# ANALYTICAL ARTICLES Economic Bulletin

2020

BANCO DE **ESPAÑA**Eurosistema

EURO AREA HOUSEHOLD INCOME AND SAVING
DURING THE FIRST WAVE OF THE PANDEMIC

Ana del Río and José Antonio Cuenca

## **ABSTRACT**

This article assesses the immediate impact the first wave of the pandemic had on euro area household income, consumption and saving, both at the aggregate level and for the main economies in the area. Drawing on the institutional sector accounts, with information to Q2, there was a contained decline in household income, despite the worsening labour market, thanks to the speed and extensive scope of the economic policy measures approved. However, the collapse in consumption during the lockdown meant that saving rebounded in an extraordinary fashion. The outbreak of the second wave and uncertainty over the scale of the economic impact will contribute, for some time longer, to saving remaining relatively high and to the accumulated reservoir of private saving not fully materialising in the form of greater expenditure.

Keywords: households, income, consumption, saving, pandemic.

JEL classification: E21, E22.

## EURO AREA HOUSEHOLD INCOME AND SAVING DURING THE FIRST WAVE OF THE PANDEMIC

The authors of this article are Ana del Río and José Antonio Cuenca of the Directorate General Economics, Statistics and Research.

## Introduction

The first wave of the pandemic and the containment measures applied were a major upset for the world economy, and likewise impacted the euro area. The economic contraction was deep-seated and major uncertainty was prevalent. GDP fell by 15% in the euro area in the first half of 2020, tripling the decline witnessed in the two worst quarters of the financial crisis. The effects on the labour market were also very negative, but the public support measures helped save jobs and protect household income. In any event, the restrictions imposed on activity, and individual restraint to protect health against a background of great uncertainty, constrained spending on the usual consumer goods and services, and private saving rose exceptionally.

Against this backdrop, this article reviews the household financial situation during the first wave of the pandemic, drawing on sectoral accounts and paying particular attention to household income, consumption and saving developments in the euro area as a whole and in the main economies.

## Household income in 2020 Q2

In 2020 Q2, household income was sustained by the exceptional and most swiftly deployed public support measures.<sup>2</sup> As Chart 1 shows, the high positive contribution of social benefits<sup>3</sup> to household income is unprecedented. Social benefits – net of contributions – accounted for 7.5% of household gross disposable income (GDI) in Q2, tripling their average weight in previous years. In any event, household GDI fell by around 3% year-on-year in 2020 Q2 in real terms. This figure is double that of the worst quarter of the financial crisis and is close to that accompanying the adverse developments at the end of the sovereign debt crisis.

Employee compensation, the main component of household income, shrank by almost 8% year-on-year in Q2. This is a historical decline that reflected the intensity

<sup>1</sup> See Gómez and Montero (2020).

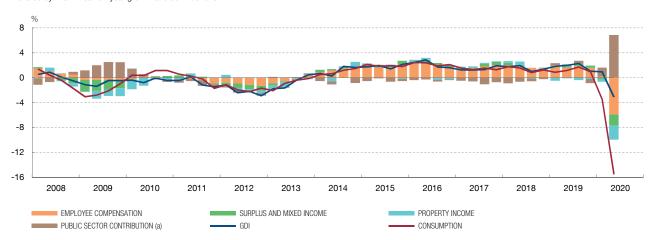
<sup>2</sup> See Cuadro-Sáez et al. (2020).

<sup>3</sup> They are depicted in terms net of social contributions and taxes.

#### **EURO AREA HOUSEHOLD INCOME AND CONSUMPTION**

The public support measures sustained euro area household income during the first wave of the health crisis.

EURO AREA HOUSEHOLD GDI AND CONSUMPTION Deflated by HICP. Year-on-vear growth and contributions



## SOURCE: Eurostat.

a Net balance of current transfers, i.e. social benefits (and other transfers) net of taxes (personal income or wealth tax) and social contributions. Excludes social transfers in kind, such as health care and education.



of the impact of the crisis on the labour market, where there was a 16% year-on-year fall in hours worked. Income from households' business activity also fell sharply. Hence, the gross operating surplus<sup>4</sup>, which includes the mixed income of the selfemployed, shrank by more than 7% year-on-year in real terms, on a similar scale to that seen in 2009. Property net income - a component whose weight in GDI is around 10% and which includes net interest and dividends – fell by more than 15% in relation to a year earlier, to a greater extent than in the previous crisis.

The different seriousness of the crisis in Q2 and its effect on the labour market were seen in the uneven impact on household income in the main euro area economies (see Chart 2.1). While in Germany<sup>5</sup> real household income declined by around 1% year-onyear, in Spain and Italy the related contraction was more severe (8% and 7%, respectively).

## The collapse in consumption during the lockdown

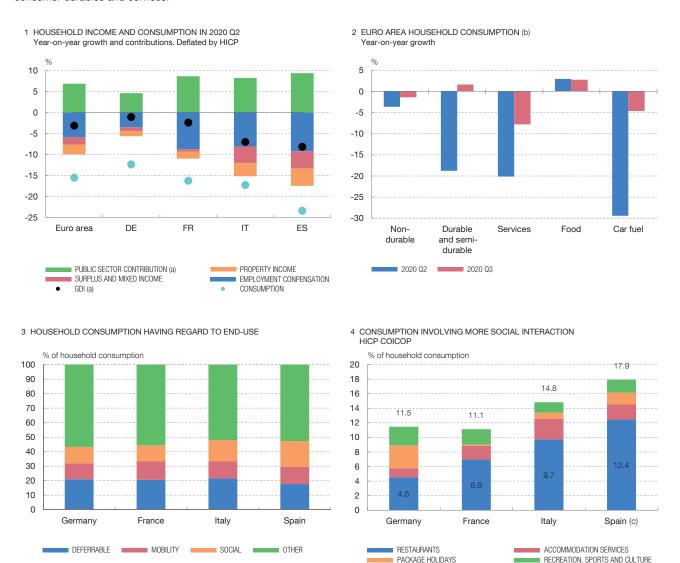
From mid-March, lockdown measures and the temporary shutdown of economic activities to combat the spread of the virus became the norm. These measures were

<sup>4</sup> Includes income attributed to owner-occupied dwellings.

In terms of hours worked, for example, the contraction in Germany was close to 10% year-on-year in Q2, while in France, Italy and Spain it was more than double that.

#### **EURO AREA HOUSEHOLD CONSUMPTION**

The lockdown measures and the temporary shutdown of non-essential activities to combat the spread of the virus, together with individuals' voluntary social distancing to protect their health, prompted a historical decline in consumption. The declines were particularly steep in consumer durables and services.



## SOURCES: Eurostat and ECB.

- a GDI is adjusted for the change in pension entitlements.
- **b** Sum of the countries with available data.
- c In Spain's case, if the CPI consumption basket (which excludes non-residents' expenditure in Spanish territory) is used, social spending accounts for around 15% of total household consumption.



extended for around three months, practically throughout Q2. The restrictions imposed, and individuals' restraint to protect their health amid great uncertainty, curtailed spending on usual goods and services consumption. As a result, household consumption collapsed. Specifically, there was a 15% year-on-year decline in Q2 in the euro area, five times greater than that in 2009 Q1. As Chart 2.1 illustrates, the contraction was sharp in all countries, although more contained in Germany (around 12%) and especially severe in Spain (over 23%).

The restrictions and lockdowns also entailed a change in the composition of household spending. The lockdown led to an increase in the demand for food and for communications-related goods and services. Conversely, current spending on fuel fell (by around 30%) owing to less mobility. The consumption of durable and semi-durable goods and of services declined substantially (by around 20% year-on-year in Q2 -- see Chart 2.2). Unlike services, purchases of durable and semi-durable goods can be deferred, whereby a pent-up demand effect could come about, the post-crisis materialisation of which would provide a greater boost to the recovery.

Table 1 shows the weight of the different expenditure items of euro area households' habitual consumption basket. The three-digit COICOP classification<sup>6</sup> is used, approximately grouping the different items in four categories having regard to their end-use and to their behaviour during the pandemic: deferrable, social, mobility and "other", which includes essential spending and other current expenditure.

The spending component dubbed "deferrable" accounted for around 20% of precrisis household consumption. This item includes durable goods such as vehicles (whose weight in consumption was 4%) and furniture and household equipment (also with a weight of 4%), and semi-durables goods such as clothing and footwear (which accounted for 6% of total consumption). Mobility-related spending accounted for 10% of household consumption, under which fuel represented somewhat more than one-third. But unquestionably, the most permanently impaired spending component as a result of the pandemic was that of services which involve greater social interaction. This aggregate, which encompasses recreation, sport and cultural services, restaurants, accommodation services and package holidays, accounted pre-crisis for more than 13% of euro area household consumption, albeit with differences from one country to another (see Chart 2.3). As Chart 2.47 shows, this spending accounted for around 11% of household consumption in Germany and France pre-crisis, and was higher in Italy (around 15%) and Spain (close to 18%). Within this category the weightiest component was that of restaurants, particularly in Spain, with over 12% of final consumption, compared with 4% in Germany.

## The extraordinary increase in the saving rate

The decline in consumption in the first semester of the year was set off by an extraordinary increase in private saving. The saving rate rebounded forcefully,

<sup>6</sup> The COICOP (Classification of Individual Consumption by Purpose) has been developed by the United Nations Statistical Division.

<sup>7</sup> It uses the consumption basket employed for harmonised consumer price indices (HCPIs); therefore, it includes non-resident spending in national territory.

Table 1 COMPOSITION OF EURO AREA HOUSEHOLD CONSUMPTION IN TERMS OF END-USE. CLASSIFICATION USED FOR THE HICP

Categories		HICP COICOP classes	Weights (%
Deferrable			20.6
	3	Clothing and footwear	6.0
	5.1 a 5.5	Furnishings and household equipment (except maintenance)	4.5
	7.1	Purchase of vehicles	4.1
	9.1 a 9.5	Recreation and culture-related goods	5.0
	12.3	Personal effects (a)	0.9
Mobility			11.3
	7.2	Goods and services for vehicles (b)	8.6
	Of which	7.2.2 Fuels and lubricants	4.3
	7.3	Transport services	2.7
Social			13.7
	9.4	Recreational and cultural services	2.4
	9.6	Package holidays	1.4
	11	Restaurants and hotels	10.0
	Of which	11.1 Restaurants, cafés and the like	8.0
		11.2 Accommodation services	2.0
ssential exp	54.4		
	1	Food and non-alcoholic beverages	15.0
	2	Alcoholic beverages and tobacco	4.0
	4	Housing, water, electricity, gas and other fuels	16.5
	Of which	4.1 Rental of habitual dwelling	6.5
	5.6	Goods and services for routine household maintenance	1.7
	6	Health	4.7
	8	Communication	3.0
	10	Education	1.0
	12	Miscellaneous goods and services (except 12.3 Personal effects)	8.5
	Of which		2.9
		12.4 Social protection	1.6
		12.5 to 12.7 Insurance, financial services and other services (c)	3.9

## SOURCE: Eurostat.

standing at over 16% of GDI by mid-year, in cumulative four-quarter terms. Households saved almost 25% of their GDI in Q2, compared with 17% in Q1, with both these figures far above that of 13% at end-2019. This increase was across the board, and somewhat sharper in Spain and France (see Chart 3.1). The extraordinary reservoir of saving, calculated as the difference over the average for the first halfyear of the last five years, exceeded €300 billion in the euro area, accounting for around 3% of GDP.

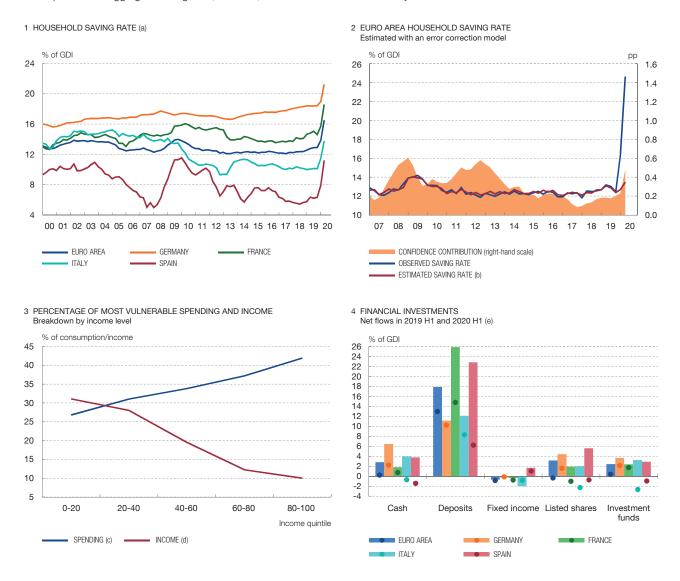
a For example, jewellery, travel accessories, baby care goods, etc.

b Includes spending on fuel, purchases of spare parts, maintenance and repair services and other services (vehicle and garage rentals, expenditure on parking and on roadworthiness tests, driving lessons).

c Includes insurance (for housing, health, transport and other), financial services and other services (e.g. administrative fees, legal services and accountancy, funeral services).

## THE INCREASE IN HOUSEHOLD SAVING DURING THE FIRST WAVE OF THE PANDEMIC

The restrictions on consumption were offset by the generation of a reservoir of forced private saving, accumulated essentially in the form of bank deposits. The aggregate saving data, however, mask an uneven distribution by level of income.



## SOURCES: Eurostat and ECB.

- a Four-quarter moving average; GDI is adjusted for the change in pension entitlements.
- **b** Error correction model presented in Table 2.
- c The spending items considered are clothing and footwear, house furnishings and maintenance, transport, recreation and culture, and hotels, cafés and restaurants. The data correspond to the 2015 Household Budget Survey.
- d Employee income from the sectors accommodation services and restaurants, artistic and recreational activities, other personal services and the distributive trade. Data from the 2017 Living Conditions Survey (EU-SILC 2018).
- e The bar represents 2020, and the circle, 2019.



It is not possible to explain this increase in saving on the basis of developments in the usual determinants of consumption: income, wealth, interest rates and consumer confidence. Assuming these relationships to be unchanged, the forecasting error for saving in the first half of the year would be indicative of the significance of forced saving associated with the restrictions on mobility, both involuntary (owing to the

Table 2
EURO AREA HOUSEHOLD CONSUMPTION. ERROR CORRECTION MODEL (a)
Quarterly data: 1999-2019

	Long-term relationship						
Variables		Income	Net wealth	Interest rate			
Coefficient		0.74	0.11	-0.21			
	Short-term relationship						
Variables (lag)	ECM	Income (0)	Wealth (0)	Confidence (0)	Consumption (-3)		
Coefficient	-0.34	0.33	0.06	0.003	0.26		
(Standard deviation)	(0.064)	(0.061)	(0.035)	(0.0001)	(0.077)		
T-ratio	-5.36	5.50	1.74	4.27	3.37		
No. of observations			83				
$R^2$			0.697				

SOURCE: Own calculations.

a The variables are deflated by the HICP and in logarithmic terms, except consumer confidence.

measures applied by governments) and voluntary (self-imposed by citizens to protect their health). Chart 3.2 shows the course of the saving rate derived from the estimation of an error correction model for household consumption<sup>8</sup> (see Table 2). As can be seen, and in line with other available evidence<sup>9</sup>, it is not possible to explain the strong increase in saving on the basis of its historical relationship to the habitual determinants; accordingly, the nature of the extraordinary rise in saving is estimated to have been eminently forced.

In any event, the aggregate course of income and consumption masks enormous heterogeneity at the individual level and, in particular, in terms of the household income level. Thus, the distribution of the reservoir of extraordinary saving is not uniform in terms of income level, a fact that is hidden with the use of aggregate data. As Chart 3.3 illustrates, forced saving would be concentrated in higher incomes, owing mainly to the fact that it is these incomes which have a percentage of wage income less exposed to the economic sectors most vulnerable to the health crisis. Moreover, the non-essential spending most cut during the crisis, that directed at services involving social interaction, also has a somewhat greater weight in the consumption of higher-income households.

## Household financial investment

The reservoir of saving generated during the lockdown materialised essentially in an across-the-board increase in bank deposits in the euro area countries (see Chart 3.4).

<sup>8</sup> For a review of alternative consumption equations for the euro area, see De Bondt et al. (2019).

<sup>9</sup> Dossche and Zlatanos (2020).

The net flow of deposits amounted to 18% of GDI in the first half of the year (equivalent to around €325 billion), far above the related figure of 13% in the same period a year earlier. The increase in deposits was more pronounced in Spain and France, while cash holdings also increased notably in Germany.

In addition, net investment in listed shares totalled 3% of GDI in the first half of the year (equivalent to some €57 billion) and flows were relatively higher in Spain and Germany, above 5% and 4% of GDI, respectively. In the case of investment fund units, households increased their holdings with a net flow that amounted to 2.4% of GDI in the euro area (around €44 billion).

The increase in the saving of households contributed to sustaining their wealth, against the background of the downward adjustment in riskier financial asset prices. In any event, the value of household financial wealth increased slightly, by 1% relative to end-2019. The equities and investment fund units portfolio declined owing to a price effect, although the weight of these instruments is low, at around 4% and 9% of total euro area household financial assets.

The increase in wealth was somewhat greater if real estate assets are taken into account, given the scant initial impact of the crisis on house prices. Specifically, euro area house prices held on a rising trend in the first half of the year, standing at 3% above their end-2019 value, with increases of 3.5% in Germany, 4% in France and Italy, and slightly over 1% in Spain.

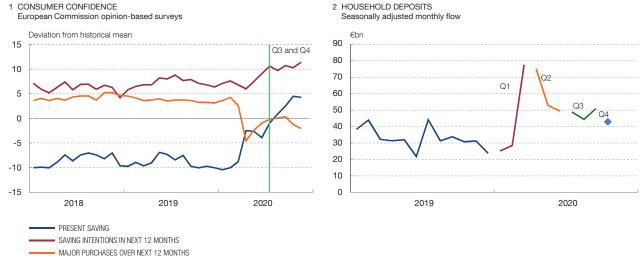
## Saving in the second half of the year

The easing of the pandemic-control measures was gradual and partial, as a fresh outbreak during the summer in some countries prevented a return to the previous situation. The household consumption data pointed to some materialisation of the pent-up consumer demand during the lockdown. Specifically, in Q3, durable and semi-durable consumption grew by 1.6% year-on-year (see Chart 2.2). However, the improvement in spending on services was partial, holding far below its pre-crisis values, with a decline of close to 8% compared with the same quarter a year earlier. Further, the incomplete recovery in mobility and the greater resort to working from home meant that spending on fuel held below its pre-crisis levels. Conversely, the demand for food remained relatively robust.

The spread of the second wave of the pandemic in Europe since October and the new restrictions introduced, more focused on inter-territorial mobility and on the activities entailing more social interaction, will continue to restrict consumption outside the home and will mean that saving will remain high because of both involuntary reasons and of agents' prudence in the face of the spread of the virus. Moreover, the uncertainty over the duration and economic consequences of the

## **SAVING IN THE SECOND HALF OF 2020**

Saving is projected to remain relatively high in the second half of the year, as suggested by the consumer confidence indicators and bank deposit flows.



SOURCES: European Commission and ECB.



crisis will encourage precautionary saving, helping enable the reservoir of forced saving to remain in place as a financial cushion. The conjunctural information is along these lines. The data on confidence (to November) and on bank deposits (to October) indicate the continuation of a higher private saving rate than before the crisis (see Chart 4.1 and 4.2). Further, the European Commission's opinion-based survey shows an incomplete recovery in households' major-purchase intentions in Q3 and a minor reduction in October and November.

21.12.2020.

## REFERENCES

- Cuadro-Sáez, L, F. S. López-Vicente, S. Párraga Rodríguez and F. Viani (2020). Fiscal policy measures in response to the health crisis in the main euro area economies, the United States and the United Kingdom, Occasional Papers, no. 2019, Banco de España.
- De Bondt, G., A. Gieseck, P. Herrero, Z. Zekaite (2019). *Disaggregate income and wealth effects in the largest euro area countries,* Working Paper No. 2343, European Central Bank.
- Dossche M., and S. Zlatanos (2020). "COVID-19 and the increase in household savings: precautionary or forced?", Box 5, ECB *Economic Bulletin*, 6/2020, European Central Bank.
- Gómez A. L., and J. M. Montero (2020). "Impact of lockdown on the euro area labour market in 2020 H1", Analytical Articles, *Economic Bulletin*, 4/2020, Banco de España.