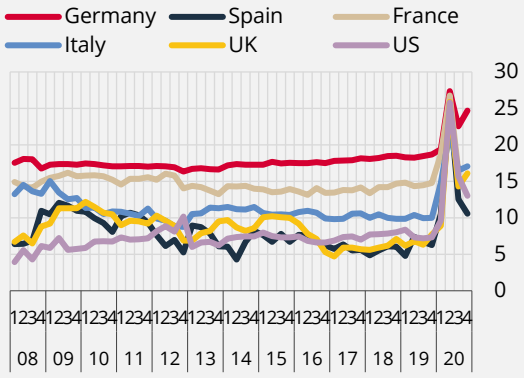
Box 2.4

Private Savings and Their Effects on Consumption Demand during the Pandemic

In 2020, household savings increased significantly in developed countries due to the pandemic (Charts 1 and Charts 2). Over this period, the decline in social mobility, changes in consumption patterns, the direct support of governments to households, and debt payment deferrals caused savings exceed their usual levels, which is evident in some income groups.[1] These excess savings are considered as a factor that supports consumption demand. While the excess savings in this period are not expected to be completely resolved, they will affect growth rates positively in these countries even if only some of them flow into consumption. However, policy authorities have expressed uncertainties about the extent to which excess savings will turn into consumption.[2]

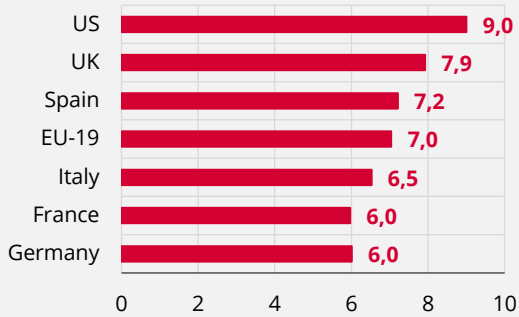
Chart 1: Household Savings (Share of Disposable Income, %)*



Sources: Bureau of Economic Analysis, Eurostat, Office for National Statistics.

* 2020Q3 for France.

Chart 2: Household Savings (Deviation from 2008-2019 Average, Share of Disposable Income, %)*



Sources: Bureau of Economic Analysis, Eurostat, Office for National Statistics.

* 2020Q3 for France.

Turkish private savings data for 2020 have not yet been published. In this box, private saving rates for Turkey, including those in 2020, are calculated using the savings-investment balance at the macro level. According to this equivalance, the difference between total domestic savings and total investments in an economy is equal to the current account balance. Based on this, private savings can be expressed as follows:

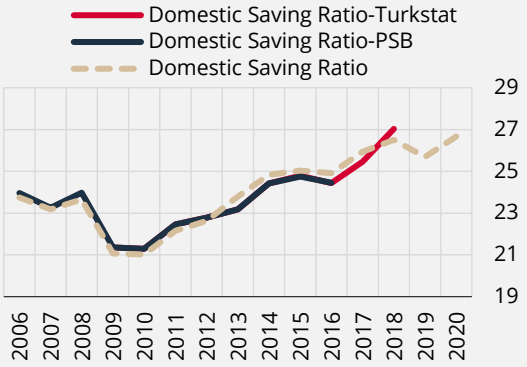
Private Savings= Current Account Balance + Total Investment and Change in Stocks – Public Savings

[1] Distribution of excess savings by household income is also important. It is observed across the countries that households with high income and fixed earnings mainly make the excess savings. The lower propensity to consume of high-income households than low-income households is a factor restricting the conversion of excess savings into consumption.

[2] In its recent public statements, the Bank of Canada assumed that 15 percent of household excess savings will be spent on consumption. In the Monetary Policy Report of February 2021, the Bank of England stated that the survey results show the ratio of households that will spend their excess savings was 13 percent; however, in the basic scenario of the bank's estimates, they assume that households will spend 5 percent of their excess savings.

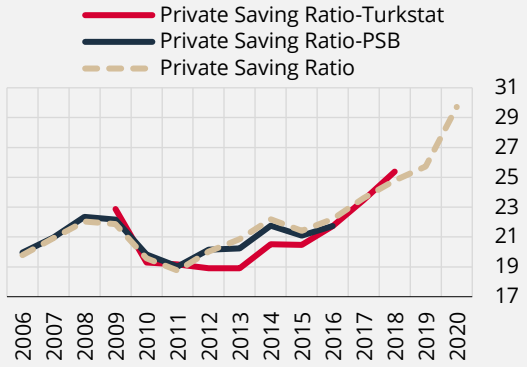
In this context, computed private savings are presented in comparison with the data published by other relevant institutions in the past (Charts 3 and Charts 4).[3] Current estimates suggest domestic savings in Turkey as a percentage of GDP increased in 2020, and this increase originated from the significant rise in private savings. On the other hand, public sector savings declined in 2020 due to developments related to the pandemic.

Chart 3: Domestic Savings (% of GDP)



Sources: PSB, Turkstat, Authors' calculations.

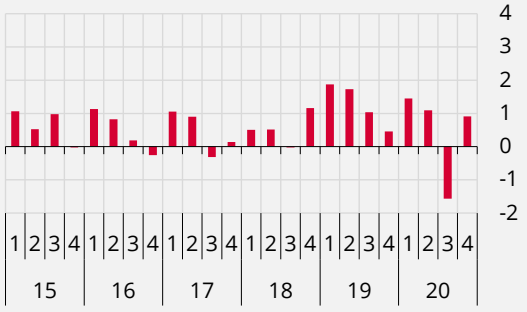
Chart 4: Private Savings (% of GDP)



Sources: PSB, Turkstat, Authors' calculations.

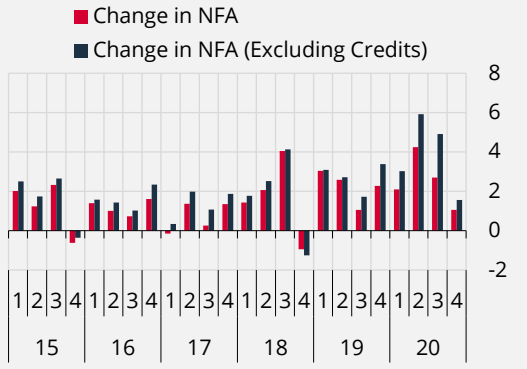
Although it is not possible to decompose private savings into households and corporations with the current dataset, inferences can be made about the course of household savings in 2020 with the help of various indicators. Households' financial assets can be tracked within the framework of the "Financial Accounts" dataset published by the CBRT. The rise in households' net financial assets (NFA) in 2020 may indicate that Turkey's household savings followed a similar trend with those of other mentioned countries (Chart 5). However, it should be noted that the increase in households' net financial assets is mostly due to the rise in the exchange rate. The increase in households' net financial assets is stronger when loans on the liability side with repayments due at a certain maturity, in contrast to items such as deposits on the asset side, are excluded (Chart 6).

Chart 5: Change in Household's Net Financial Assets* (% of GDP, excl. Valuation Effect)



Source: CBRT.
* Ratio to the 4-quarter moving sum of GDP. Excludes precious metals kept out of the financial system by households.

Chart 6: Change in Household's Net Financial Assets* (% of GDP, incl. Valuation Effect)



Source: CBRT.
* Ratio to the 4-quarter moving sum of GDP. Excludes precious metals kept out of the financial system by households.

The course of household savings is a factor to be taken into account when examining the determinants of private consumption. In this context, models for the effects of income and wealth on

[3] Savings statistics in Turkey are published by the Turkish Statistical Institute (Turkstat) under the name "Institutional Sector Accounts". The most recent observation in the dataset, including savings for households, general government, financial corporations, non-financial corporations, and total economy, is for 2018. On the other hand, the Presidential Strategy and Budget Office (PSB) has published public savings data as of 2020. Private and public saving and investment rates for the period until 2016 can be accessed via the PSB.

private consumption demand have been constructed to evaluate the impact of the recent increase in savings and financial assets on consumption. The coefficient of the real M3 broad money supply definition, which is used to represent the wealth effect, in alternative equations to explain private consumption has been estimated in the range of 0.10-0.25 points (Table 1). In 2020, the real M3 money supply increased by approximately 18 percent compared to 2019. Accordingly, it is calculated that the real M3 increase contributes around 2 to 5 points to private consumption demand.

Table 1: Alternative Models for Private Consumption Demand

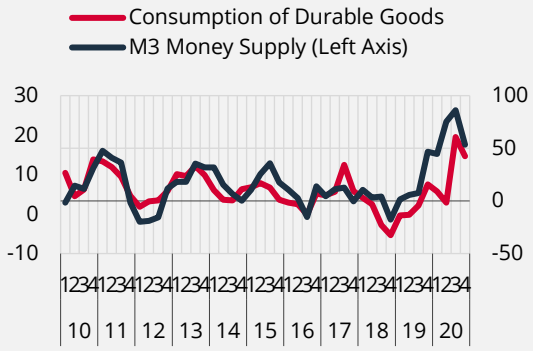
	Long Run Coefficients		Short Run Coefficients		Dynamic OLS		ARDL	
Explanatory Variables:	**Income**	**M3**	**Income**	**M3**	**Income**	**M3**	**Income**	**M3**
GDP-Net Taxes	0.75	0.14	0.81	0.13	0.70	0.18	0.74	0.14
GDP-Tax Revenues*	0.73	0.15	0.76	0.11	0.69	0.19	0.69	0.16
Compensation of Employees	0.64	0.20	0.52	0.22	0.58	0.25	0.45	0.18

Source: Authors' calculations.

* Represents total tax revenues in central government budget statistics.

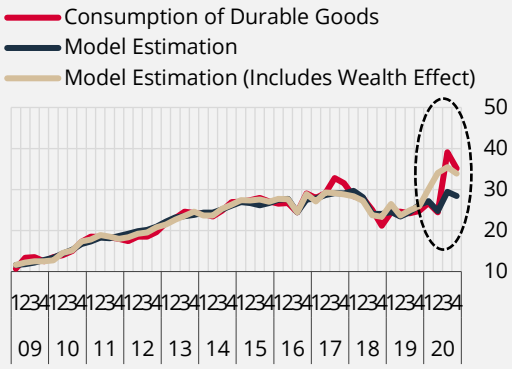
Analyzing the relationship between demand for durable consumption goods and real M3 reveals that the wealth effect is a significant determinant for this group (Chart 7). Historically, a model that includes income (GDP-defined compensation of employees), real exchange rate, and consumer loans explains the movements in consumer durables expenditures to a large extent.[4] However, this model falls short of explaining the strong increase in durable goods consumption in the second half of 2020. Incorporating the M3 money supply, including Turkish lira and foreign currency deposits, variable into this model to represent the wealth effect significantly improves the model's explanatory power for 2020 (Chart 8). It seems that the increasing demand for durable goods is also supported by the increase in savings due to the inability to spend on services, such as restaurants-hotels, recreation-culture, etc., during the pandemic, and the wealth channel kept the demand for durable goods strong.

Chart 7: Consumption of Durable Goods and M3 Money Supply (Real, Annual % Change)



Source: CBRT, Turkstat.

Chart 8: Consumption of Durable Goods and Model's Estimations (Constant Prices, Seasonal and Calendar Adjusted, Billion TRY)



Source: Authors' calculations.

In summary, calculations made using the savings-investment balance suggest that private savings increased in Turkey in 2020. This increase contributed to the strong demand for durable goods in the second half of 2020 through the wealth channel. The wealth effect is expected to support consumption demand in the upcoming period.

[4] In specifications without the wealth effect, the dependent variable is real durable consumption expenditures, while explanatory variables are GDP-defined real compensation of employees, real consumer credits, real exchange rate and tax rates regarding durable consumption. Real M3 money supply is incorporated as an explanatory variable into specifications including wealth effects. Among the variables used, durable consumption expenditure and compensation of employees are adjusted for seasonal and calendar effects, while consumer credits are seasonally adjusted. Model coefficients were estimated for the period 2009Q1-2019Q4, while model predictions were obtained for the period 2009Q1-2020Q4.