Individuals who are highly uncertain about their labour market prospects are significantly more likely to compress expenditure. The restrictive measures, i.e. being either in the red or orange zone at moment of the interview, are positively related to the fall in expenditure, but the coefficient is not statistically significant. Column (7) is our preferred specification of equation 2, where we include standard demographic controls and reasonable proxies for the different motivations for cutting expenditure.²⁵

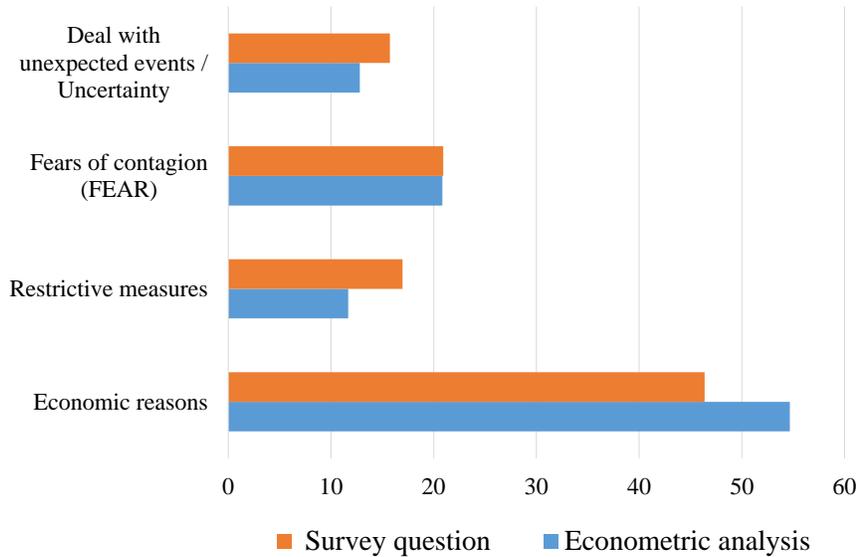
Using our preferred specification of equation (2) (column 7 of Table 2), we compute the contributions of the different reasons for cutting expenditure for the average household in the sample.²⁶ The results are represented by the blue bars in Figure 5, while the orange ones represent the unconditional descriptives based on the survey questions. The predicted probability of an expected drop in spending is equal to 0.35, which compares with an unconditional probability of 0.33. Among the four motivations, we find that the fear of contagion accounts for about 20% both in the survey and in the econometric analysis. Economic reasons are mentioned by 46% of households in the corresponding

²⁵Results are confirmed using a probit model (see Appendix Table C.6). Moreover, our findings are unchanged when the analysis is conducted on wave 2 of the Survey, on the pooled sample of wave 2 and 3 and on wave 4 conducted between the end of February and beginning of March 2021 (Table C.7 in the Appendix C). Our results are also robust to the inclusion of other variables: the interaction of education with fear of contagion and uncertainty turns out to be not statistically significant, as well as a dummy variable equal to one for households having received fiscal support to income by the Italian Government. Also the dummy variable for the sector of activity is not statistically significant and leaves the results unchanged. Results are available upon request.

²⁶For instance, to compute the contribution of the fear of contagion we multiply the coefficient for FEAR in column 7 of Table 2 (0.23) for the average value assumed by the variable FEAR in the estimation sample (0.26). We thus find a value of 0.06, which we compare to the sum of the contributions provided by economic reasons, fear of infection, restrictive measures and precautionary motives (0.26), obtaining a relative contribution of FEAR of 0.23.

survey question; their contribution is somewhat higher (55%) in the econometric analysis. The weight assigned to unexpected events decreases by 3 percentage points (at 13%) when controlling for all the main determinants of consumption in equation (2). In the multivariate analysis also the importance assigned to the restrictive measures shrinks; moreover, we know from Table 2 that the coefficient is not statistically significant.

Figure 5: Reasons for cutting expenditure



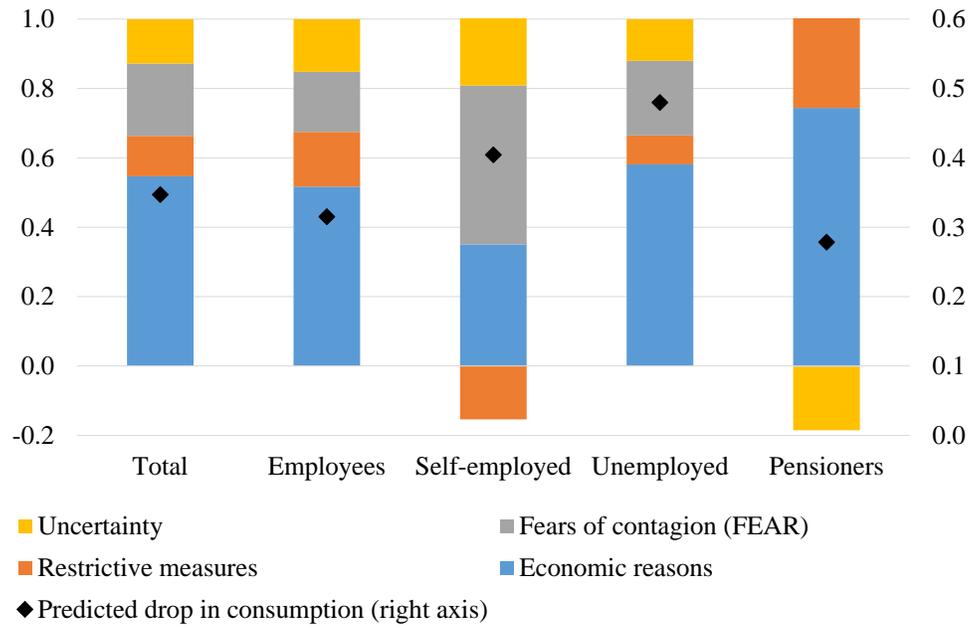
Notes: our computations on SSIH data from wave 3 (November 2020). ‘Survey question’ is the frequency of responses to question 2 (economic reasons) and of scores to question 3 (other reasons) of the Covid-19 module in the SSIH questionnaire (see Appendix B). ‘Econometric analysis’ reports the contributions of the different reasons for cutting expenditure based on the results of Table 2 (column 7) computed at the sample mean.

To investigate the heterogeneous impact of the pandemic across households, it is interesting to perform the same decomposition over different categories. One of the most relevant dimension of heterogeneity is represented by the job status, as already showed by the descriptive statistics: overall, one third of households assert that they have suffered a decline in income in 2020 but this percentage rises to over half when the household is headed by a self-employed worker or by an unemployed individual. Hence we separately estimate our preferred specification of equation (2) on individuals holding different occupations (Table C.8) and report the contributions of the reasons for cutting expenditure for the average household in each sub-sample (Figure 6). We find substantial heterogeneity across households depending on their job status. 40% of households headed by a self-employed individual expect a drop in expenditure: about half of the predicted fall is explained by fears of contagion, more than one third by uncertainty on unexpected events. About half of unemployed households heads expect a decline in expenditure, mentioning economic reasons above

all. The contributions of the reasons for cutting expenditure for employees are broadly in line with total households. For pensioners precautionary reasons exert a negative effect on the probability of cutting consumption, which is reasonable given than they need to smooth these events on a relatively shorter period of time. Restrictive measures are mildly significant only for the employees and the unemployed.²⁷

When we adopt the same decomposition based on the age of the household’s head, we find that the probability of cutting consumption is relatively higher for people aged 55-65 and lower for older respondents (more than 65 years old).²⁸ The coefficients for fear of contagion and uncertainty are positive and significant for all age categories except the oldest one. Restrictive measures are mostly not significant but they have a negative and significant coefficient for younger individuals: this could reflect the desire of the youth to resume spending as soon as tight restrictions are eased.

Figure 6: Contribution of the reasons for cutting expenditure by occupation



Notes: our computations on SSIH data from wave 3 (November 2020). Contributions are computed at the sample means of each occupational category.

As already explained in Section 3.1, it is not straightforward to estimate equation (2) using as a dependent variable the probability of being able to save resources over the following year.²⁹ However,

²⁷Results are confirmed when instead of estimating a different equation for each occupational status we estimate a unique equation interacting each job status with the fear of contagion and with uncertainty.

²⁸See Appendix Table C.9 and Figure C.3.

²⁹Only 10% of households expecting a fall in expenditure in the following 3 months foresee that they will be able to save some money in the following year.

to connect the drop in consumption with the saving expectations we estimate our baseline regression (column 7 in Table 2) splitting the sample between those who plan to spend less than their yearly income and succeed in saving ($S = 1$) and those who do not (see Table 3). Splitting the sample in the two subgroups reveals that uncertainty and labour market expectations play a role in explaining consumption drop only for households not expecting to save, presumably reflecting their liquidity constraints: 40% have indeed some difficulty in making ends meet.³⁰

4 Conclusions

In this paper we have combined a macro and a micro approach based on Italian data to disentangle the different reasons behind the unprecedented drop in private consumption caused by the outbreak of the Covid-19 pandemic. The macro estimates show that, in addition to the deterioration in economic conditions, other pandemic-related factors (such as the fear of infection, government mandated restrictions and increased uncertainty due to health and economic perspectives) explain a large part of consumption dynamics in 2020 and are especially relevant for the expenditure categories directly impacted by lockdown policies and for which the perceived risk of infection is higher. Consistent with the macro evidence, our analysis based on the micro data from the Bank of Italy’s Special Survey of Italian Households confirms the importance of these pandemic-related factors. Micro data further allow us to disentangle the relative importance of such factors and investigate their heterogeneous impact across the household distribution. We find that, apart from economic reasons, the fear of infection plays the largest role, followed by uncertainty about the future. The latter two drivers are more relevant for self-employed household heads, whereas the fall in expenditure for unemployed household heads depends mostly on their economic conditions.

Our paper offers some insights on the evolution of expenditure and savings in the near future. In Italy, purchases of a range of services, such as travel, cultural events, eating in restaurants, were still prevented or sharply discouraged in the first part of 2021. Despite a plausible shift towards other consumption items (e.g durables), these limitations ultimately translated into higher saving. Our analysis suggests that part of the savings piled-up in 2020 may be mobilized when the epidemic is progressively brought under control, especially when the fear of infection is reduced. However the impaired economic situation and uncertainty about the future, which we show to be important drivers of the current consumption outlook, could have persistent scarring effects on the hardest-hit sectors and on fragile households.

³⁰Results are confirmed when considering only households in the panel component of SSIH who reply in the wave 4 (February-March 2021) to the question on whether they accumulated savings in 2020 (Table C.10).

Table 2: Assessing the channels in cutting expenditure (linear model)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Age	0.013** (0.005)	0.011** (0.005)	0.014*** (0.005)	0.013*** (0.005)	0.011 (0.007)	0.010 (0.006)	0.010 (0.006)
Age sq.	-0.000** (0.000)	-0.000** (0.000)	-0.000*** (0.000)	-0.000** (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
None or primary	0.146*** (0.039)	0.075* (0.040)	0.056 (0.038)				
Middle school	0.075** (0.033)	0.027 (0.033)	0.016 (0.031)				
High School	0.052 (0.033)	0.027 (0.033)	0.016 (0.031)				
Employee	0.053 (0.035)	0.049 (0.035)	0.045 (0.033)	0.045 (0.033)	0.074 (0.057)	0.080 (0.055)	0.082 (0.055)
Self-Employed	0.124*** (0.043)	0.116*** (0.043)	0.059 (0.040)	0.059 (0.040)	0.084 (0.059)	0.091 (0.058)	0.091 (0.058)
Unemployed	0.156*** (0.038)	0.130*** (0.037)	0.103*** (0.035)	0.108*** (0.035)	0.092 (0.063)	0.074 (0.061)	0.076 (0.061)
Making ends meet (very difficulty)		0.206*** (0.036)	0.129*** (0.034)	0.136*** (0.033)	0.083** (0.040)	0.071* (0.039)	0.073* (0.040)
Making ends meet (difficulty)		0.198*** (0.031)	0.153*** (0.030)	0.161*** (0.029)	0.103*** (0.036)	0.100*** (0.035)	0.101*** (0.035)
Making ends meet (easily)		0.071** (0.031)	0.036 (0.030)	0.038 (0.030)	0.014 (0.036)	0.009 (0.035)	0.010 (0.035)
Expectation on Y (decrease)			0.336*** (0.025)	0.337*** (0.025)	0.301*** (0.029)	0.286*** (0.029)	0.286*** (0.029)
Expectation on LM (decrease)			0.110*** (0.020)	0.109*** (0.020)	0.086*** (0.024)	0.064*** (0.024)	0.064*** (0.024)
FEAR CASES					0.091*** (0.024)		
Uncertainty					0.123*** (0.028)	0.116*** (0.028)	0.115*** (0.028)
FEAR						0.233*** (0.027)	0.228*** (0.027)
Red zone							0.044 (0.030)
Orange zone							0.044 (0.030)
Constant	-0.141 (0.148)	-0.193 (0.147)	-0.356** (0.140)	-0.328** (0.138)	-0.294* (0.166)	-0.279* (0.162)	-0.312* (0.163)
N	2077.000	2077.000	2077.000	2077.000	1408.000	1408.000	1408.000

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Our calculation from wave 3 (November 2020). LM indicates labour market, Y=income, C=expenditure. Dependent variable equal to one for households expending a drop in expenditure in the next 3 months. Reference category for occupational status is pensioner; reference category for making ends meet is very easily; reference category for expectation on Y and LM is increase or stay the same. Red/Orange zone are dummy variables equal to one for regions in red/orange areas at the moment of the interview (reference yellow area). Uncertainty is a dummy variable equal to one if the self-reported probability of (i) loosing the job is higher than 25% for employed household members and (ii) finding a job is lower than 25% for unemployed individuals. FEAR is a dummy variable equal to one whether the households answered "1" to the questions 1.2, 1.3 and 1.5 (see Appendix B). FEAR CASES is a dummy variable equal to one if the household decided to eliminate or strongly reduce their spending in hotels, coffee bars and restaurants even when in the region of residence there are fewer than 10 new cases per day.

Table 3: Connecting the drop in consumption with saving increase

	Baseline	Saving=1	Saving=0
	(1)	(2)	(3)
Age	0.010 (0.006)	0.002 (0.009)	0.011 (0.009)
Age sq.	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Employee	0.082 (0.055)	0.123 (0.081)	0.048 (0.075)
Self-Employed	0.091 (0.058)	0.076 (0.086)	0.077 (0.078)
Unemployed	0.076 (0.061)	0.169* (0.094)	0.023 (0.082)
Making ends meet (very difficulty)	0.073* (0.040)	0.115* (0.059)	0.042 (0.067)
Making ends meet (difficulty)	0.101*** (0.035)	0.098** (0.046)	0.089 (0.064)
Making ends meet (easily)	0.010 (0.035)	-0.044 (0.041)	0.059 (0.067)
Expectation on Y (decrease)	0.286*** (0.029)	0.284*** (0.058)	0.253*** (0.035)
Expectation on LM (decrease)	0.064*** (0.024)	0.035 (0.033)	0.075** (0.034)
Red zone	0.044 (0.030)	0.058 (0.041)	0.028 (0.042)
Orange zone	0.044 (0.030)	0.053 (0.043)	0.018 (0.042)
FEAR	0.228*** (0.027)	0.159*** (0.040)	0.272*** (0.037)
Uncertainty	0.115*** (0.028)	-0.017 (0.043)	0.172*** (0.036)
Constant	-0.312* (0.163)	-0.134 (0.229)	-0.295 (0.238)
N	1408.000	617.000	791.000

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Our calculation from wave 3 (November 2020). LM indicates labour market, Y=income. Dependent variable equal to one for households expending a drop in expenditure in the next 3 months. Reference category for occupational status is pensioner; reference category for making ends meet is very easily; reference category for expectation on Y and LM is increase or stay the same. Red/Orange zone are dummy variables equal to one for regions in red/orange areas at the moment of the interview (reference yellow area). Uncertainty is a dummy variable equal to one if the self-reported probability of (i) losing the job is higher than 25% for employed household members and (ii) finding a job is lower than 25% for unemployed individuals. FEAR is a dummy variable equal to one whether the households answered "1" to the questions 1.2, 1.3 and 1.5 (see Appendix B).

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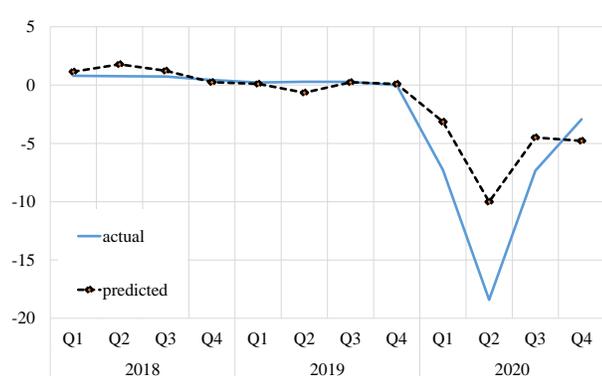
A Macroeconomic evidence: additional results

Table A.1: Results of the macro-regression for different consumption categories

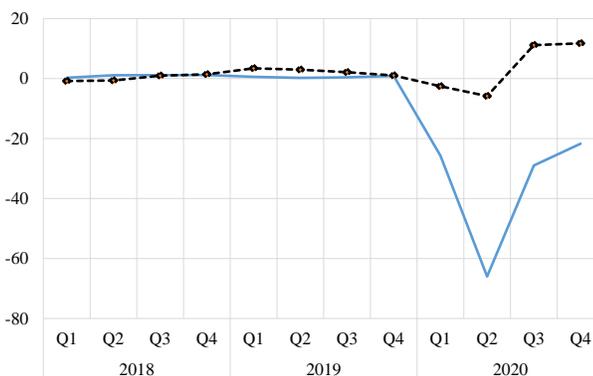
	Total	Restaurants and hotels	Clothing and footwear	Furnishings	Personal care	Food and beverages
	(1)	(2)	(3)	(4)	(5)	(6)
Log permanent income	0.381*** [0.119]	-0.303 [0.222]	0.114 [0.301]	0.607* [0.313]	-0.215 [0.140]	0.388** [0.150]
Income volatility	0.00755 [0.00458]	0.0490*** [0.00856]	0.00437 [0.0116]	0.00153 [0.0121]	0.0354*** [0.00538]	-0.00989* [0.00576]
Hours worked	0.345** [0.143]	0.780*** [0.268]	0.629* [0.363]	0.724* [0.378]	0.692*** [0.168]	0.155 [0.180]
Log real wealth	0.0515*** [0.00910]	0.154*** [0.0170]	0.0428* [0.0230]	-0.0804*** [0.0240]	0.231*** [0.0107]	-0.0728*** [0.0114]
Log financial wealth	-0.0189 [0.0181]	-0.155*** [0.0337]	-0.139*** [0.0457]	-0.00806 [0.0476]	-0.140*** [0.0212]	0.176*** [0.0227]
Interest rate	-0.00290* [0.00171]	-0.0151*** [0.00319]	0.00800* [0.00432]	0.00578 [0.00450]	-0.00588*** [0.00200]	0.00590*** [0.00214]
Unemployment expectations	-0.00363** [0.00137]	-0.0195*** [0.00256]	-0.0176*** [0.00347]	-0.0053 [0.00361]	-0.00929*** [0.00161]	0.00463*** [0.00172]
Uncertainty	-0.00308*** [0.000834]	-0.00606*** [0.00156]	-0.00285 [0.00211]	-0.00227 [0.00220]	0.0000658 [0.000979]	-0.00264** [0.00105]
Constant	1.425 [1.201]	0.188 [2.242]	-1.507 [3.039]	-8.358** [3.162]	-2.841** [1.409]	2.839* [1.508]
Observations	74	74	74	74	74	74
Adjusted R^2	0.91	0.90	0.66	0.91	0.97	0.96

Source: our computations on data from Istat, Bank of Italy, ECB and Confcommercio.

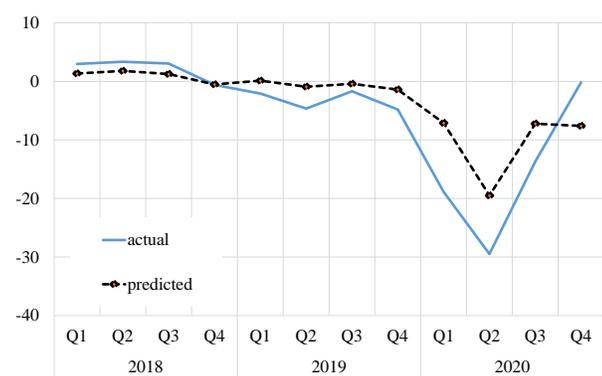
Figure A.1: Actual and predicted private consumption growth by category
(y-o-y growth rates)



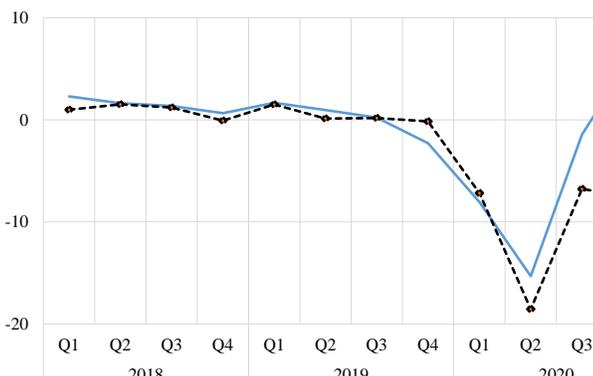
(a) Total consumption



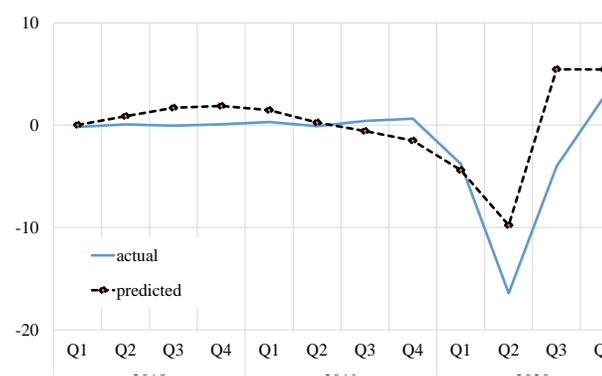
(b) Restaurants and hotels



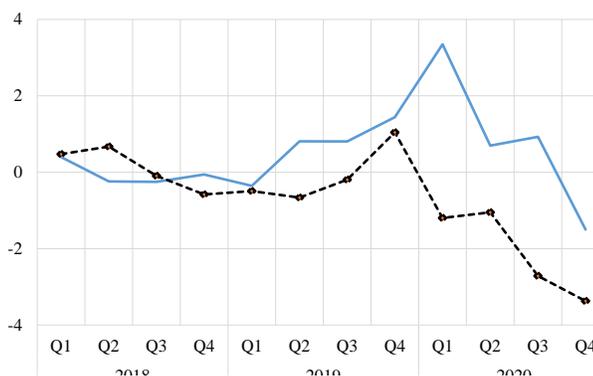
(c) Clothing and footwear



(d) Furnishings



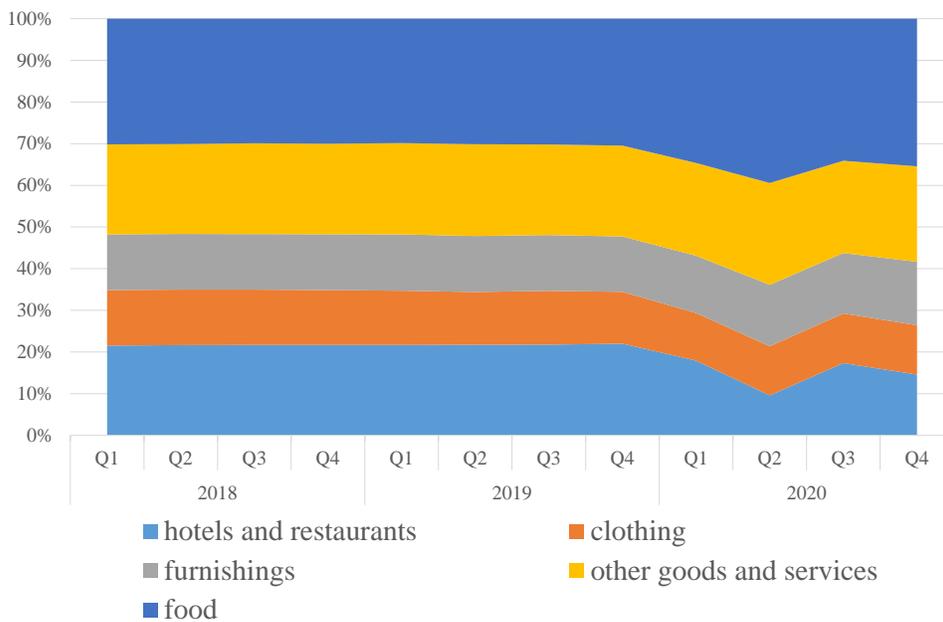
(e) Personal care



(f) Food and beverages

Source: our computations on data from Istat, Bank of Italy, ECB and Confcommercio.

Figure A.2: Evolution of the shares of different consumption categories



Notes: Source: National Accounts data from Istat, consumption categories according to the COICOP2 classification. The total is made by a subset of five categories: i) restaurants and hotels; ii) clothing and footwear; iii) furnishing and housing equipment; iv) other good and services; v) food and beverages.

B The SSIH questionnaire

The SSIH questions we exploit are the following:

1. In the next 12 months, do you expect to:
 - spend less than the entire yearly income and succeed in saving
 - spend the entire yearly income and not to manage to save anything
 - spend more than the entire yearly income, drawing on savings or borrowing
2. Consider the expenditure for food, clothing and footwear, home goods and services. How will your household change total expenditure for these items in the next 3 months?
 - will increase
 - will stay the same
 - will decrease

The Covid-19 module

1. Compared to before the Covid-19 pandemic, in the last month how frequently you did these activities?

1= never done or much less often; 2= less often; 3= with the same frequency, 4= often, 5= more often

	1	2	3	4	5
1. shop for food and other essential goods in stores					
2. make purchases in stores of clothing, footwear, etc.					
3. go to the hairdresser, beautician and other personal services					
4. go out to shop for furniture, appliances, etc.					
5. go to hotels / bars / restaurants					

2. (If you answered “1” or “2” to at least one of 1.2, 1.3 and 1.5) Why did you spend some expenses less often?
 - Lower financial resources
 - Other reasons
3. (If “Other reasons” at previous question) Distribute 100 points between these three alternatives, based on what you think are most likely: give a high score to those you think are most likely, one low to those it deems least likely.
 - Given the containment measures, some purchases were hindered / impossible

- Fears of contagion
- Put money aside for unexpected events

Table B.2: SSIH data: summary statistics

Variable	Wave 3			Wave 2		
	Mean	Std. Dev.	N	Mean	Std. Dev.	N
20-39	0.132	0.339	2077	0.132	0.338	2346
40-49	0.211	0.408	2077	0.208	0.406	2346
50-59	0.194	0.395	2077	0.194	0.395	2346
60-69	0.191	0.393	2077	0.194	0.395	2346
70+	0.272	0.445	2077	0.272	0.445	2346
None or primary	0.191	0.393	2077	0.192	0.394	2346
Middle school	0.373	0.484	2077	0.373	0.484	2346
High School	0.295	0.456	2077	0.295	0.456	2346
College and beyond	0.141	0.348	2077	0.141	0.348	2346
Male	0.684	0.465	2077	0.685	0.464	2346
Female	0.316	0.465	2077	0.315	0.464	2346
North	0.489	0.5	2077	0.491	0.5	2346
Center	0.203	0.402	2077	0.201	0.401	2346
South	0.308	0.462	2077	0.308	0.462	2346
Employee	0.403	0.491	2077	0.4	0.49	2346
Self Employed	0.092	0.288	2077	0.099	0.298	2346
Unemployed	0.14	0.347	2077	0.156	0.363	2346
Pensioner	0.365	0.482	2077	0.345	0.475	2346
Making ends meet (very difficult)	0.188	0.391	2077	0.23	0.421	2346
Making ends meet (difficult)	0.351	0.477	2077	0.338	0.473	2346
Making ends meet (easily)	0.305	0.46	2077	0.295	0.456	2346
Making ends meet (very easily)	0.156	0.363	2077	0.137	0.344	2346
Expectation on Y (increase)	0.146	0.353	2077	0.122	0.327	2346
Expectation on Y (stable)	0.658	0.475	2077	0.627	0.484	2346
Expectation on Y (decrease)	0.197	0.398	2077	0.251	0.434	2346
Expectation on LM (increase)	0.207	0.405	2077	0.214	0.41	2346
Expectation on LM (stable)	0.147	0.354	2077	0.19	0.392	2346
Expectation on LM (decrease)	0.583	0.493	2077	0.525	0.499	2346
Expectation on C less Y in 12 months ($S = 1$)	0.419	0.493	2077	0.415	0.493	2346
Expectation on C in 3 months (decrease, $ncexp = 1$)	0.328	0.47	2077	0.318	0.466	2346
FEAR	0.277	0.448	2077	0.191	0.393	2346
FEAR CASES	0.58	0.494	2077	0.612	0.487	2346
Uncertainty	0.316	0.465	1408	0.204	0.403	1850
Red zone	0.405	0.491	2077			
Orange zone	0.37	0.483	2077			
Yellow zone	0.225	0.417	2077			
Survey questions on the reasons for cutting expenditure						
Lower financial resources (% of households)	0.464	0.499	1838			
Restrictive measures (points assigned)	31.64	22.537	1032			
Fears of contagion (points assigned)	39.016	23.292	1032			
Put money aside for unexpected event (points assigned)	29.344	21.007	1032			

Notes: Our calculation from wave 3 (November 2020) and 2 (August-September 2020) of SSIH. LM indicates labour market, Y=income, C=expenditure, S= saving. Red/Orange/Yellow zone is the share of households in red/orange/yellow areas at the moment of the interview. Uncertainty is equal to one if the self-reported probability of (i) loosing the job is higher than 25% for employed household members and (ii) finding a job is lower than 25% for unemployed individuals. FEAR is a dummy variable equal to one whether the households answered "1" to both the question 1.2, 1.3 and 1.5 (see Appendix B). FEAR CASES is equal to one if the household decides to eliminate or strongly reduce spending in hotels, coffee bars and restaurants when in the region of residence there are fewer than 10 new cases per day. The last four rows of the Table refer to the survey questions about the reasons for cutting expenditure (Questions 2 and 3 of the Covid module in Appendix B).

C Microeconomic evidence: additional results

Table C.3: Determinants of the reasons for cutting expenditure (probit models)

	Economic reasons	Fears of contagion	Fears of contagion	Restrictive measure	Deal with unexpected events
	(1)	(2)	(3)	(4)	(5)
Age	-0.003 (0.027)	-0.029 (0.034)	-0.030 (0.034)	0.020 (0.034)	-0.001 (0.033)
Age sq.	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)
Employee	0.272 (0.192)	-0.460** (0.220)	-0.523** (0.219)	-0.010 (0.236)	0.115 (0.221)
Self-Employed	0.572*** (0.206)	-0.333 (0.245)	-0.375 (0.245)	-0.043 (0.260)	0.151 (0.257)
Unemployed	0.328 (0.226)	-0.378 (0.302)	-0.424 (0.300)	-0.101 (0.310)	-0.127 (0.302)
Making ends meet (very difficulty)	1.433*** (0.162)	0.031 (0.234)	0.004 (0.232)	-0.467** (0.229)	0.091 (0.232)
Making ends meet (difficulty)	1.034*** (0.139)	-0.141 (0.157)	-0.132 (0.158)	-0.075 (0.158)	0.436*** (0.159)
Making ends meet (easily)	0.247* (0.140)	-0.204 (0.137)	-0.198 (0.137)	-0.154 (0.142)	0.257* (0.138)
Expectation on Y (decrease)	0.299*** (0.116)	0.015 (0.170)	0.011 (0.171)	-0.132 (0.160)	-0.022 (0.170)
Expectation on LM (decrease)	0.233** (0.096)	0.053 (0.112)	0.071 (0.111)	-0.097 (0.113)	-0.094 (0.113)
Red zone	0.077 (0.119)	0.069 (0.139)	0.116 (0.137)	0.418*** (0.141)	-0.029 (0.139)
Orange zone	0.180 (0.119)	0.178 (0.144)	0.166 (0.144)	0.201 (0.143)	0.155 (0.146)
FEAR	0.247** (0.102)	0.370*** (0.132)		-0.364*** (0.131)	0.126 (0.132)
Uncertainty	0.363*** (0.106)	0.089 (0.156)	0.102 (0.156)	-0.021 (0.160)	0.292* (0.160)
FEAR CASES			0.203* (0.112)		
Constant	-1.544** (0.722)	0.780 (0.897)	0.883 (0.891)	-0.092 (0.883)	-0.322 (0.884)
N	1238.000	685.000	685.000	685.000	685.000

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Our calculation from wave 3 (November 2020). LM indicates labour market, Y=income, C=expenditure. Dependent variable is a dummy equal to 1 when the household reported to have reduced purchases because of lower financial resources (question 2 of the Covid-19 module; column 1). For the other motivations, the dependent variable is a dummy variable which takes value of 1 if the score that the respondent assigns to a given motivation is higher than the median (columns 2-5). Reference category for occupational status is pensioner; reference category for making ends meet is very easily; reference category for expectation on Y and LM is increase or stay the same. Red/Orange zone are dummy variables equal to one for regions in red/orange areas at the moment of the interview (reference yellow area). Uncertainty is a dummy variable equal to one if the self-reported probability of (i) losing the job is higher than 25% for employed household members and (ii) finding a job is lower than 25% for unemployed individuals. FEAR is a dummy variable equal to one whether the households answered "1" to the questions 1.2, 1.3 and 1.5 (see Appendix B). FEAR CASES is a dummy variable equal to one if the household decided to eliminate or strongly reduce their spending in hotels, coffee bars and restaurants even when in the region of residence there are fewer than 10 new cases per day.

Table C.4: Determinants of the reasons for cutting expenditure (multinomial logit)

	Economic	Fears	Deal with unexpected events
Age	-0.029 (0.049)	-0.047 (0.051)	-0.021 (0.049)
Age sq.	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Employee	-0.107 (0.349)	-0.702** (0.356)	-0.394 (0.342)
Self Employed	0.268 (0.364)	-0.729* (0.387)	-0.398 (0.359)
Unemployed	-0.023 (0.422)	-0.550 (0.453)	-0.484 (0.430)
Making ends meet (very difficulty)	1.814*** (0.292)	-0.010 (0.319)	0.035 (0.300)
Making ends meet (difficulty)	1.587*** (0.244)	0.092 (0.243)	0.503** (0.235)
Making ends meet (easily)	0.309 (0.223)	-0.239 (0.214)	0.166 (0.208)
Expectation on Y (decrease)	0.354* (0.211)	-0.016 (0.244)	-0.052 (0.216)
Expectation on LM (decrease)	0.259 (0.167)	0.053 (0.180)	-0.088 (0.163)
Red zone	0.011 (0.194)	-0.126 (0.208)	-0.089 (0.191)
Orange zone	0.361* (0.207)	0.053 (0.224)	0.226 (0.207)
FEAR	0.765*** (0.199)	0.566*** (0.210)	0.502** (0.200)
Uncertainty	0.841*** (0.212)	0.371* (0.223)	0.499** (0.212)
Constant	0.128 (1.265)	2.017 (1.353)	1.239 (1.252)

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. No. of observations: 1238. Reference for the multinomial model is "restrictive measures". Our calculation from wave 3 (November 2020). LM indicates labour market, Y=income, C=expenditure. Reference category for occupational status is pensioner; reference category for making ends meet is very easily; reference category for expectation on Y and LM is increase or stay the same. Red/Orange zone are dummy variables equal to one for regions in red/orange areas at the moment of the interview (reference yellow area). Uncertainty is a dummy variable equal to one if the self-reported probability of (i) losing the job is higher than 25% for employed household members and (ii) finding a job is lower than 25% for unemployed individuals. FEAR is a dummy variable equal to one whether the households answered "1" to both the question 1.2, 1.3 and 1.5 (see Appendix B).

Table C.5: Determinants of the non-economic reasons for cutting expenditure (multinomial probit)

	Fears	Deal with unexpected events
Age	-0.053 (0.057)	-0.034 (0.055)
Age sq.	0.001 (0.001)	0.000 (0.001)
Employee	-0.713* (0.376)	-0.339 (0.365)
Self Employed	-0.723* (0.425)	-0.301 (0.397)
Unemployed	-0.535 (0.507)	-0.528 (0.486)
Making ends meet (very difficulty)	0.098 (0.392)	0.176 (0.369)
Making ends meet (difficulty)	0.120 (0.279)	0.657** (0.271)
Making ends meet (easily)	-0.262 (0.231)	0.190 (0.225)
Expectation on Y (decrease)	-0.052 (0.292)	-0.059 (0.259)
Expectation on LM (decrease)	0.091 (0.194)	-0.067 (0.181)
Red zone	-0.096 (0.226)	-0.100 (0.214)
Orange zone	0.126 (0.247)	0.276 (0.237)
FEAR	0.662*** (0.238)	0.596*** (0.229)
Uncertainty	0.394 (0.274)	0.643** (0.264)
Constant	2.070 (1.507)	1.434 (1.432)

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. No. of observations: 685. Reference for the multinomial model is "restrictive measures". Our calculation from wave 3 (November 2020). LM indicates labour market, Y=income, C=expenditure. Reference category for occupational status is pensioner; reference category for making ends meet is very easily; reference category for expectation on Y and LM is increase or stay the same. Red/Orange zone are dummy variables equal to one for regions in red/orange areas at the moment of the interview (reference yellow area). Uncertainty is a dummy variable equal to one if the self-reported probability of (i) loosing the job is higher than 25% for employed household members and (ii) finding a job is lower than 25% for unemployed individuals. FEAR is a dummy variable equal to one whether the households answered "1" to both the question 1.2, 1.3 and 1.5 (see Appendix B).

Table C.6: Assessing the channels in cutting expenditure (probit)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Age	0.036*	0.032*	0.045**	0.041**	0.032	0.031	0.031
	(0.020)	(0.020)	(0.021)	(0.021)	(0.028)	(0.027)	(0.028)
Age sq.	-0.000*	-0.000	-0.000*	-0.000*	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
None or primary	0.413***	0.220	0.172				
	(0.146)	(0.150)	(0.157)				
Middle school	0.217**	0.080	0.040				
	(0.103)	(0.105)	(0.112)				
High School	0.153	0.085	0.045				
	(0.104)	(0.106)	(0.113)				
Employee	0.149	0.143	0.143	0.144	0.230	0.248	0.248
	(0.121)	(0.120)	(0.128)	(0.127)	(0.197)	(0.197)	(0.196)
Self-Employed	0.343**	0.332**	0.191	0.190	0.264	0.281	0.278
	(0.139)	(0.141)	(0.146)	(0.145)	(0.203)	(0.205)	(0.204)
Unemployed	0.420***	0.355***	0.311**	0.324**	0.281	0.229	0.231
	(0.136)	(0.135)	(0.143)	(0.143)	(0.217)	(0.216)	(0.215)
Making ends meet (very difficulty)		0.619***	0.437***	0.456***	0.279*	0.249*	0.258*
		(0.121)	(0.127)	(0.125)	(0.145)	(0.148)	(0.149)
Making ends meet (difficulty)		0.600***	0.511***	0.532***	0.339***	0.335**	0.339**
		(0.106)	(0.111)	(0.110)	(0.130)	(0.131)	(0.132)
Making ends meet (easily)		0.242**	0.147	0.150	0.064	0.047	0.054
		(0.106)	(0.111)	(0.110)	(0.131)	(0.133)	(0.132)
Expectation on Y (decrease)			0.907***	0.911***	0.821***	0.810***	0.808***
			(0.088)	(0.088)	(0.104)	(0.106)	(0.106)
Expectation on LM (decrease)			0.350***	0.347***	0.266***	0.209**	0.209**
			(0.077)	(0.077)	(0.089)	(0.091)	(0.091)
FEARS CASES					0.284***		
					(0.087)		
Uncertainty					0.359***	0.349***	0.346***
					(0.100)	(0.103)	(0.103)
FEAR						0.683***	0.667***
						(0.097)	(0.097)
Red zone							0.135
							(0.111)
Orange zone							0.135
							(0.114)
Constant	-1.749***	-1.978***	-2.611***	-2.527***	-2.389***	-2.411***	-2.511***
	(0.535)	(0.540)	(0.581)	(0.576)	(0.724)	(0.726)	(0.734)
N	2077.000	2077.000	2077.000	2077.000	1408.000	1408.000	1408.000

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Our calculation from wave 3 (November 2020). LM indicates labour market, Y=income, C=expenditure. Dependent variable equal to one for households expending a drop in expenditure in the next 3 months. Reference category for occupational status is pensioner; reference category for making ends meet is very easily; reference category for expectation on Y and LM is increase or stay the same. Red/Orange zone are dummy variables equal to one for regions in red/orange areas at the moment of the interview (reference yellow area). Uncertainty is a dummy variable equal to one if the self-reported probability of (i) loosing the job is higher than 25% for employed household members and (ii) finding a job is lower than 25% for unemployed individuals. FEAR is a dummy variable equal to one whether the households answered "1" to the questions 1.2, 1.3 and 1.5 (see Appendix B). FEAR CASES is a dummy variable equal to one if the household decided to eliminate or strongly reduce their spending in hotels, coffee bars and restaurants even when in the region of residence there are fewer than 10 new cases per day.

Table C.7: Channels for cutting expenditure (different waves)

	Wave 3	Wave 2	Wave 2 and 3	Wave 4
	(1)	(2)	(3)	(4)
Age	0.010	0.014**	0.011**	0.013***
	(0.006)	(0.006)	(0.004)	(0.004)
Age sq.	-0.000	-0.000*	-0.000**	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Employee	0.082	0.001	0.042	-0.016
	(0.055)	(0.048)	(0.036)	(0.031)
Self-Employed	0.091	0.074	0.081**	-0.004
	(0.058)	(0.051)	(0.038)	(0.036)
Unemployed	0.076	0.051	0.067*	-0.009
	(0.061)	(0.051)	(0.040)	(0.036)
Making ends meet (very difficulty)	0.073*	0.179***	0.126***	0.025
	(0.040)	(0.038)	(0.027)	(0.030)
Making ends meet (difficulty)	0.101***	0.067*	0.083***	0.060**
	(0.035)	(0.035)	(0.025)	(0.026)
Making ends meet (easily)	0.010	0.033	0.019	0.008
	(0.035)	(0.035)	(0.025)	(0.026)
Expectation on Y (decrease)	0.286***	0.263***	0.274***	0.176***
	(0.029)	(0.026)	(0.019)	(0.023)
Expectation on LM (decrease)	0.064***	0.097***	0.082***	0.094***
	(0.024)	(0.023)	(0.016)	(0.017)
Red zone	0.044	-0.016	0.014	0.025
	(0.030)	(0.028)	(0.020)	(0.018)
Orange zone	0.044	-0.070**	-0.011	-0.102
	(0.030)	(0.029)	(0.021)	(0.071)
FEAR	0.228***	0.145***	0.186***	0.213***
	(0.027)	(0.026)	(0.019)	(0.021)
Uncertainty	0.115***	0.082***	0.098***	0.111***
	(0.028)	(0.026)	(0.019)	(0.020)
Constant	-0.312*	-0.334**	-0.309***	-0.275***
	(0.163)	(0.157)	(0.113)	(0.106)
N	1408.000	1512.000	2920.000	2400.000

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Our calculation from wave 2 (April-May 2020), wave 3 (November 2020) and wave 4 (February-March 2021). LM indicates labour market, Y=income, C=expenditure. Reference category for occupational status is pensioner; reference category for making ends meet is very easily; reference category for expectation on Y and LM is increase or stay the same. Red/Orange zone are dummy variables equal to one for regions in red/orange areas at the moment of the interview (reference yellow area). Uncertainty is a dummy variable equal to one if the self-reported probability of (i) losing the job is higher than 25% for employed household members and (ii) finding a job is lower than 25% for unemployed individuals. FEAR is a dummy variable equal to one whether the households answered "1" to the questions 1.2, 1.3 and 1.5 (see Appendix B).

Table C.8: Channels for cutting expenditure by job status

	Baseline	Employed	Self-employed	Unemployed	Pensioners
	(1)	(2)	(3)	(4)	(5)
Age	0.013** (0.006)	0.001 (0.009)	-0.011 (0.020)	0.044*** (0.016)	-0.029 (0.072)
Age sq.	-0.000* (0.000)	0.000 (0.000)	0.000 (0.000)	-0.000*** (0.000)	0.000 (0.001)
Making ends meet (very difficulty)	0.074* (0.040)	0.104** (0.049)	-0.130 (0.116)	0.193* (0.113)	-0.143 (0.124)
Making ends meet (difficulty)	0.104*** (0.035)	0.067 (0.043)	-0.067 (0.100)	0.242** (0.113)	0.453*** (0.108)
Making ends meet (easily)	0.010 (0.035)	0.003 (0.042)	-0.068 (0.101)	0.065 (0.149)	0.073 (0.096)
Expectation on Y (decrease)	0.284*** (0.029)	0.264*** (0.038)	0.268*** (0.070)	0.317*** (0.079)	0.307*** (0.080)
Expectation on LM (decrease)	0.064*** (0.024)	0.067** (0.029)	0.080 (0.066)	0.038 (0.082)	-0.019 (0.073)
Red zone	0.044 (0.030)	0.037 (0.036)	0.015 (0.082)	0.165* (0.097)	0.107 (0.090)
Orange zone	0.043 (0.030)	0.074* (0.038)	-0.083 (0.079)	-0.051 (0.096)	0.212** (0.091)
FEAR	0.228*** (0.027)	0.186*** (0.035)	0.339*** (0.071)	0.265*** (0.075)	-0.002 (0.087)
Uncertainty	0.117*** (0.026)	0.157*** (0.035)	0.195*** (0.069)	0.077 (0.094)	-0.297*** (0.092)
Constant	-0.289* (0.162)	-0.038 (0.232)	0.579 (0.518)	-1.197*** (0.416)	1.013 (2.528)
N	1408.000	904.000	212.000	143.000	131.000

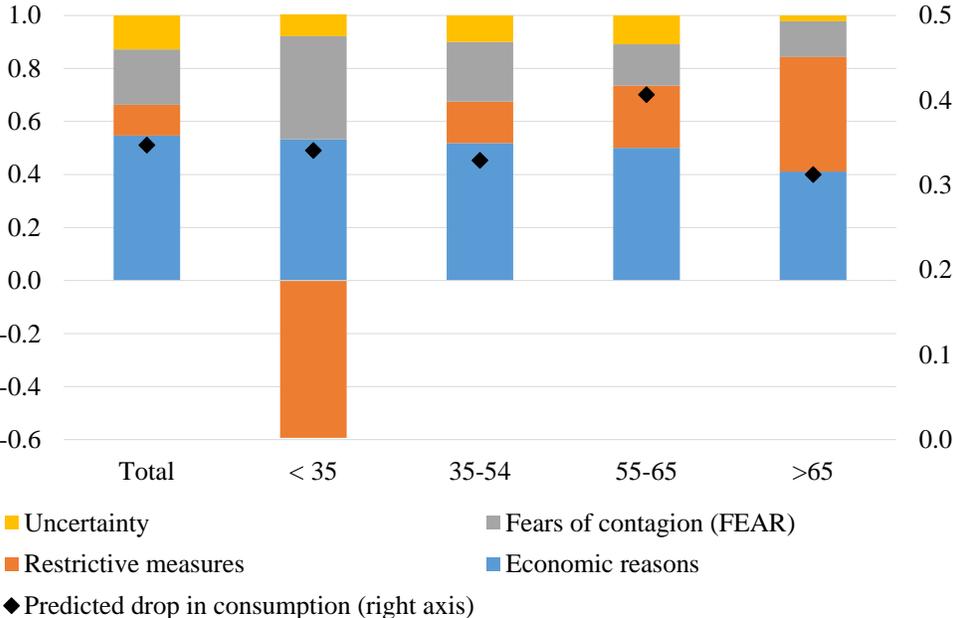
Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Our calculation from wave 3 (November 2020). LM indicates labour market, Y=income, C=expenditure. Reference category for occupational status is pensioner; reference category for making ends meet is very easily; reference category for expectation on Y and LM is increase or stay the same. Red/Orange zone are dummy variables equal to one for regions in red/orange areas at the moment of the interview (reference yellow area). Uncertainty is a dummy variable equal to one if the self-reported probability of (i) loosing the job is higher than 25% for employed household members and (ii) finding a job is lower than 25% for unemployed individuals. FEAR is a dummy variable equal to one whether the households answered "1" to the questions 1.2, 1.3 and 1.5 (see Appendix B).

Table C.9: Channels for cutting expenditure by age

	Baseline	< 35	35-54	55-65	> 65
	(1)	(2)	(3)	(4)	(5)
Age	0.010 (0.006)	1.092*** (0.375)	-0.036 (0.049)	0.483* (0.291)	-0.397** (0.164)
Age sq.	-0.000 (0.000)	-0.018*** (0.006)	0.000 (0.001)	-0.004* (0.002)	0.003** (0.001)
Employee	0.082 (0.055)	0.359* (0.188)	0.160 (0.339)	-0.036 (0.090)	0.055 (0.100)
Self-Employed	0.091 (0.058)	0.493** (0.215)	0.145 (0.341)	0.013 (0.099)	-0.020 (0.096)
Unemployed	0.076 (0.061)	0.000 (.)	0.131 (0.342)	0.066 (0.105)	-0.015 (0.123)
Making ends meet (very difficulty)	0.073* (0.040)	0.214 (0.160)	0.058 (0.052)	0.027 (0.080)	0.069 (0.126)
Making ends meet (difficulty)	0.101*** (0.035)	0.080 (0.136)	0.063 (0.046)	0.079 (0.074)	0.178* (0.106)
Making ends meet (easily)	0.010 (0.035)	-0.063 (0.135)	0.013 (0.046)	0.061 (0.076)	-0.100 (0.102)
Expectation on Y (decrease)	0.286*** (0.029)	0.042 (0.121)	0.330*** (0.038)	0.282*** (0.059)	0.319*** (0.086)
Expectation on LM (decrease)	0.064*** (0.024)	0.093 (0.092)	0.078** (0.031)	0.085* (0.048)	-0.055 (0.073)
Red zone	0.044 (0.030)	-0.206* (0.114)	0.059 (0.039)	0.117** (0.058)	0.117 (0.093)
Orange zone	0.044 (0.030)	-0.078 (0.117)	0.069* (0.040)	0.082 (0.059)	0.094 (0.097)
FEAR	0.228*** (0.027)	0.312** (0.121)	0.260*** (0.035)	0.185*** (0.054)	0.115 (0.084)
Uncertainty	0.115*** (0.028)	0.348*** (0.125)	0.099*** (0.036)	0.102* (0.054)	0.016 (0.091)
Constant	-0.312* (0.163)	-16.385*** (5.616)	0.461 (1.129)	-13.700 (8.682)	14.959** (6.174)
N	1408.000	88.000	775.000	386.000	159.000

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Our calculation from wave 3 (November 2020). LM indicates labour market, Y=income, C=expenditure. Reference category for occupational status is pensioner; reference category for making ends meet is very easily; reference category for expectation on Y and LM is increase or stay the same. Red/Orange zone are dummy variables equal to one for regions in red/orange areas at the moment of the interview (reference yellow area). Uncertainty is a dummy variable equal to one if the self-reported probability of (i) loosing the job is higher than 25% for employed household members and (ii) finding a job is lower than 25% for unemployed individuals. FEAR is a dummy variable equal to one whether the households answered "1" to the questions 1.2, 1.3 and 1.5 (see Appendix B).

Figure C.3: Contribution of the reasons for cutting expenditure by age category



Notes: our computations on SSIH data from wave 3 (November 2020). Contributions are computed at the sample means of each age category.

Table C.10: Connecting the drop in consumption with saving in 2020

	Baseline	Accumulate saving in 2020	Did not accumulate saving in 2020
	(1)	(2)	(3)
Age	0.010 (0.006)	-0.003 (0.010)	0.017* (0.009)
Age sq.	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)
Employee	0.082 (0.055)	0.047 (0.082)	0.083 (0.081)
Self-Employed	0.091 (0.058)	0.067 (0.087)	0.074 (0.083)
Unemployed	0.076 (0.061)	0.054 (0.103)	0.069 (0.085)
Making ends meet (very difficulty)	0.073* (0.040)	0.041 (0.073)	-0.022 (0.070)
Making ends meet (difficulty)	0.101*** (0.035)	0.041 (0.050)	0.052 (0.067)
Making ends meet (easily)	0.010 (0.035)	-0.036 (0.043)	0.024 (0.070)
Expectation on Y (decrease)	0.286*** (0.029)	0.276*** (0.053)	0.281*** (0.037)
Expectation on LM (decrease)	0.064*** (0.024)	0.067* (0.036)	0.052 (0.035)
Red zone	0.044 (0.030)	0.023 (0.045)	0.030 (0.043)
Orange zone	0.044 (0.030)	0.007 (0.048)	0.066 (0.043)
FEAR	0.228*** (0.027)	0.156*** (0.043)	0.274*** (0.039)
Uncertainty	0.115*** (0.028)	0.072 (0.047)	0.132*** (0.037)
Constant	-0.312* (0.163)	0.111 (0.252)	-0.442* (0.233)
N	1408.000	514.000	751.000

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Our calculation from wave 3 (November 2020) considering households interviewed also in wave 4 (February-March 2021) and replying to the question on the saving accumulated in 2020. LM indicates labour market, Y=income. Dependent variable equal to one for households expending a drop in expenditure in the next 3 months. Reference category for occupational status is pensioner; reference category for making ends meet is very easily; reference category for expectation on Y and LM is increase or stay the same. Red/Orange zone are dummy variables equal to one for regions in red/orange areas at the moment of the interview (reference yellow area). Uncertainty is a dummy variable equal to one if the self-reported probability of (i) losing the job is higher than 25% for employed household members and (ii) finding a job is lower than 25% for unemployed individuals. FEAR is a dummy variable equal to one whether the households answered "1" to the questions 1.2, 1.3 and 1.5 (see Appendix B).