FORECAST

Alternative scenario: Households use their savings more quickly than anticipated

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The COVID-19 pandemic and resulting lockdown measures have imposed severe constraints on the consumption opportunities of households, and demand has especially collapsed in a number of service industries. Households have accumulated a significant amount of savings since early 2020 due to the shortfall in consumption caused by the pandemic. The release of these savings into private consumption or housing demand over the next few years may result in economic growth proving much stronger than anticipated in the baseline forecast.

Statistics on disposable household income and private consumption suggest that households have accrued a total of about EUR 9 billion in savings over the past 1½ years. In this alternative

scenario, excess savings are defined as the difference between the amount of household savings estimated in the Bank of Finland's June 2021 forecast and its December 2019 forecast.

The household saving rate has risen exceptionally high during the pandemic, to over 6%, based on an estimate covering the last three quarters of 2020. Disposable household income has also continued to rise in spite of the pandemic, albeit at a more moderate pace.

Although households have accumulated a significant amount of savings during the pandemic, a portion of these savings may have already been invested in 2020, for example in shares (see: Public purse carried households and businesses through the COVID crisis). There is uncertainty as to how this particular portion of savings might influence private consumption or housing demand in the short term, especially if households have purchased shares with the intention of investing over a longer period. Hence it is possible that not all of the excess savings will be spent on consumption in the short term.

Household consumption is the most significant determinant of output growth and its fluctuations in the short term. Private consumption corresponds to roughly half of GDP. Higher consumption is instantly reflected in the volume of GDP, and it also bolsters employment and investment over slightly longer periods.

In this alternative scenario, we use the Aino 3.0 model[1] to estimate what effects the unwinding of households' excess savings might have on output growth and its composition in the coming years, as well as its impact on inflation. The estimates do not take the public finances into account. Changes in consumption and residential investment are examined with the Bank of Finland June 2021 forecast serving as the baseline. The particular baseline path does not change the dynamics or the main results of the model.

The model's estimated effects rise proportionately with how much of the excess savings are assumed to be spent on consumption during the forecast period and how quickly the savings are run down. This, in turn, depends on consumer behaviour and changes in consumer preferences. For example, consumers may remain cautious for a long time, normalising their consumption and running down their savings only gradually once uncertainty begins to lift.

There is considerable uncertainty as to when consumers will begin running down their savings and to what extent. In the alternative scenario, it is assumed that about 60% of the excess savings will be spent on private consumption and housing during 2021–2023.[2] This assumption of 60% is further broken down so that private consumption receives about 40% of the excess savings and housing demand about 20%. These percentage shares roughly translate to just over EUR 3.5 billion of additional consumption and just under EUR 2 billion of increased housing demand.

Housing demand will grow more rapidly than private consumption, as the influx of savings going into housing is proportionately larger.

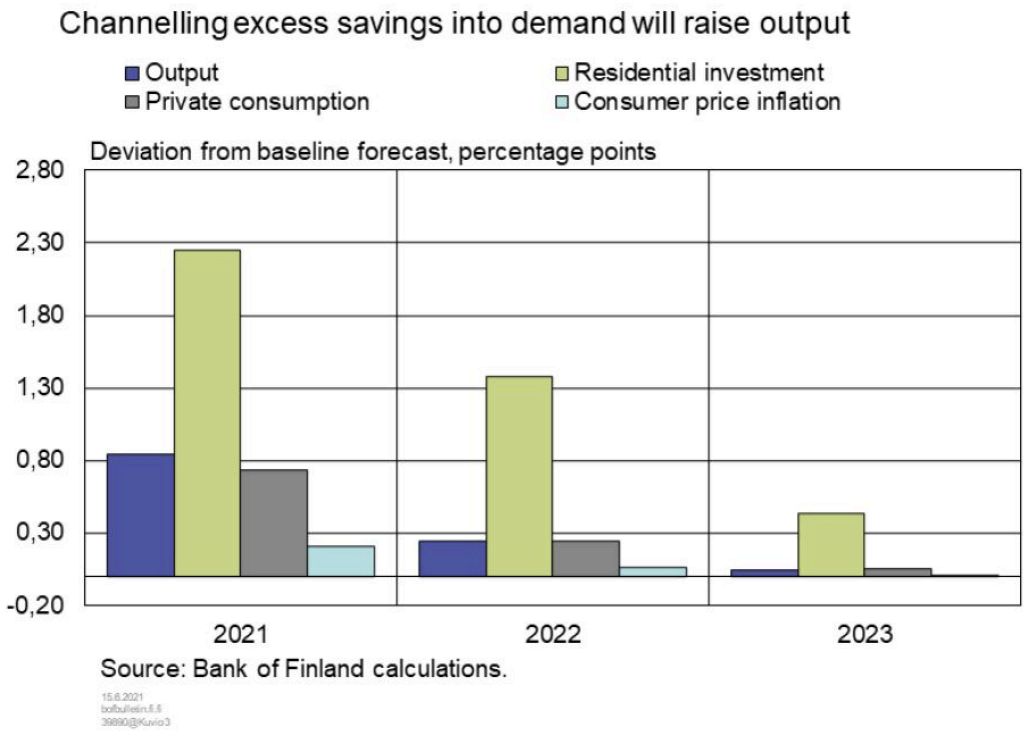
It is assumed that inflation will pick up globally due to stronger demand and short-term supply constraints, and that this will accelerate the rise in the export prices of Finland's competitors during the forecast period. The higher export prices of competitors will influence the Finnish economy through the foreign trade channel, i.e. through the prices of imports and exports.

Running down savings will accelerate output growth

The premise of the alternative scenario is that the COVID-19 pandemic will begin to recede as vaccination coverage increases after mid-2021 and will result in a lifting of general uncertainty. Private consumption is assumed to increase by a total of about one percentage point more over 2021–2023 than in the baseline forecast. This assumption is based on a simple calculation where the path of private consumption in the baseline forecast is raised by EUR 3.5 billion and the resulting percentage point deviation is calculated from the baseline. In the alternative scenario, consumption is 0.7 percentage points higher in 2021 than in the baseline forecast (Chart 1).

As housing demand strengthens this will lead to a rise in residential investment. From housing demand it is assumed that the cumulative deviation in residential investment growth from the baseline forecast will be about 4 percentage points over 2021–2023. This roughly corresponds to about EUR 1.8 billion of additional residential investment compared with the baseline forecast. The model estimates that residential investment growth will be about 2.2 percentage points higher in 2021 than in the baseline forecast and that it will gradually decelerate towards its baseline path.

Chart 1.



Higher private consumption and residential investment will raise the growth rate of output 0.8 percentage points above that of the baseline forecast. Over the entire forecast period, output will cumulatively be about 1 percentage point higher than in the baseline forecast. The higher export prices of Finland's competitors will raise non-residential investment in Finland.

The rise in output will significantly boost employment. The number of hours worked will increase, and real wages will grow slightly. Imports will also grow, as higher consumption and investment will increase the demand for imports. Imports will also be bolstered by stronger global demand for exports. Net exports will thus remain neutral and will not contribute to output growth.

Inflation will be only slightly faster than in the baseline forecast; however, the alternative scenario may underestimate the inflationary pressures caused by consumption. This may especially be true in situations where a rapid rise in consumption leads to excess demand and supply is not able to keep pace with the rapid changes in demand. In the model, a rise in the demand for housing leads to higher residential investment but also raises the real prices of housing, as the nominal prices of housing increase faster than the general price level. Although the model does not take regional differences in the housing market into account, price rises are conceivable, especially in growth centres.

The calculations demonstrate that growth in household consumption and strengthening housing demand have a markedly positive impact on output growth. In Finland, savings accumulated by households have often trickled towards housing demand, so we may well assume this to be the case once the economy has sufficiently recovered from the crisis.

The model allows for the elasticities of output and consumer price inflation to be estimated with respect to private consumption. That is, we can estimate how much output or inflation will change when private consumption increases and all other factors are held constant.

According to the model, the elasticity of output with respect to private consumption is about 0.5 during 2021–2023 and in consumer price inflation (with respect to private consumption) 0.4. These estimates are smaller than long-term elasticities calculated using time series covering Finland's euro membership. The model's estimate for the elasticity of output with respect to residential investment is about 0.7 over 2021–2023, and for consumer price inflation[3] about 0.6. These figures are similarly smaller than those estimated from the time series.

The savings accrued by households could of course flow elsewhere, such as into the stock market or foreign travel, which would reduce the amount of savings available for consumption or housing demand, especially in the short term. In addition, the prospects of future tax hikes due to the higher levels of public debt could inhibit the growth of consumption and depress housing demand.

The estimates presented in this alternative scenario are approximations and are subject to uncertainty. The actual effects of a rise in consumption may deviate significantly from the figures estimated by the model. A stronger-than-anticipated flow of savings into domestic demand would nevertheless have a favourable impact on other sectors of the economy and would raise output clearly beyond levels estimated in the baseline forecast. Overall, the estimates obtained from the model concerning output and inflation fall in line with expectations, given higher consumption growth and a rise in housing demand.

Key alternative scenario figures

	2021	2022	2023	Average annual deviations in growth over 2021–2023*	Cumulative deviation in growth over 2021–2023*
Output	0.8	0.2	0.0	0.4	1.1

Source: Bank of Finland calculations.

Key alternative scenario figures					
Residential investment	2.2	1.4	0.4	1.4	4.1
Private consumption	0.7	0.2	0.1	0.3	1.0
Consumer price inflation	0.2	0.1	0.0	0.1	0.3
Non-residential investment	3.1	-0.4	-1.6	0.4	1.1
Exports	0.6	0.2	0.1	0.3	0.8
Imports	0.9	0.1	-0.2	0.3	0.9
Real wages	0.2	0.2	0.2	0.2	0.6
Hours worked	0.9	0.2	0.0	0.4	1.1
Productivity (output – hours worked)	0.0	0.0	0.0	0.0	0.1
*Percentage deviations from the baseline forecast.					

Source: Bank of Finland calculations.

Footnotes

1. Aino 3.0 is the Bank of Finland's latest dynamic stochastic general equilibrium model, which includes a depiction of the housing market. See Silvo & Verona (2020) The Aino 3.0 model, Bank of Finland Research Discussion Papers 9/2020. ↑
2. Because the model is numerically solved by taking linear approximations, the dynamic effects remain the same whether it is assumed that all of the excess savings are spent or only 60%, as assumed by the alternative scenario. However, the assumption regarding savings does affect the magnitude of the estimated effects. If households were to run down all of their excess savings, i.e. EUR 9 billion, the estimated impact on output would rise in proportion with the increase in consumption. ↑
3. Corresponds to the aggregate price movement of private consumption. ↑

Key words

consumption, COVID-19, COVID-19 pandemic, households, saving