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Article

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NBB economic review

Provided in Cooperation with:
National Bank of Belgium, Brussels

Reference: Sola Perea, Maite de/Mohimont, J. et. al. (2022). At the heart of the turmoil : the pandemic, households and their financial situation. In: NBB economic review S. 1 - 21. https://www.nbb.be/doc/ts/publications/economicreview/2022/ecorevi2022_h16.pdf.

NBB Economic Review

2022 / #16

At the heart of the turmoil : the pandemic, households and their financial situation

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National Bank OF BELGIUM
Eurosystem

At the heart of the turmoil: the pandemic, households and their financial situation

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Introduction

The overall financial situation of Belgian households improved during the COVID-19 crisis of 2020-2021. At first sight, this seems contradictory to our idea of a crisis, but this is a reflection of the very particular characteristics of the COVID-19 shock. First, the lack of consumption opportunities (for which there was no full catch-up in the following months) explains the increase in some households' wealth. Second, the targeted nature of the income support measures for the most affected households limited the losses incurred. However, it is also clear that some categories of households suffered badly from the crisis and saw their wealth decrease.

In Belgium, the relevant data on employment levels and hours worked actually indicate that the level of employment in 2020 remained similar to that recorded in 2019, but the number of hours worked fell by 8.5 % (Federal Planning Bureau, 2022). These data also show that some groups were hit harder, in particular workers with a low level of education, women, the self-employed and activities with low-skilled workers (hospitality, retail trade, sports, recreation and leisure activities, personal services sector).

Survey data provide additional information, in particular the NBB's consumer survey, which included questions specific to the COVID-19 crisis between April 2020 and October 2021. The answers to these questions can be broken down by different variables in order to highlight the heterogeneity of the effects of the crisis across household categories (NBB, 2021b). It has been shown that, at the beginning of the crisis, 24 % of all households incurred income losses in excess of 10 %. Moreover, some groups were more severely affected: (1) the loss of income was greatest amongst the self-employed, (2) salaried workers lost income at the very beginning of the crisis as a result of temporary lay-offs, (3) inactive categories suffered from the suspension or reduction of any supplementary paid activities, and from the lack of new job opportunities.

However, the compensatory measures taken by the authorities helped to absorb the shock. Self-employed people who were forced to (partially) cease their work benefited from a bridging allowance which helped to limit their income losses. Most of the employees who could not go to work due to lockdown or whose business sector was closed down kept their jobs and received temporary unemployment benefits.

Taking those facts into account, this article aims to answer the following questions: (1) Can we confirm, through granular survey data, any heterogeneity between households? Can we refine the groups of most affected households and quantify the impact of the crisis on their wealth and income? (2) Were the compensatory measures effective and did they help to mitigate the shock, at least for the worst affected households? What would have been the magnitude of the shock had there been no compensatory measures?

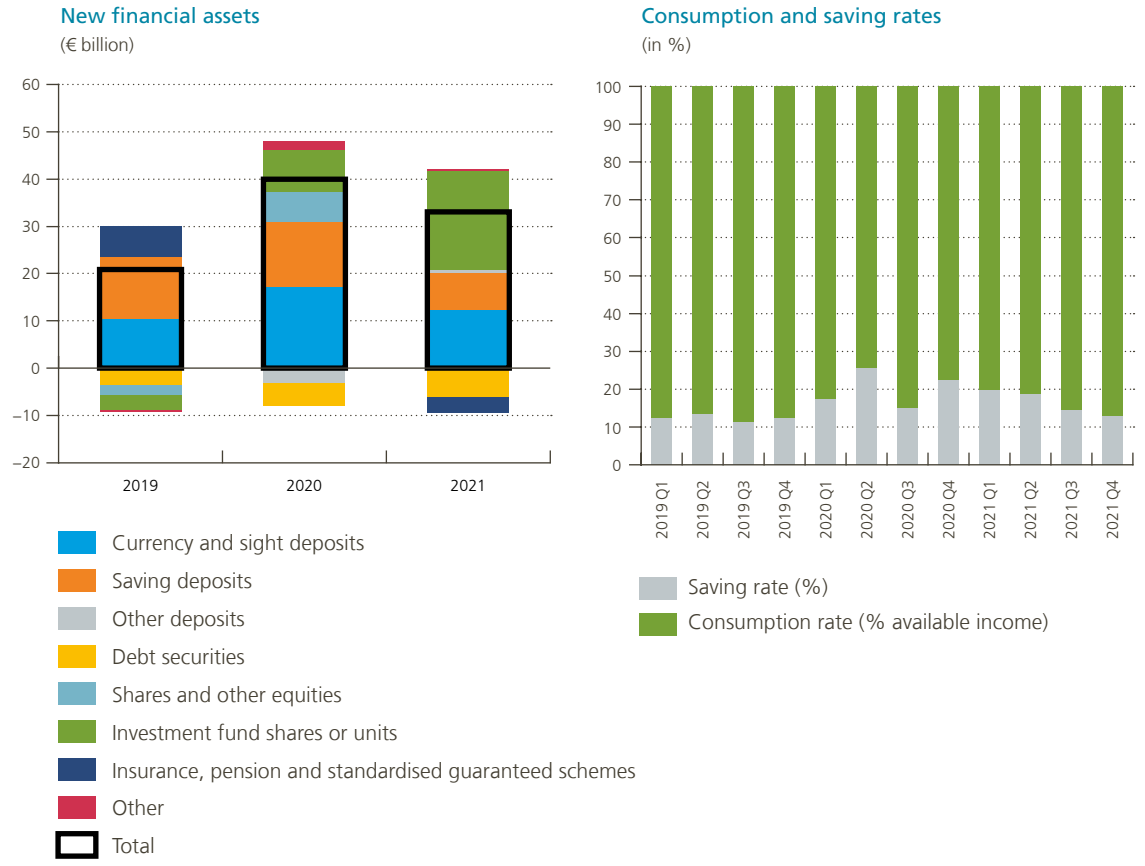
1. The big picture: highlighting an overall improvement, with some caveats

Looking at an aggregate level, the financial situation of Belgian households improved during the COVID-19 crisis. As in other euro area countries, households built up more financial assets than in the preceding year, in particular liquid assets. According to the Belgian financial accounts, the amounts on their sight deposits and saving accounts increased in 2020 more than in 2019 or in 2021. Moreover, they acquired new shares and other equities and part of their wealth went into investment funds. This trend continued in 2021 as some households continued to buy new shares in investment funds.

This increase in wealth is also related to the household saving rate, which was particularly high in the second and fourth quarters of 2020, when containment measures were more stringent and consumption of certain goods and services dropped. At that time, the surge in saving rate coincided with government-imposed restrictions on social contacts and economic activities and was mainly due to significantly reduced household spending. Many types of consumption were effectively not available (restaurants, cultural activities, travel, etc.). Therefore, most of the increase can be explained by forced saving at the beginning of the pandemic (Dossche *et al.*, 2021; Basselier and Minne, 2021; Dey-Chowdhury *et al.*, 2022) whereas precautionary savings played a limited role. The saving rate also remained relatively high in the first half of 2021, when the situation was still uncertain.

Chart 1

During the pandemic, households mainly increased their liquid financial assets, as a result of the lack of consumption opportunities due to the lockdowns



Sources: NBB (Financial accounts), NBB (National accounts).

Households probably chose to build up savings reserves during this period in order to be able to cope with a potentially prolonged shock.

The propensity to save in anticipation of the crisis was quickly apparent in household statements. In the consumer survey, savings expectations were already rising in January 2020, as coronavirus infections were on the rise in Asia and starting to worry European governments and media, while at that time the financial situation of households had not yet started to deteriorate. Household saving forecasts continued to rise over the following months, as the crisis took hold, showing some volatility, until the spring of 2021.

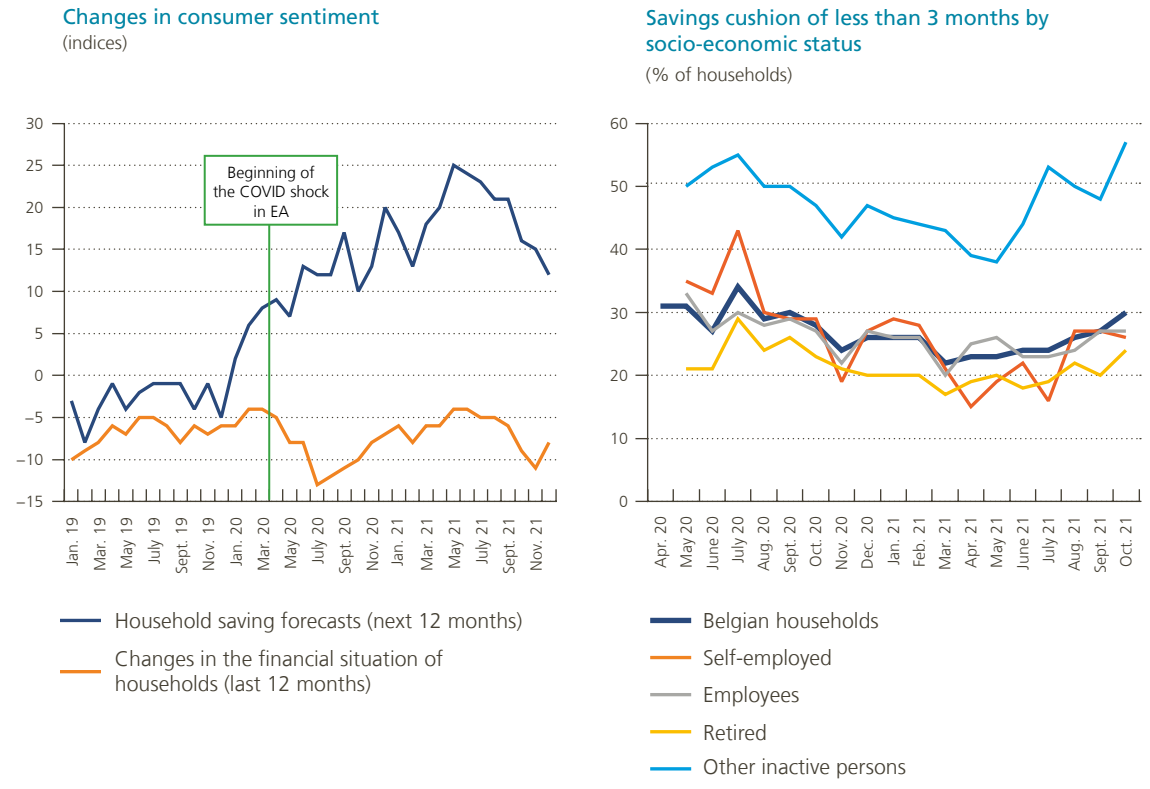
According to the consumer survey, the financial situation of households started to deteriorate in March 2020 and worsened until July that year. After this date, a gradual improvement took place. This implies that the financial situation of some groups of the population deteriorated during the crisis, even though, from the point of view of the financial accounts, households' financial wealth increased at the aggregate level.

Indeed, some categories of households were in a precarious position, having a very limited saving buffer in relation to their current expenditure. For these households, even a small loss of income could be detrimental and lead to difficulties in meeting their potential debt repayments.

The consumer survey addressed this issue at the time of the pandemic. The share of Belgian households with savings that could not cover at least three months (one month) of current expenditure was around 30 % (15 %) at the beginning of the coronavirus crisis. Taking into account socio-economic status, the results show that there is no significant difference between the self-employed and employees, except for a higher volatility among the

Chart 2

Consumer sentiment and financial situation of households during the crisis



Source : NBB (Consumer survey).

self-employed. The lowest proportion of households with less than three months' savings throughout the survey period is found among retired people. Conversely, the highest proportion was among other inactive people, where it reached about 50 %.

The most vulnerable households are those that combined both criteria : suffering from a significant loss of income (at least 10 %) and at the same time having limited savings (less than three months of current expenses). In Belgium, their proportion amounted to about 10 % during the second quarter of 2020, at the beginning of the crisis, and then gradually declined to 5 % during the second quarter of 2021.

The next section addresses the issue of household heterogeneity in the face of the COVID-19 shock, using data coming from the Household Financial and Consumption Survey.

2. The close-up : revealing the diverse impact of the crisis

Several factors may explain the differentiated impact of the COVID-19 crisis on households. A first one is the activity status of the household members : not all sectors and types of work could continue as before the crisis, given the measures taken to limit contagion (for an overview, see NBB, 2021a and NBB, 2022). Some of these worst affected jobs and sectors typically involve younger people and people with lower levels of formal education, who are more likely to be financially fragile (NBB, 2021a). These trends have also been documented at the euro area level (Dossche *et al.*, 2021). As mentioned earlier, the diversity in financial positions at the start of the pandemic also played a role, as households with more limited savings had less scope to cover their expenses in the event of income loss (NBB, 2021a).

The fourth wave of the Household Finance and Consumption Survey (HFCS), which took place over 2020 and 2021, can shed light on the heterogeneity in the financial impact of the crisis on households. Compared to the previous wave of the survey (which took place in 2017), the net wealth (all assets minus debt) of the median Belgian household went up. This was partly due to the increase in the value of financial assets : the amounts held in bank deposits rose markedly (by 18 % in median value), but the increase was much sharper for assets held only by a minority of households (in particular shares, both publicly traded and not). However, not all households benefited to the same extent : the net worth of households whose reference person was unemployed fell strongly (de Sola and Van Belle, 2022).

2.1 The impact of the crisis : descriptive statistics

Households that took part in the fourth wave of the survey were asked to assess whether the COVID-19 crisis had affected their income, wealth and consumption. A large majority (78 %) indicated that their income had remained unchanged during the crisis, while 16 % of households said they had suffered a drop in revenue. Falls in income were more prevalent among households composed of a couple with dependent children and younger households. Households with an initial higher level of income, on the contrary, indicated more often that their income had gone up.

Households where the reference person was either self-employed or unemployed at the time of the survey indicated more often that their income had fallen during the pandemic. This was also the case when at least one person in the household was employed in a sector more vulnerable to the crisis[1]. Retired households, on the

1 For the purposes of this article, the following economic sectors (1-letter NACE) are defined as vulnerable, taking into account the impact that the COVID-19 crisis had on their employment : trade and transport (G), hospitality (I), administration and support service activities (N), arts, entertainment and recreation (R), and other services (S).

Chart 3

Impact of the crisis on household income

(in % of households)

Source: NBB (HFCS).

Note: Equivalised income measures household income adjusted by the size and composition of the household. It is constructed by dividing total household income by the OECD equivalence scale, which takes a value of 1 for the household reference person, of 0.5 for each additional adult member and of 0.3 for each child under 14.

contrary, more often reported an unchanged situation. Overall, for households that declared a drop in revenue, income from self-employment activities was relatively more important. In the same line, 40 % of households where self-employment provided at least 60 % of the household's income declared that they had suffered a fall in revenue during the COVID crisis. Pensions represented a larger share for those who indicated that their income did not change during the pandemic, relative to those households that experienced either a drop or increase in revenue.

Over one in ten households indicated that their net wealth had contracted during the crisis. As a share of their wealth, the decrease was considerably larger for the poorest category of households (17 % of their net wealth at the time of the survey). Adult couples with children, households with a reference person between 35 and 54 years old, and those with lower levels of income more often said that their wealth had fallen during the crisis. Equally, those with an unemployed or self-employed reference person more often reported a loss in wealth. More affluent respondents were more likely to say that their wealth had increased (13 % of households in the top 20 % of the wealth distribution, compared to 2 % of households at the bottom 20 %).

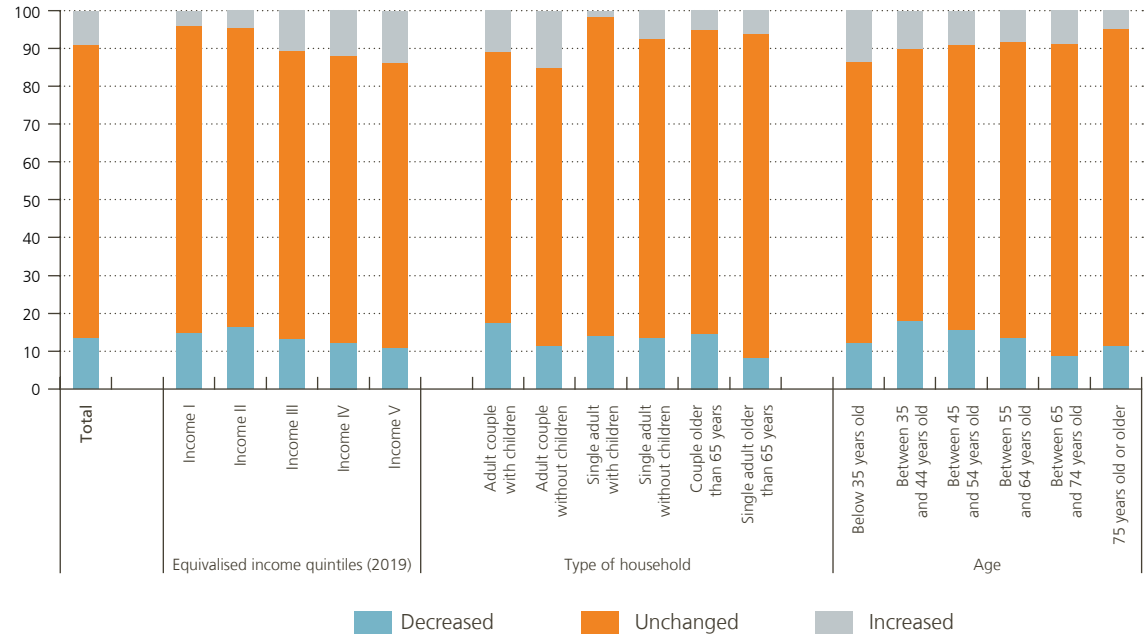
Falls in consumption were more often signalled by households with higher income levels and for adult couples without children, that is, households that potentially spend a larger share of their income on non-essential goods and services, whose consumption was limited during the crisis, either for contagion risks (i.e. meals in restaurants, culture and entertainment, holidays) or for reduced needs during the period (i.e. clothing)[1].

1 Basic expenses (food at home, home-related utilities, rent and debt repayments) amounted to 58 % of income for those households in the lowest income quintile (adjusted for household composition), but to 17 % for those in the top 20 %.

Chart 4

Impact of the crisis on household consumption

(in % of households)



Source: NBB (HFCS).

Note: Equivalised income measures household income adjusted by the size and composition of the household. It is constructed by dividing total household income by the OECD equivalence scale, which takes a value of 1 for the household reference person, of 0.5 for each additional adult member and of 0.3 for each child under 14.

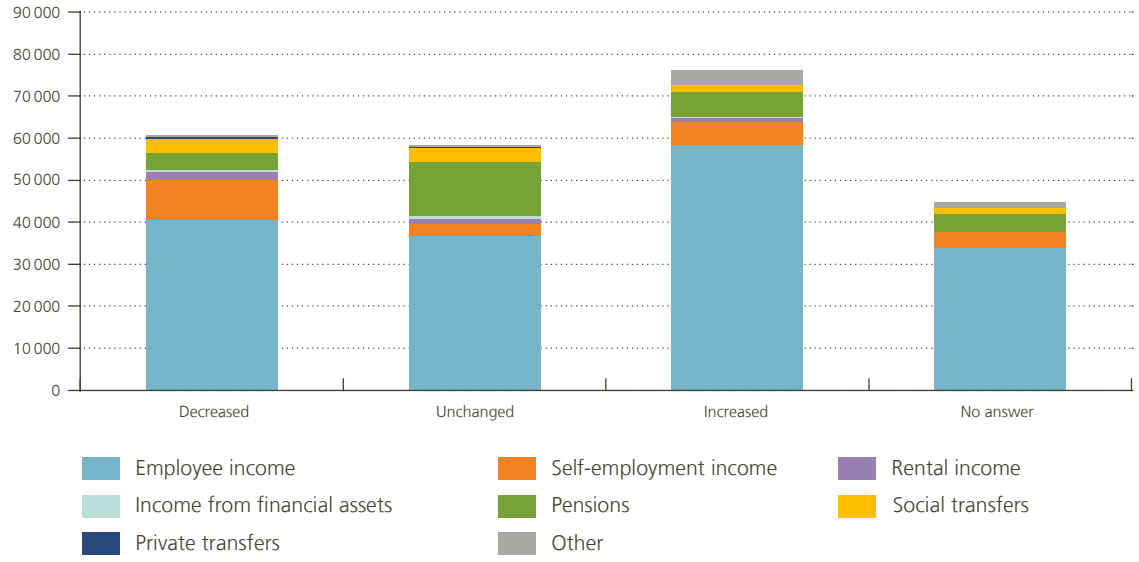
Consumption fell more often for households where the reference person was employed, and, on the contrary, rose for one fifth of households surveyed with a reference person who was unemployed or otherwise out of the labour market (but not retired). Households where at least one person worked in a vulnerable sector reported unchanged consumption less often than other households: consumption either fell or went up more often than for other households.

Households interviewed in 2021 were equally likely to report changes in income and wealth as those that replied to the survey in 2020. However, the size of the effect (both for households indicating an increase or a decrease in income and wealth) was somewhat greater for those who replied in the second year of the pandemic. This could point to persistence of the impact of the crisis.

Chart 5

Income composition in function of the impact of the crisis on income

(in €)



Source: NBB (HFCS).

2.2 Empirical analysis: characteristics of households that relate with the impact of the crisis

One way to assess the relative roles of several household characteristics is to estimate multinomial logistic regressions for changes in income, wealth and consumption. A multinomial logistic regression is a model where the variable that we want to explain takes on more than two categorical values. In this case, the variable will be the response to the question "How has your income (wealth/consumption) changed during the crisis?", which offered three alternative answers: "it has increased", "it has not changed", "it has decreased".

In the regressions that we estimate, we use several household characteristics as possible explanatory variables. We use a similar model for each of the three questions, and we try to explain the answers on the basis of the household's income in 2019, its net wealth at the time of the interview, work status, age and gender of the reference person, the number of children in the household, the date of the interview (quarter of the year) and employment of at least one member of the household in a sector that has been particularly badly affected by the crisis. The tables below include these variables and their categories, as well as the results of the regressions.

The results shown in the table refer to the relative risk ratio that the specific outcome (a decrease or increase in income, wealth or consumption) takes place, given the value or category of each household characteristic. A relative risk ratio above 1 indicates higher probability that the event considered takes place, relative to a base category; a ratio below 1 signals that the probability is lower.

In the event of a drop in income, for instance, the level of income and wealth (adjusted for the household composition) does not seem to influence the probability of a fall in revenue (after controlling for all other variables, their relative risk ratio is equal to 1 and not significant at the usual significance levels). The activity status is, however, an important factor: households with a self-employed reference person are seven times more likely to declare a fall in income than those where the reference person is retired (the risk was also considerably

higher for the unemployed). Being active in one of the vulnerable sectors also raised the likelihood of the household seeing its revenue fall. Households where the reference person had a university degree were less likely to suffer any income loss, possibly because those who were active in the labour market were more likely to have been in a job that they could do from home (Palomino *et al.*, 2020).

Households with a reference person younger than 35 were the most likely to indicate that their income had increased, possibly related to the higher labour mobility of younger people, and the ability to find a better-paid job.

Table 1

Relative risk ratios of reporting a decrease or an increase in income during the crisis

	Decrease in income	Increase in income
Equivalised income (demeaned, in € thousands)	**1.00**	**1.01****
Equivalised wealth (demeaned, in € thousands)	**1.00**	**1.00**
Activity status of reference person		
Retired	1.00	1.00
Employee	3.60**	1.22
Self-employed	7.02**	1.16
Unemployed	4.72**	0.73
Other not in labour market	2.00	0.99
Education level of reference person		
Primary education	1.00	1.00
Secondary school	0.72	0.85
Tertiary education	0.61*	0.73
Gender of reference person		
Female	1.00	1.00
Male	1.10	1.00
Number of children (demeaned)	**1.08**	**0.89**
Date of interview		
2020 Q3	1.00	1.00
2020 Q4	0.71	1.15
2021 Q1	0.75	0.92
2021 Q2	0.79	1.23
Age of reference person		
65 years and older	1.00	1.00
Under 35 years old	1.43	5.65**
Between 35 and 44	1.45	3.38
Between 45 and 54	1.03	2.03
Between 55 and 64	0.89	1.30
Employment in vulnerable sector		
Non-vulnerable	1.00	1.00
Vulnerable	1.55**	0.79*
Constant	**0.10****	**0.02****

Source: NBB (HFCS).
** Significant at 5 % level.
* Significant at 10 % level.

The (initial) income level also seemed to be linked to that outcome: the higher the income, the higher the expected probability of seeing their revenues grow. Other characteristics of the households appeared to be insignificant.

The expected risk of suffering a drop in consumption was higher for households with a more highly educated reference person, and for those interviewed in the last quarter of 2020 and the first three months of 2021. Households with a higher level of income were also more likely to report a decline in consumption. Compared to those households where the reference person was 65 years old or older, all the other respondents had a higher

Table 2

Relative risk ratios of reporting a decrease or an increase in consumption during the crisis

	Decrease in consumption	Increase in consumption
Equivalised income (demeaned, in € thousands)	**1.01****	**0.99**
Equivalised wealth (demeaned, in € thousands)	**1.00**	**1.00**
Activity status of reference person		
Retired	1.00	1.00
Employee	0.57**	1.79
Self-employed	0.48**	0.47
Unemployed	0.43*	2.58
Other not in labour market	0.22**	2.73*
Education level of reference person		
Primary education	1.00	1.00
Secondary school	1.66**	1.68*
Tertiary education	2.31**	1.22
Gender of reference person		
Female	1.00	1.00
Male	0.93	0.91
Number of children (demeaned)	**0.96**	**1.23***
Date of interview		
2020 Q3	1.00	1.00
2020 Q4	1.64**	1.07
2021 Q1	1.56**	1.25
2021 Q2	1.02	1.00
Age of reference person		
65 years and older	1.00	1.00
Under 35 years old	2.19**	0.98
Between 35 and 44	2.03**	1.23
Between 45 and 54	2.35**	1.04
Between 55 and 64	2.07**	0.89
Employment in vulnerable sector		
Non-vulnerable	1.00	1.00
Vulnerable	1.23	1.55
Constant	**0.17****	**0.11****

Source: NBB (HFCS).
** Significant at 5 % level.
* Significant at 10 % level.

risk to reduce their consumption. This could point to the accumulation of forced savings for those households, as in many such cases households would be likely to report either unchanged or increasing income and falling consumption.

On the contrary, households whose reference person was outside the labour market, yet not unemployed or retired, had a higher expected risk of raising their consumption.

Table 3

Relative risk ratios of reporting a decrease or an increase in net wealth during the crisis

	Decrease in wealth	Increase in wealth
Equivalised income (demeaned, in € thousands)	**1.00**	**1.01****
Equivalised wealth (demeaned, in € thousands)	**1.00**	**1.00**
Activity status of reference person		
Retired	1.00	1.00
Employee	1.12	1.72
Self-employed	2.30*	1.33
Unemployed	3.12**	1.27
Other not in labour market	1.63	1.24
Education level of reference person		
Primary education	1.00	1.00
Secondary school	1.21	2.24**
Tertiary education	0.91	2.23**
Gender of reference person		
Female	1.00	1.00
Male	1.23	1.22
Number of children (demeaned)	**1.05**	**1.12**
Date of interview		
2020 Q3	1.00	1.00
2020 Q4	0.81	1.44
2021 Q1	0.61**	0.73
2021 Q2	0.52**	1.67**
Age of reference person		
65 years and older	1.00	1.00
Under 35 years old	1.18	1.19
Between 35 and 44	1.66	0.79
Between 45 and 54	1.31	0.70
Between 55 and 64	1.14	0.71
Employment in vulnerable sector		
Non-vulnerable	1.00	1.00
Vulnerable	1.27	0.79
Constant	**0.13****	**0.03****

Source: NBB (HFCS).
** Significant at 5 % level.
* Significant at 10 % level.

This was also the case for households with a higher number of children or a reference person with a secondary education diploma and for those who were employed in vulnerable sectors, although the significance was slightly lower for the latter.

Households with a higher income were more likely to report an increase in their net wealth. Having an education level above primary school and being interviewed in the last quarter of the survey (the second quarter of 2021)

Table 4

Odd ratios of reporting losing jobs (temporarily or not) during the crisis

	Stopped work
Equivalised income (demeaned, in € thousands)	**1.00**
Equivalised wealth (demeaned, in € thousands)	**1.00**
Activity status of reference person	
Retired	1.00
Employee	3.51**
Self-employed	5.60**
Unemployed	2.76
Other not in labour market	0.74
Education level of reference person	
Primary education	1.00
Secondary school	0.77
Tertiary education	0.53**
Gender of reference person	
Female	1.00
Male	1.26
Number of children (demeaned)	**0.95**
Date of interview	
2020 Q3	1.00
2020 Q4	1.12
2021 Q1	0.93
2021 Q2	0.81
Age of reference person	
65 years and older	1.00
Under 35 years old	3.79**
Between 35 and 44	3.49**
Between 45 and 54	3.37**
Between 55 and 64	1.46
Employment in vulnerable sector	
Non-vulnerable	1.00
Vulnerable	2.63**
Constant	**0.04****

Source : NBB (HFCS).
** Significant at 5 % level.
* Significant at 10 % level.

were also factors linked to a higher probability of a rise in wealth. In the same vein, those households that answered the survey in 2021 (instead of 2020) were less likely to report a fall in their net worth.

On the contrary, those families where the reference person was unemployed (or, to a lesser degree, self-employed) more often incurred a fall in wealth, consistent with the negative impact in income.

A final analysis estimates the risk of becoming unemployed (including temporarily) during the crisis. Households indicated whether at least one of the household members had lost their job or had to stop their self-employment business, whether permanently or not. This was the case for 17 % of households, and 24 % of those where the reference person was not retired.

The logistic regression shows that households whose reference person had a tertiary education degree had half the probability of losing their occupation than those where the reference person had a primary level of education. Households with at least one member employed in one of the vulnerable sectors were more than twice more likely to report a job loss over this period. These results seem to confirm the importance of both the sector of employment and the ability to work from home (as proxied by education level), rather than the household's income. As could be expected, households whose reference person was employed or self-employed, or, in general, younger than 55, were also more likely to be in this situation, as their members would be more often than not on the labour market. Finally, the risk of losing their job was higher for the youngest households (reference person younger than 35).

The results from the HFCS seem to confirm the heterogeneous impact of the COVID-19 crisis on households' financial situation, to a large extent depending on their employment status, sector and occupation of the household members. While some households could build further financial reserves owing to unchanged income and reduced consumption, others incurred a drop in wealth, as they could not reduce their consumption enough to compensate their income losses.

Despite the size of the shock and its heterogeneous impact, overall, the impact of the pandemic was relatively limited on the household sector. Household disposable income grew in 2020, although its composition shifted towards higher net social transfers (Coppens *et al.*, 2021). This suggests that the measures taken by the government to support household income helped cushion the shock. Together with a decline in consumption opportunities during the lockdown period, these measures contributed to the increase in their aggregate savings and financial wealth. However, considering the heterogeneous effects of the crisis, it is important to assess the impact of these measures on different types of households and their distributional consequences.

3. Behind the scenes: the impact of mitigating public measures

One of the most important fiscal policy responses was the implementation and extension of temporary Job Retention Schemes (JRS)[1]. JRS cover different types of policies including wage subsidies, short-time work (STW), and furlough schemes (see Drahokoupil and Müller, 2021). While their specificities differ across time and countries, they share a common objective: they all aim to preserve the employment link (and contract) between a worker and his or her employer, even when work is fully suspended, during a period of temporary adverse economic conditions. Wage subsidies help firms with their wage bills when workers are still active, while STW and furlough schemes subsidize hours not worked. Furloughs are often viewed as a special case of STW scheme where hours can be cut to zero.

During the pandemic, most European countries extended existing JRS or introduced new ones. JRS had already been used in response to the global financial crisis but to a much lesser extent. By May 2020, 28.6 million

1 This section draws on Mohimont *et al.* (2022).

workers were supported by JRS in the European Union (Drahokoupil and Müller, 2020). Pre-existing JRS were extended, procedures were simplified, coverage broadened, and/or generosity increased. New schemes were also designed, often to support workers when their hours were reduced to zero. In most countries, JRS enabled firms to adjust hours at no cost during the pandemic.

In Belgium, public authorities extended the temporary unemployment scheme (TUS). At its peak in May 2020, it covered 1.15 million workers (Serroyen, 2021). During the pandemic, allocations for temporary unemployed workers were increased from 65 to 70 % of their original wage (subject to a maximum), withholding taxes were reduced from 26.75 to 15 %, and the government added a daily corona supplement to these transfers (Serroyen, 2021 ; ETUC 2020). According to the classification discussed above, the Belgian TUS is a furlough scheme.

3.1 A model to evaluate the effects of the pandemic and job retention schemes

We use a model-based approach to predict the evolution of income, consumption and savings of Belgian households according to their wealth and employment status [1]. We focus on households that had a limited stock of liquid wealth before the pandemic, who would have more difficulty in covering their expenses in the event of a loss of income. In this section, we consider that a household is vulnerable when the amount of savings it holds in its bank accounts is lower than its monthly gross labour income.

In this model, households can have three different employment statuses : they are either employed, unemployed or furloughed. The latter is a form of temporary unemployment where households are supported by the government, as observed during the pandemic when the TUS was extended.

We use this model to design two scenarios. In our baseline scenario, public authorities extend the TUS in response to the pandemic (as actually observed in Belgium) and workers affected by restrictions on economic activity become furloughed. This temporary measure is implemented in response to the COVID shock and phased out as restrictions on economic activity are gradually lifted. When the lockdown ends, most furloughed workers return to their previous job, while a few unlucky workers transition to unemployment. We use the predictions of this baseline scenario to describe the heterogeneous impact of the crisis on Belgian households in section 3.2, which complements our survey-based analysis set out in the previous section.

In the alternative scenario, these furlough policies are not implemented, so workers affected by restrictions on economic activity face the risk of becoming unemployed. If they do, they receive standard unemployment benefit. The difference between the predictions of our model in these two scenarios enables us to measure the effects of the TUS. We detail the results of this experiment in section 3.3.

Chart 6 shows the impact of the COVID shock on expected income, consumption, and savings for vulnerable unemployed, furloughed, or employed households during the first year of the pandemic, when the TUS is extended (blue bars) or not (sum of the yellow and blue bars). Expected income, consumption, and savings are computed taking account of households' transition probabilities between different employment statuses. Numbers are expressed as a fraction of consumption before the shock.

The employment status in chart 6 refers to the household's occupation when the COVID shock hit the economy. The unemployed member of the household considered in this figure loses his or her job just before the pandemic and is thus covered by regular unemployment benefits. The furloughed worker works zero hours when restrictions are first introduced. If the TUS is extended, he or she has the right to claim generous temporary unemployment benefits. But if the TUS is not extended, he or she faces higher unemployment risks and only has access to regular unemployment benefits.

1 We adjust and calibrate the model developed in Mohimont *et al.* (2022) to the Belgian economy.

3.2 The heterogeneous effect of the pandemic in Belgium

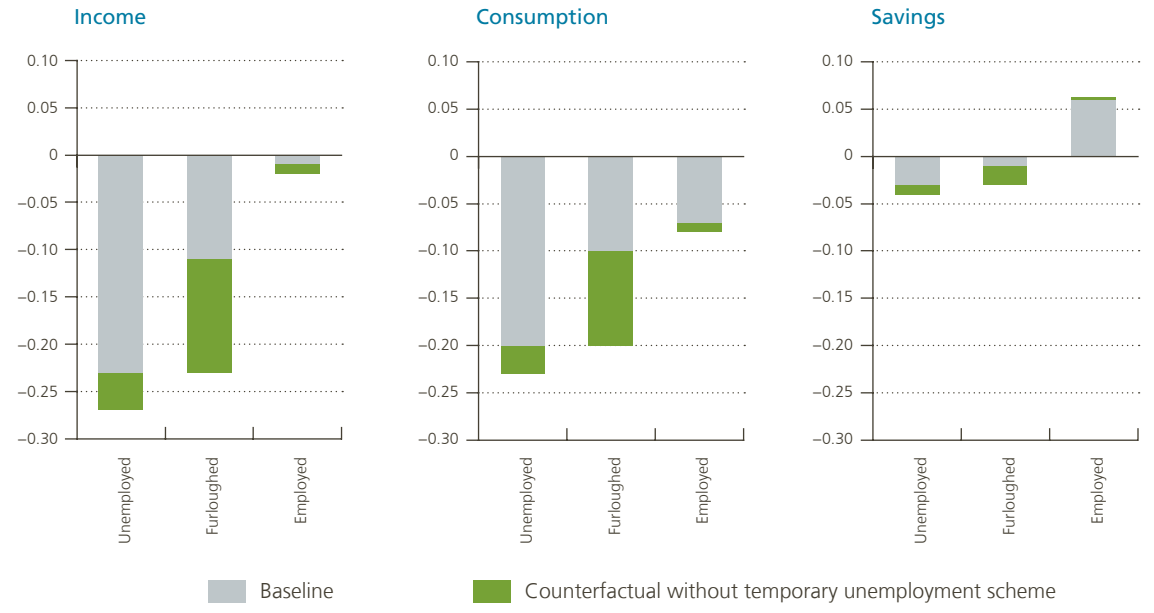
In the baseline scenario where the TUS is extended, household members losing their job right before the pandemic experience the largest fall in expected income. They fall under the standard unemployment scheme (with relatively less generous benefits) and see their employment opportunities reduced as they become less likely to find a new job during the pandemic. During the first year of the pandemic, they expect an income loss of about 23 % of their consumption level before falling into unemployment. Those who also have limited liquid wealth cut consumption by 20 %.

Furloughed workers also experience a large drop in expected income. This drop is nevertheless mitigated by two factors. First, furloughed workers benefit from higher temporary unemployment benefit. Second, they expect to quickly return to their previous job with a high probability as restrictions start being lifted. These two factors mitigate the expected income loss during the pandemic, which is twice as small as the loss incurred by households falling into unemployment. As a result, vulnerable furloughed workers cut consumption by about 10 % on average and marginally draw on their savings. Note that these numbers represent expected losses that potentially hide some variability within this group of households. Some sectors actually remained closed for longer than others, implying larger income, consumption and savings losses for some of the worst affected furloughed workers.

In contrast, workers unaffected by economic restrictions (who kept their jobs and were allowed to work full-time during the pandemic) experience a marginal drop in their expected income. This marginal drop is explained by a weakening of the economic outlook leading to a small increase in unemployment risks. Despite relatively stable incomes, these employed households also reduce consumption, leading to an rise in savings. The model predicts that the increase in savings is largely forced and explained by weaker demand and reduced consumption opportunities during the pandemic. However, for households with limited liquid wealth, precautionary savings also play a role.

Chart 6

The impact of the COVID shock and the TUS on vulnerable Belgian households



Source : authors' calculations.

Overall, the model predicts an heterogeneous effect of the COVID shock on households' income, consumption and savings according to their employment status and stock of savings. These results are in line with our empirical analysis based on survey data described earlier.

3.3 The benefits of temporary unemployment scheme as a crisis management tool

During the pandemic, Belgian authorities quickly extended the TUS. But what would have happened otherwise ? To answer this question, we turn to our counterfactual analysis where TUS are not extended. This is where a model-based approach is most valuable because we cannot observe the consequences of not activating any temporary unemployment scheme in Belgian data. In what follows, we simulate their effects with our model.

We find that TUS protected jobs, mitigated the immediate impact of the pandemic and supported the recovery. In the absence of TUS, our model predicts a larger and a more persistent decline in employment. These schemes thus directly benefited furloughed workers by protecting their jobs and indirectly benefited all households by mitigating the impact of the pandemic and supporting the recovery. Other studies based on different countries also find that JRS had a favourable impact in the short run as crisis-management tool (see, for example, IMF, 2022 ; Dengler and Gehrke, 2021 ; Martin and Okolo, 2022 ; Mohimont *et al.*, 2022). TUS protected households' income, consumption, and wealth.

Furloughed workers were the main beneficiaries of the TUS implemented in Belgium. When they are not implemented, furloughed workers face a greater risk of becoming unemployed. The higher unemployment risk and the absence of more generous temporary unemployment benefit lead to a much higher expected income loss for furloughed workers. This, in turn, causes a 20 % reduction in their consumption (compared to 10 % when TUS are activated) and a steeper fall in their stock of savings.

The TUS also had an indirect positive impact on unemployed and employed households' consumption, income and savings. These schemes mitigated the immediate impact of the pandemic and supported the recovery. Better economic prospects boosted all households' expected incomes through better employment prospects. In the early stage of the pandemic, the model predicts a big increase in unemployment in the absence of a TUS. A large population of unemployed households competing for a few jobs available would have led to a lower job-finding rate and prolonged unemployment spells for many households. Households with limited savings are particularly vulnerable to long unemployment spells as they do not have the buffers required to maintain consumption.

While JRS are effective crisis-mitigation tools in the short run, there is also a debate on their long-run effects on labour reallocation, productivity and employment (e.g. Cooper *et al.*, 2017 ; Andrews *et al.*, 2021 ; OECD, 2021). On the one hand, JRS implemented over a prolonged period (or permanently) can slow labour reallocation. They can have an adverse impact on labour productivity in the long run when they keep workers in less productive jobs. Workers covered by JRS but employed in potentially unviable jobs may also be encouraged not to search for better job opportunities. On the other hand, JRS can be combined with retraining policies to improve the employment prospects of workers. JRS can also protect jobs that are viable in the long run against temporary shocks. In economies where hiring/firing workers is costly, the option offered by JRS to reduce hours at low cost in times of temporary distress can encourage employment creation.

The pandemic accelerated structural change – such as the digital and green transitions – that had already started before the pandemic (see for example the literature review of Jollès and Meyermans, 2021). In this context, JRS should be designed so that they do not impair the reallocation of labour towards more productive jobs/sectors that support these changes. For these reasons, it has often been advised to design well-calibrated exit or recalibration strategies for the JRS introduced or extended during the pandemic.

Conclusion

This article focuses on the impact of the pandemic on Belgian households' income, consumption and wealth. We describe the impact of the pandemic on the Belgian household sector and use microeconomic survey data to describe its heterogeneous effect on different categories of households. Finally, we evaluate the effect of the extension of the temporary unemployment scheme and its distributional consequences through the lens of a macro model.

While the overall financial wealth of the Belgian household sector is high by international standards, some households went into the COVID crisis with very little savings. Survey data show that 15 % of households had a saving buffer that would not even cover one month of current expenses. These households were more vulnerable to shocks to their labour incomes.

At the aggregate level, the financial situation of Belgian households improved during the COVID crisis. A decline in consumption opportunities and an uncertain environment combined with policy support measures resulted in an increase in aggregate savings.

Yet this global picture hides heterogeneity at the household level : the pandemic had an uneven impact on households' income, consumption and wealth. Some sectors and occupations were more severely affected by economic restrictions imposed in response to the coronavirus. Households that were self-employed, unemployed, less educated or working in vulnerable sectors were more likely to experience a drop in income during the pandemic. Some of these households also had a limited savings buffer before the pandemic and were allocating a larger portion of their incomes to basic consumption goods. In contrast, households in more comfortable positions were more likely to reduce their consumption level during the pandemic, which resulted in an accumulation of financial assets.

Our macro model suggests that the temporary unemployment scheme protected jobs, alleviated the immediate impact of the pandemic and supported the recovery. Furloughed workers were the main beneficiaries of this scheme. Their income losses – although still relatively high – were mitigated by temporary unemployment benefits and lower unemployment risks. The TUS also had an indirect positive impact on all households. In the absence of a temporary unemployment scheme, the impact of the crisis and the increase in inequalities would have been more pronounced.

Lastly, at the aggregate level, it remains uncertain how households may use the savings accumulated during the pandemic. Will they continue to hold this buffer against future uncertainty or to pay down debt or to support higher future consumer expenditure or investment ? This will depend, among other things, on the distribution of these savings across households. From this perspective, and going forward, the current rapid acceleration in consumer price inflation poses new challenges for households, particularly those that had suffered income and wealth losses during the pandemic. For these groups, the sharp increase in the cost of living, fuelled by rising energy prices, represents a new shock which may put further strain on their finances and possibly on debt repayments.

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Conventional signs

€	euro
%	per cent
e.g.	*exempli gratia* (for example)
et al.	*et alia* (and others)
etc.	*et cetera*
i.e.	*id est* (that is)

List of abbreviations

Countries or regions

EA	Euro area

Abbreviations

COVID-19	Coronavirus disease-19
ETUC	European Trade Union Confederation
HFCS	Household Finance and Consumption Survey
IMF	International Monetary Fund
JRS	Job retention schemes
NACE	Statistical classification of economic activities in the European Community
NBB	National Bank of Belgium
STW	Short-time work
TUS	Temporary unemployment scheme

National Bank of Belgium
Limited liability company
RLP Brussels – Company number: 0203.201.340
Registered office: boulevard de Berlaimont 14
BE-1000 Brussels
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Publisher

Pierre Wunsch
Governor

National Bank of Belgium
Boulevard de Berlaimont 14 – BE-1000 Brussels

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© Illustrations: National Bank of Belgium

Cover and layout: NBB CM – Prepress & Image

Published in 2022