In 2020, the drop in consumption fuelled savings, with a particular increase in the financial wealth of the most well-off: some results obtained by analysing banking data

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Bank account data represent a useful source of advance information on household consumption and savings in 2020, on a micro-economic level and in infra-annual terms. By analysing anonymised data provided by Crédit Mutuel Alliance Fédérale, it is possible to study the ways in which the public health crisis altered the financial circumstances of households who hold accounts with this bank, taking into account their level of income, their age and their socio-professional category. This study thus constitutes an extension of recent work on the same subject using the same source materials.

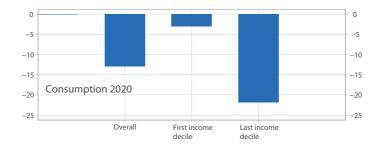
During the two periods of lockdown in 2020, all of the groups of households studied, regardless of their level of income, reduced their consumption, which became focused on essential items, particularly during the month of April. Those households whose consumption was highest before the crisis, primarily executives and high-income households, thus appear to have seen the greatest fall in their consumption. This drop in consumption led to an upturn in savings, boosting the value of households' current and savings accounts. The gross financial wealth of households (cash savings, securities accounts and life assurance savings, excluding loans) thus appears to have increased significantly

in 2020. This increase can be seen across all groups of households, irrespective of their level of financial wealth. In Euros, it was higher among those households with substantial financial wealth, who were able to save more by reducing their consumption. Low-wealth households also put money aside, particularly during the first lockdown. Nevertheless, the sums at stake for such households, generally in the order of tens or hundreds of Euros, remain low – despite their relative significance as a proportion of those households' initial wealth. Among working households, some were hit harder than others by the decline in earned income, and thus saw a smaller increase in their savings: this was particularly true of tradespeople and retailers, and also employees in the private sector, unlike those in the public sector.

The banking data used here do not allow us to determine household income directly, but they can nonetheless be used to deduce an approximate estimate, based on the total value of transfers and cheques paid into the accounts. These incoming flows fell during the first lockdown before bouncing back in June. On average, the second lockdown does not appear to have caused a reduction in incoming cash flows.

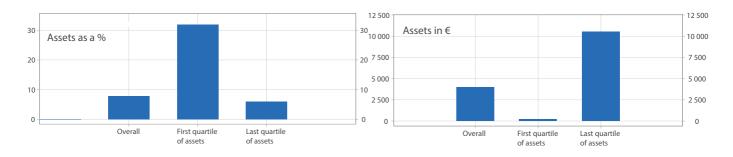
All of the analyses conducted for the purposes of this study were performed using strictly anonymised data, hosted on Crédit Mutuel's secure computer systems based in France. INSEE would like to thank Crédit Mutuel Alliance Fédérale for their help, and for allowing us to use these data. We would also like to thank the Economic Analysis Council for their invaluable comments. INSEE has also benefited from fruitful exchanges with BNP Paribas, who have provided material allowing us to corroborate, at a more aggregated level, the principal findings of this study.

► Variation in household consumption in the corrected sample in 2020



► Percentage variation of household wealth in the variation of household wealth in the corrected corrected sample in 2020





How to read it: Mean consumption in 2020 was 3% below pre-crisis levels for those households in the bottom income decile in 2019. Financial wealth increased by an average of 32% between December 2019 and December 2020 for households in the bottom 25% in terms of wealth, equivalent to around 218 Euros.

Note: the first bar graph corresponds to the average variation in percentage terms of the total value of consumption via card, cheque and cash withdrawals between 2019 and 2020, in relation to the average income of the household in 2019. The last two graphs represent the variation between December 2019 and December 2020 (in percentage and value terms) in the mean financial wealth of households, in relation to their level of financial wealth. The bottom 25% of households, and the largest fortunes, were not necessarily the same in December 2019 and December 2020; the mean value calculated for these two dates was thus not necessarily calculated for precisely the same group of households. Source: Crédit Mutuel Alliance Fédérale data, INSEE calculations

11 March 2021 11

The decline in consumption was twice as intense during the first lockdown as it was in the second; cash withdrawals and transfers fell more sharply than card payments

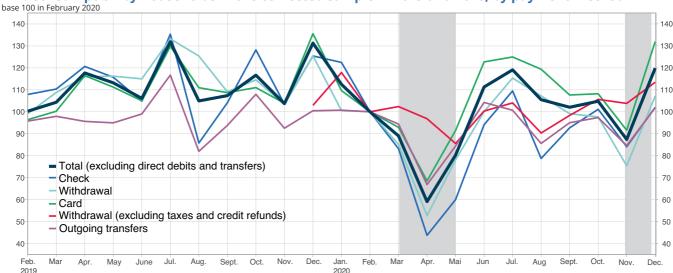
A very sharp fall in consumption during the first lockdown

The bank account data provided by Crédit Mutuel Alliance Fédérale¹ (> Box 'Sources and Methods') allow us, first and foremost, to study household expenditure during the Covid crisis. The variation in this expenditure reveals downturns corresponding to the two periods of lockdown in 2020, which have been analysed at length over the past year in INSEE's successive Economic *Outlook* reports. Of particular note is the fact that the decline in consumption by card and cheque in November was around half as severe as that witnessed in April (figure 1). The scale of the fall, measured using data from a sample of households holding accounts with Crédit Mutuel Alliance Fédérale, was broadly on a par with the estimates calculated by INSEE². Payments by cheque and cash withdrawals fell more sharply than card payments. Debits, meanwhile (excluding taxes and loan repayments), largely corresponding to pre-engaged expenditure (rent, telephone contracts etc.) remained stabler over this period. Transfers out of accounts, on the other hand, which include both consumption spending and transfers between households, fell more significantly. The data also reveal a strong rebound in consumption in summer 2020,

The data also reveal a strong rebound in consumption in summer 2020, particularly June and July. This rebound was driven by a sharp increase in payments with bank cards, at the expense of other payment methods. Thereafter, during the autumn, payments by card did drop off during the second lockdown, but much less substantially than during the first lockdown (see *Economic Outlook*, 2 December 2020).

- 1 This dataset has already been used by Fize, Landais and Lavest (CAE, 2021).
- 2 Household spending reconstructed in this manner is nonetheless different from final household consumption as recorded in the national accounts. It does not, for example, include imputed rents (rent fictitiously consumed by households who own their own homes), nor does it include spending on healthcare services which are reimbursed by social security, which are deducted from final household consumption.

▶ 1. Consumption by households in the corrected sample in 2019 and 2020, by payment method



How to read it: in July 2020, total consumption was 20% above the level seen in February 2020.

Note: the graph shows the variation in mean consumption in percentage terms, in relation to February 2020. The values are calculated by dividing the mean monthly consumption of households by the average level recorded in February 2020. The periods of lockdown are shaded in grey.

Source: Crédit Mutuel Alliance Fédérale data, INSEE calculations

Consumption and constraints: the downturn was more substantial for those households with high levels of consumption, such as executives and highearners During the first lockdown, consumption (card payments, cash withdrawals and cheques) fell for all of the households in our sample, irrespective of their level of income³ in 2019 (▶ figure 2 and ▶ Methodology box). Nonetheless, the drop-off was more substantial for those households with high incomes in 2019 than it was for lower-income households. In April, the consumption of the 10% of households with the highest incomes in 2019 was 55% below "normal" (the pre-crisis trend level),⁴ whereas it was around 40% below "normal" for households in the bottom 30% of the income scale.

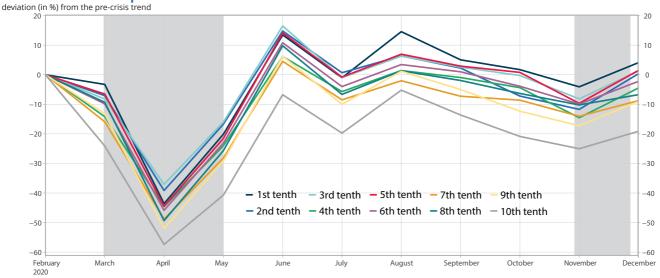
During the summer months, the rebound in consumption was more substantial for low-income households, and less substantial for high-income households. Indeed, for the month of June, the top 10% of households (in terms of income) were the only decile not to return to or exceed a level of consumption comparable to their "normal" spending.

For all households, whatever their income, the second lockdown had a much less severe effect on consumption. With the exception of the top-earning 10%, mean consumption in November hovered between 80 and 100% of its "normal" level. The top-earning 10% of households, meanwhile, reduced their consumption to 75% of their "pre-crisis trend" level.

The variation in the mean consumption of households with reference to the socio-professional category of their "reference person⁵ (► figure 3) corroborates the results obtained by looking at income levels. Those socio-professional categories with the highest incomes, such as executives, reduced their consumption more substantially than workers and employees.

- 3 Since income cannot be observed directly from the banking data used here, the sum total of incoming cheques and transfers is used as an approximation for the purposes of this study (transfers of more than 40,000 Euros were discounted. They represented 0.13% of all transfers observed, and most likely correspond to transfers between accounts rather than income streams). Transfers between accounts held by the same household were also excluded.
- 4 Level expected for April 2020, if the pre-crisis trend had continued(▶ méthodology box).
- 5 The reference person is defined here as the oldest member of the household.

▶ 2. Consumption by households in the corrected sample in 2020, by level of income in 2019, and by deviation from the pre-crisis trend



How to read it: for the bottom 10% of household incomes in 2019 (1st decile), mean consumption in April 2020 was 40% below the pre-crisis trend level (the level we would have expected to see in April 2020 if the pre-crisis trend had continued).

Note: the sample has been broken down into 10 equally-sized groups of households, based on their income in 2019. The curves represent the mean variation in consumption for each group. The periods of lockdown are shaded in grey.

Source: Crédit Mutuel Alliance Fédérale data, INSEE calculations

During the first lockdown, consumption was focused on basic necessities

Hospitality spending bounced back over the summer

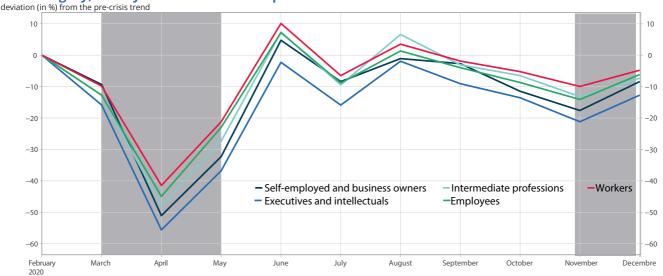
During the first lockdown, restrictions imposed to control the public health crisis transformed the structure of household consumption. The closure of "non-essential" shops forced households to modify their consumption habits. They thus reduced their expenditure in all areas except food shopping (▶ figure 4); spending on online purchases (e-commerce) also increased. Food shopping represents a smaller proportion of the total consumption of executives, and as such their consumption fell more sharply. However, spending on food shopping⁶ increased across all socio-professional categories, increasing their relative weight as a proportion of household consumption (+20 percentage points − pp − in April for workers, compared with February 2020, and as much as +31pp for executives and educated professionals).

Online shopping also saw an increase: the proportional weight of this spending in April increased by 1.5pp for workers and 5.1pp for executives and educated professionals. Predictably, spending in the hospitality sector fell sharply for all socio-professional categories, their proportional weight collapsing by –12pp for workers and –18pp for executives and educated professionals.

Over the summer, the hospitality sector enjoyed a clear rebound, with the reopening of restaurants and bars. In August, with the exception of executives and educated professionals, all other socio-professional categories spent more in this sector than they did in August 2019. Tradespeople and intermediate professionals increased their spending in the hospitality sector by 4% and 5% respectively, while workers and employees increased theirs by 6%. Executives and educated professionals did not see a similar increase, with their spending in bars and restaurants in August 2020 remaining stable at the level observed in August 2019.

- **6** By default, in this study "spending on food shopping" includes all expenditure in supermarkets, whether or not food was purchased.
- 7 These results confirm the analysis conducted at the aggregate level, based on the value of bank card transactions, of tourist spending in France by French residents during the summer of 2020 (Focus section of the *Economic Outlook* report dated 6 October 2020).
- 8 Comparison with August 2019 seems more pertinent, in light of the seasonality of such spending. Nevertheless, it is not possible to calculate in year-on-year terms for each month in 2020 since data are only available from July 2019 onwards. This is why Figure 4 refers to February 2020.

► 3. Consumption of working households in the corrected sample in 2020, by socio-professional category, and by deviation from the pre-crisis trend



How top read it: for households whose reference person falls into the category "workers," mean consumption in April 2020 was 40% below the pre-crisis trend level (the level we would have expected to see in April 2020 if the pre-crisis trend had continued).

Note: the periods of lockdown are shaded in grey.

Source: Crédit Mutuel Alliance Fédérale data, INSEE calculations

Online shopping boomed during the second lockdown

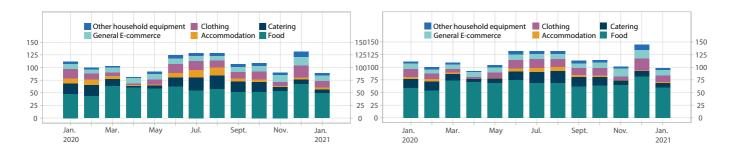
In November, during the second period of lockdown, all socio-professional categories substantially increased their spending on online shopping. In particular, executives and educated professionals spent 42% more in this manner than they did in November 2019, while workers spent 51% more. This increase most likely reflect the adaptation of household spending habits to the public health restrictions, with consumers increasingly turning to online alternatives. In the hospitality sector, the drop-off in spending was still dramatic, but slightly less so than in April: a –39% fall for workers and –63% for executives and educated professionals.

► 4. Structure of monthly consumption in 2020, by socio-professional category of working households in the corrected sample

Base 100 in February 2020 for each socio-professional category

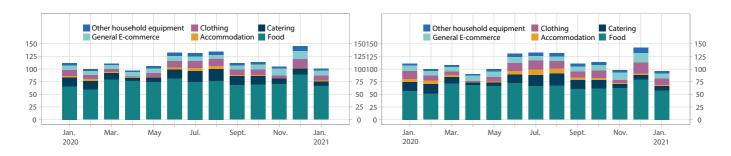
Executives and higher intellectual professions

Employees



Workers

Intermediate occupations



How to read it: for households whose reference person falls into the category "executives and educated professionals," total spending in April 2020, for the sectors represented here, was down 19% on February 2020 (not corrected for the pre-crisis trend, since a sector-by-sector breakdown is only possible from July 2019 onwards).

Note: self-employed workers and trade professionals are not included in this graph, because their numbers were not sufficient to allow for a breakdown of their consumption. Only spending with bank cards is taken into account here, and the sectors are borrowed from the Merchant Category Codes (MCC). The variation in consumption is more dynamic than that shown in Figures 2, 3 and 5, which also include cash withdrawals and cheques (moreover, in this graph, the pre-crisis trend is not taken into consideration due to a lack of MCC data for the whole of 2019). By default, food spending includes all sums spent in supermarkets, on food and other items.

Source: Crédit Mutuel Alliance Fédérale data, INSEE calculations

⁹ This point was also illustrated, at the aggregate level and again using bank card data, in the focus on household consumption contained in the Conjoncture report dated 2 December 2020.

The consumption of young households,¹⁰ defined as those for whom the reference person is aged between 18 and 25, has bounced back more robustly since June than the consumption of other age groups (▶ figure 5). Conversely, older households for whom the reference person is aged 60 or over, and who are thus more at risk of suffering severe health consequences from Covid-19, reduced their consumption more significantly during both lockdowns; furthermore, the upswing in their consumption over the summer was less substantial, due in part to reduced hospitality spending(▶ figure 6). These specificities might reflect a more cautious approach, and a desire to avoid potential infection risks for a category of consumers who have been hit particularly hard by the Covid-19 epidemic.

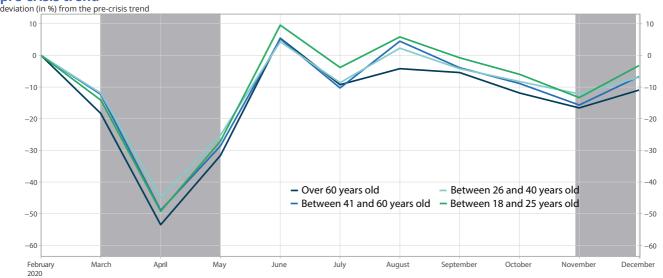
Income fell more substantially during the first lockdown than in the second

During the first lockdown, income broadly fell across all categories. Since household income cannot be observed directly from the banking data used here, the sum total of incoming cheques and transfers is used as an approximation (> Sources and Methods section). Transfers of more than 40,000 Euros were discounted, as they most likely correspond to transfers between accounts rather than income streams. Nevertheless, the income measured in this manner overestimates actual income because it includes transfers between households, and between accounts with different banks held by the same household. As such, the variations observed are probably more sensitive to the economic outlook than real income.

In April, median income fell by 10% compared to the pre-crisis trend (**figure 7**). The first income quartile (the level of income below which we find one quarter of the population) fell in April, but less substantially than the 3rd quartile. This decline in income compared with pre-crisis trend levels continued in May, despite the easing of lockdown restrictions in the middle of that month.

10 In the banking data, young people aged 18 and over are considered as a separate household, regardless of their actual place of residence and degree of financial independence.

► 5. Consumption by the households in the corrected sample in 2020, by age and by deviation from the pre-crisis trend



How to read it:in April 2020, consumption by households whose reference person was aged between 18 and 25 was 50% below the pre-crisis trend level. Note: the periods of lockdown are shaded in grey.

Source: Crédit Mutuel Alliance Fédérale data, INSEE calculations

After lockdown, income increased significantly in June, with a strong rebound across all income categories and a mean 7% increase for all households compared with the pre-crisis trend. The end of the year, in spite of the second lockdown, saw a relative return to normality, with income standing at around the level we would have expected to see if the pre-crisis trend had continued. The second lockdown, in November, does not appear to have engendered an overall fall in income, across all of the quartiles, although this broad stability may conceal less positive individual variations.

Financial wealth increased significantly in 2020, particularly for the largest fortunes

The fall in consumption during the two periods of lockdown led to an increase in the financial wealth of households in 2020. The public health restrictions, including the closure of "non-essential" shops during the two periods of lockdown, obliged households to reduce their consumption. Their savings thus increased as a result, since earned income saw a much less substantial decline (the savings ratio of households thus hit 21.3% of disposable household income in 2020 according to the national accounts, up from 14.9% in 2019).

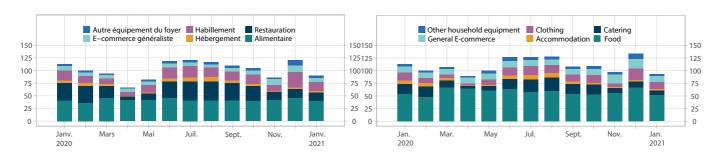
11 Generally speaking, variation in the mean household income of ours ample appears to have been smaller in 2020 than the variation in the gross disposable income of households as measured by the national accounts. This discrepancy may arise from the conceptual differences between the two notions (the gross disposable income of households includes the income of self-employed professionals, as well as the imputed rents that home-owning households pay to themselves), but we must also bear in mind the difficulty of reconstructing household data on the basis of the data used here (income was not directly observed, and the clients in the sample may have other accounts with other banks).

▶ 6. Structure of monthly consumption in 2020, by age group in the corrected sample

Base 100 in February 2020 for all age groups

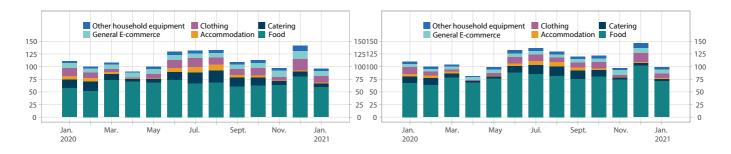
Under 25 years old

Between 26 and 40 years old



Between 41 et 60 years old

Over 60 years old



How to read it: for households whose reference person was aged between 18 and 25, total spending in April 2020, in the sectors represented here, was down by 34% on February 2020 (not corrected for the pre-crisis trend, since a sector-by-sector breakdown is only possible from July 2019 onwards).

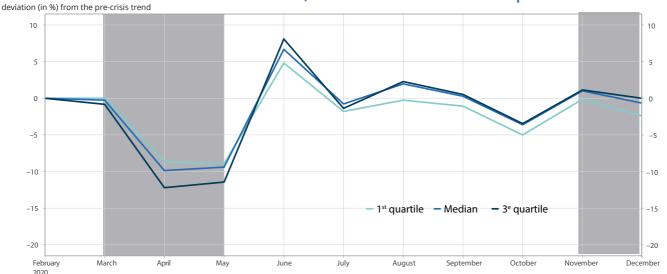
Note: Only spending with bank cards is taken into account here, and the sectors are borrowed from the Merchant Category Codes (MCC). The variation in consumption is more dynamic than that shown in Figures 2, 3 and 5, which also include cash withdrawals and cheques (moreover, in this graph, the pre-crisis trend is not taken into consideration due to a lack of MCC data for the whole of 2019). By default, food spending includes all sums spent in supermarkets, on food and other items. Online shopping not included, only in-person sales taken into account.

Source: Crédit Mutuel Alliance Fédérale data, INSEE calculations

First lockdown: a massive increase in cash savings but a temporary drop in the value of life insurance savings plans and securities accounts as a result of the market crash of March 2020

The decline in household consumption in our sample during the first lockdown, combined with the fact that their income was protected by the measures put in place (short-time working schemes, solidarity funds etc.), helped households to "put money away." The balances of current accounts thus grew by 10% between February and May, while the balance of savings accounts grew by 2.5% over the same period (▶ figure 8 and the ▶ Methodology section). Unlike these cash savings, financial savings, i.e. sums held in securities accounts and life assurance plans, temporarily fell in March before growing over the ensuing months. This temporary fall can be attributed to tumbling markets. Nonetheless, the market recovery of the subsequent months, and the glut of savings diverted into these financial instruments by households over the course of the year, enabled household financial savings to exceed their February levels by December.

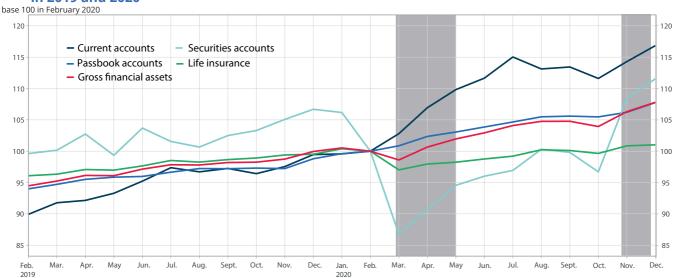
> 7. Distribution of household income in 2020, in terms of deviation from the pre-crisis trend



How to read it: in April 2020, the first income quartile was 8% below its "normal" level.

Note: The quartile and median values correspond to levels of income, to be interpreted as follows: one quarter of households earn less than the 1st quartile value, half of all households earn below the median, and three quarters are below the 3rd quartile *Source: Crédit Mutuel Alliance Fédérale data. INSEE calculations*

► 8. Variation of the gross financial wealth of households in the corrected sample and its components in 2019 and 2020



How to read it: in August 2020, gross financial wealth was 5% greater than in February 2020.

Note: The periods of lockdown are shaded in grey.

Source: Crédit Mutuel Alliance Fédérale data, INSEE calculations

Across the year as a whole, financial wealth increased substantially

An increase in all deciles of financial wealth in 2020

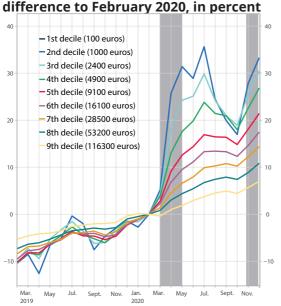
Ultimately, the gross financial wealth of the households in our sample, which includes both cash and financial savings, had returned to its February level by the end of April, following a slight dip in March, and went on to increase over subsequent months.

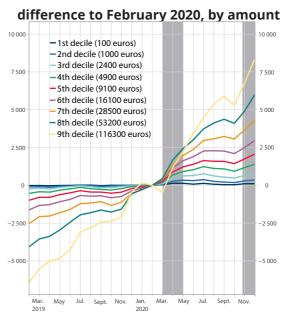
During the second lockdown, the less substantial decline in consumption meant that cash savings grew less significantly than they had done during the first lockdown. The balance of current accounts nonetheless grew by 5% between October and December. Since the second lockdown did not spark any discernible fall in the markets, gross financial wealth increased significantly between October and December.

Finally, across 2020 as a whole, households saved considerable sums and their financial wealth increased noticeably as a result. This 2020 increase served to accentuate the increase already observed in 2019. As such, the financial wealth of the households covered by this study grew by 8% between February 2020 and December 2020, having already grown by 6% between February 2019 and December 2019.

This increase in wealth was visible at all levels. Gross financial wealth increased in 2020 for virtually all of the wealth deciles, even more so than in 2019 (► figure 9a and b).

▶ 9. Deciles of gross financial wealth in 2019 and 2020





How to read it: Left-hand graph - in April 2020, the 1st decile of financial wealth was 25% higher than in February 2020. Right-hand graph - in June 2020, the 9st decile of financial wealth was 3700 Euros above the level recorded in February 2020.

Note: the curves correspond to the variations observed in the decile values. Deciles are income thresholds used to divide the population into 10 equal parts. 10% of households in the sample have financial wealth below the first decile value. This graph paints a different picture than Figures 2,3 and 5, which are concerned with consumption, because it tracks these financial wealth thresholds and not the mean variation in the wealth of groups of households in relation to 2019 (which may be affected by households transferring assets between bank accounts in 2020). The variation of the first decile in percentage terms is not shown here, because it was extremely high during the first lockdown and would thus overwhelm the other curves (since the 1st decile is so low, a slight value increase is equivalent to an enormous increase in percentage terms).

Source: Crédit Mutuel Alliance Fédérale data, INSEE calculations

Large financial fortunes substantially increased their savings in 2020

The least wealthy households saw a substantial relative increase in their financial wealth, which nonetheless corresponds to only a small increase in Euro terms

A temporary dip in the largest financial fortunes in March, in line with turbulence on the markets The largest financial fortunes saw the greatest increase in their wealth in value terms (▶ figure 9). Households with substantial financial wealth, who often also have sizeable incomes (Cazenave-Lacrouts, 2018), substantially reduced their consumption (see above) and thus saw a significant increase in their savings in 2020. This savings surplus nonetheless represents a small proportion of the savings accumulated over the course of their lifetime by these households, causing the 8th and 9th wealth deciles to rise by around 10% or even less.

At the other end of the scale, as a proportion of their previous financial wealth, it was those households with the lowest levels of financial assets that saw the greatest increase in 2020. The 1st decile, which corresponds to financial wealth of 900 Euros in the sample studied here, increased by just over 30% between February and May 2020, an increase of around 300 Euros. In absolute terms, the sums in play remain small compared to those saved by the wealthiest households, but they nonetheless represent a substantial proportion of the initial wealth of these households. With the end of lockdown restrictions, these smaller financial fortunes dissipated gradually as households spent the (modest) surplus accumulated in the first lockdown over the course of the summer.

Those households with the largest fortunes tend to have a more substantial proportion of their wealth invested in the form of financial savings. These households were more exposed to the temporary fall in market prices in March 2020 than those households whose wealth is primarily held in cash (> figure 10). Their wealth only increased subsequently, once the market rebound had compensated for their earlier losses.

▶ 10. Cash savings, financial savings (life assurance plans and securities accounts) and gross financial wealth of households in the corrected sample, by level of financial wealth



Total assets Liquid savings (current accounts and passbook accounts) Financial savings (life insurance and securities accounts) 0 Mar. May Jul. Sept. Nov. Jan. Mar. May Jul. Sept. Nov. 2019 200 2 000 100 1 000 -100 —1000 —1 000

Wealth between 1st and 3rd quartile



Higher wealth 3rd quartile (excluding top 5%)

Liquid savings (current accounts and passbook accounts) 5 000 5 000 Financial savings (life insurance and securities accounts) 0 0 -5 000 May Jul. Nov Mar. May Jul. Sept. Nov.

Higher wealth 95° centile



How to read it: in December 2020, households with an average level of financial wealth (those situated between the highest and lowest quartiles) increased their total gross financial wealth by 1270 Euros more than "normal," with financial savings growing by 20 Euros and cash savings by 1250 Euros.

Note: these curves represent the mean financial wealth of households situated between certain wealth threshold values. We may not necessarily find the same households in the same groups each month: by increasing or decreasing their savings, households may have switched from one group to another between 2019 and 2020.

Source: Crédit Mutuel Alliance Fédérale data, INSEE calculations

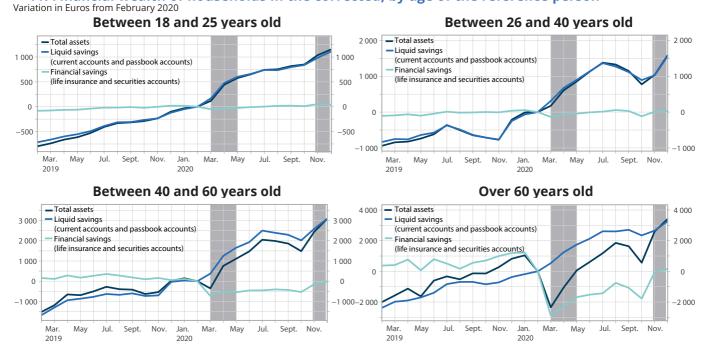
Financial wealth has increased more significantly for the over-40s

Financial wealth has grown less significantly for tradespeople, workers, young people and private-sector employees than it has for those employed in the public sector

Within the households studied here, the financial wealth of the youngest households, for whom the reference person is below the age of 40, increased less substantially (in Euros) than that of households in which the reference person is over 40 (▶ figure 11). Households whose reference person is aged between 40 and 60 tend to have higher incomes: as such, the drop-off in consumption in 2020 left them with more money to save. Furthermore, these households are more likely to be in stable employment, on permanent contracts, and were probably less exposed to loss of income as a result of the economic crisis. Meanwhile, Households whose reference person is over 60 tend to have a larger proportion of their savings in financial instruments, and were thus more affected by the market turbulence of March, before seeing their savings grow again in subsequent months.

Within the active population, certain categories were more exposed than others to the consequences of the economic crisis; their wealth grew less significantly as a result. This is true of tradespeople and retailers and, to a lesser extent, to private-sector employees who suffered a loss of income following the stoppage or slowdown of economic activity. (Heterogeneity in the variations in financial wealth between different socio-professional categories and sectors). The financial wealth of workers also increased less significantly than that of other categories. Workers, often employed on temporary contracts, may have been hit harder by the economic crisis.

▶ 11. Financial wealth of households in the corrected, by age of the reference person



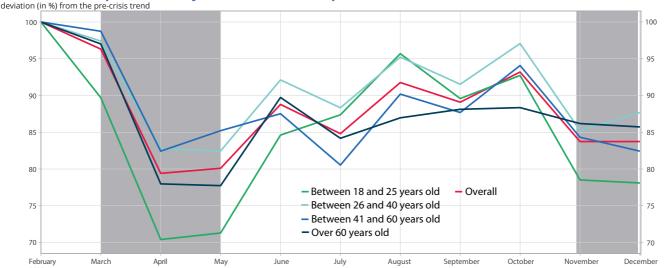
How to read it: in December 2020, households aged between 40 and 60 increased their total gross wealth by 1500 Euros more than "normal," with their financial savings (securities and life assurance policies) increasing by 50 Euros and their cash savings growing by 1450 Euros.

Source: Crédit Mutuel Alliance Fédérale data. INSEE calculations

A fall in the number of people using their overdraft during lockdown, then a gradual increase

The drop-off in consumption during the first lockdown had the effect of reducing the proportion of households with negative wealth (figure 12). This proportion then increased again, albeit without returning to its pre-crisis level. It grew more rapidly among the youngest households, those whose reference person is under 40; households in this category tend to have less financial wealth, and less stable income. These results may appear to contradict those emerging from the Epicov survey. The latter study found an increase in the number of households reporting a deterioration in their financial circumstances, particularly in the lower income brackets (Givord, Silhol, 2020). Nonetheless, the perception of a deterioration in financial circumstances does not necessarily mean that the financial wealth held in households' bank accounts has actually declined. If earned income falls and the economic outlook appears bleak, households may perceive their financial circumstances to be diminished even if their savings have not yet been affected. The periods of lockdown led to a significant decrease in consumption, which boosted savings. This increase in savings therefore does not reflect an improvement in the financial circumstances of households; it is, in fact, a result of constraints upon consumption. Furthermore, the sample used here only represents the customers of a single bank, and is therefore not a perfectly faithful representation of the diverse array of economic circumstances encountered among the population as a whole. •

► 12. Proportion of households in the corrected sample using overdraft facilities in 2020, by age of the reference person and by deviation from the pre-crisis trend



How to read it: in December 2020, compared to the pre-crisis trend, there were 15% fewer households using overdraft facilities, i.e. with a negative bank balance. Source: Crédit Mutuel Alliance Fédérale data, INSEE calculations

Box: Heterogeneity in the variations in financial wealth between different socio-professional categories and sectors

This table corresponds to a regression of the difference between the logarithms for the gross financial wealth of households in active employment between December 2019 and 2020, differentiated by socio-professional category, age and département of residence. The coefficients can be interpreted as the value of savings for a given category when age and département are equivalent, compared with intermediate professions in the public sector (the chosen benchmark group). As such, intermediate professions in the private sector saved 2.4% less than their public-sector counterparts between December 2019 and December 2020, for equivalent age and département. This regression allows us to make comparisons between a large number of professional categories, using fixed values for age and département of residence. •

► 13. Heterogeneity in the variations in financial wealth between different socio-professional categories and sectors

	Variation in savings between December 2019 and December 2020	
	Coefficient	Standard deviation
Professions		
Tradespeople	-0,035***	(0.01)
Shopkeepers and retailers	-0.036***	(0.01)
Business owners (10+ employees)	-0.068***	(0.012)
Educated professionals	-0.037***	(0.012)
Executives		
Private sector	-0.034***	(0.006)
Public sector	-0.024*	(0.01)
Intermediate professions		
Public sector	Référence	Référence
Private sector	-0.023***	(0.007)
Employees		
Private sector	-0.019***	(0.006)
Public sector	0	(0.007)
Workers		
Private sector	-0.026***	(0.007)
Public sector	-0.018*	(0.007)
Control for age	X	X
Control for département	X	X

How to read it: intermediate professionals in the private sector saved, on average, 2.4% less than intermediate professionals in the public sector between December 2019 and December 2020, for equivalent age and département of residence.

Source: Crédit Mutuel Alliance Fédérale data. INSEE calculations

Box: Sources and Method

This study is based upon the analysis of bank account data provided by Crédit Mutuel Alliance Fédérale. They correspond to a fixed sample of individuals over the period 2019-2020, allowing us to study how they fared during the public health crisis.

Our partners at Crédit Mutuel Alliance Fédérale were keen to highlight the following points:

As the first bank to adopt the status of "benefit corporation," Crédit Mutuel Alliance Fédérale's participation in this study is consistent with the missions we have set for ourselves:

- to contribute to the greater good, striving for a fairer and more sustainable society: for Crédit Mutuel Alliance Fédérale, contributing to the development of economic information is a means of contributing to democratic debate;
- to protect the digital privacy and confidentiality of all customers: Crédit Mutuel Alliance Fédérale is committed to ensuring the total protection of customer data. All of the analyses conducted for the purposes of this study used strictly anonymised data, and were performed using secure IT systems hosted in France by Crédit Mutuel.

Representativeness of the data

Our sample comprised customers for whom Crédit Mutuel Alliance Fédérale was the primary bank between December 2018 and June 2020, including geographical and age criteria. In this initial sample, under-25s were over-represented and over-65s under-represented in relation to the structure of the French population at large, as derived from the census. Similarly, the sampling process meant that certain départements were over-represented. We therefore re-weighted the sample in order to better represent the structure of the French population in terms of age and département of residence. Nevertheless, it is important to note that this sample, even after weighting, may not be representative of the French population. Pensioners are under-represented: they account for 27.2% of the population, but just 16.6% of Crédit Mutuel Alliance Fédérale customers. Students, on the other hand, are over-represented: 8.3% of the population and 12.2% of respondents in our data, after fitting. These discrepancies can be largely explained by the failure to systematically update the socio-professional details of bank customers. Customers' files are probably not updated immediately, due to a lack of available information, for example when students enter employment, or older customers take their retirement. As for marital status, the data are fairly close to the averages observed for the population as a whole. In January 2019, in the sample provided by Crédit Mutuel Alliance Fédérale, 4.4% customers were in civil partnerships, compared with 4.5% in the census figures. The proportion of single people was 27.8% and 27% respectively.

For the purposes of this study, it is useful to make sure that the developments observed in bank accounts held with Crédit Mutuel Alliance Fédérale are similar to those observed across all bank accounts by the Banque de France over this same period (**figure 14**). The trajectories are indeed closely-matched; the observations of this study based on the households in our sample should, broadly speaking, be applicable to all of the households which make up the French population. Similarly, the principal results of this study have been corroborated by analyses looking at a different bank (BNP Paribas).

.../...

Variation in consumption and savings by age and socio-professional category

Variations in consumption and savings are calculated on the basis of the Crédit Mutuel Alliance Fédérale definition of a household-group. A household-group comprises a customer of the bank plus his/her spouse and any children under the age of 18. Children with bank accounts who turn 18 are thereafter considered to constitute a new household-group. Age and socio-professional category are determined for the reference person for each household (the oldest member).

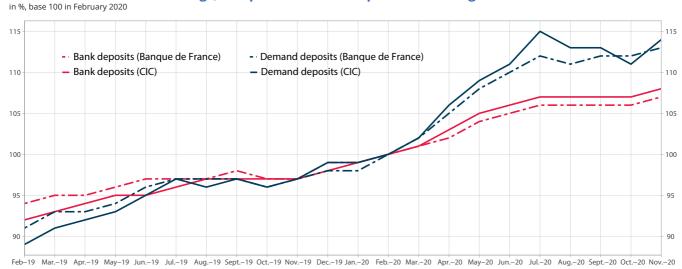
Measuring consumption, savings and income

Household consumption includes cash withdrawals, card payments and payments by cheque. For those customers in our sample who also hold accounts with banks other than Crédit Mutuel Alliance Fédérale, these consumption data only reflect their spending using the payment facilities provided by Crédit Mutuel Alliance Fédérale. Standing orders and outgoing transfers are not counted as consumption, but their variation is tracked in **figure 1**. Outgoing transfers may indeed constitute consumption spending, but they may just as well correspond to transfers between households, or even transfers between different bank accounts held by the same household. Standing orders (excluding taxes and loan repayments) do constitute consumption, but they are excluded from most analyses because data is only available from the latter half of 2019 onwards. This category includes "pre-engaged expenditure," and is therefore less affected by the health crisis in the short term.

The gross financial wealth analysed in this study includes all assets held with Crédit Mutuel Alliance Fédérale by the customers in the sample. This includes cash savings (current accounts and savings accounts) as well as financial savings (life assurance policies and securities accounts). They do not necessarily represent all of the financial assets of these customers, as they may also have investments in other financial institutions. This is particularly true of those households with the highest levels of financial wealth. Although our data do not allow us to estimate the sums held by the wealthiest individuals, they do give an accurate representation of general variations in the financial wealth of a majority of households.

Since income cannot be directly observed from the banking data used here, the sum total of incoming cheques and transfers is used to estimate approximate income for the purposes of this study. Transfers of more than 40,000 Euros were discounted. They represented 0.13% of all transfers observed, and most likely correspond to transfers between accounts rather than income. Transfers between accounts held by the same household with Crédit Mutuel Alliance Fédérale were also excluded. The income thus measured likely over-estimates real income (figure 15), since

▶ 14. Variation in bank savings, comparison with Banque de France figures



How to read it: In April 2020, the bank deposits held by French population as a whole were 3% greater than they had been in February 2020. For customers of Crédit Mutuel Alliance Fédérale, the increase was 4%.

Source: Crédit Mutuel Alliance Fédérale data, savings books of resident households and NPISHs (Banque de France series), INSEE calculations

it includes transfers between households and transfers between banks within households; the broader variations detected may be affected by this imbalance. An alternative approach to measuring income would have been to deduce it from consumption spending and the variation in financial wealth. This would not, however, have resolved the problem of transfers between households. Furthermore, this approach would have been sensitive to fluctuations in the value of financial savings.

Deviation from the pre-crisis trend

In order to measure the impact of the public health crisis on variations in consumption, it is informative to compare the month-by-month situation in 2020 with the forecasts for what would have happened without the pandemic. The hypothesis retained here is that, without the crisis, consumption in March 2020 would have been equivalent to consumption in March 2019 plus the year-on-year increase in consumption, measured between February 2019 and February 2020, i.e. before the first lockdown. In formal terms, the following formula is applied:

$$Some \ results \ obtained \ by \ analysing \ banking \ data = \frac{Consumption_{March2020}}{Consumption_{March2019}} (\frac{Consumption_{February2020}}{Consumption_{February2019}})$$

A value greater than 0 indicates consumption above the level predicted by the pre-crisis trend, a value below 0 indicates the opposite. •

▶ 15. Distribution of the disposable income of households in relation to transfers, in the bank account data and according to the Fiscal and Social Income survey

	Crédit Mutuel Alliance Fédérale (2019)	Fiscal and social inco- me survey (2017)
1st décile	11 897	13 800
2º décile	18 212	17 850
3º décile	22 968	21 600
4 ^e décile	28 008	25 740
5º décile (médiane)	34 142	30 540
6º décile	41 972	35 850
7º décile	51 692	42 020
8º décile	64 637	50 090
9º décile	88 615	63 870

How to read it: In 2017, 10% of households had available income of less than 13,800 Euros (1st decile), according to the Fiscal and Social Income Survey, while 10% of households in our sample had annual income of less than 11,897 Euros based on the payments they received (excluding transfers of more than 40,000 Euros).

Note: fields and measurements vary between the two sources. Income corresponds to available income after tax in the Fiscal and Social Income Survey, whereas for our purposes it corresponds to the sum total of incoming transfers and cheques (excluding transfers of more than 40,000 Euros) for Crédit Mutuel Alliance Fédérale).

Source: INSEE-DGFIP-Cnaf-Cnar-CCMSA, Fiscal and social income survey 2017. Crédit Mutuel Alliance Fédérale data, INSEE calculations

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