

ARTICLE – Household savings increased significantly during the pandemic

Swedish households have saved a large part of their incomes for a long time. The largest part of these savings is made up of collective occupational pensions but households also invest in housing and have also had positive financial savings recently. These financial savings can be seen in bank deposits, equities, funds and the like. These savings increased strongly at the start of the pandemic, when households reduced their consumption by more than their incomes decreased. The restrictions imposed and changed behaviour patterns thus led households to accrue a liquid buffer. The analysis made here indicates that households still have a large part of this buffer left. If households were to use more of this buffer for consumption going forward, demand could become stronger than is forecast by the Riksbank. However, it is difficult to assess the degree to which households will do this, partly because there are no statistics over the distribution of savings among different households.

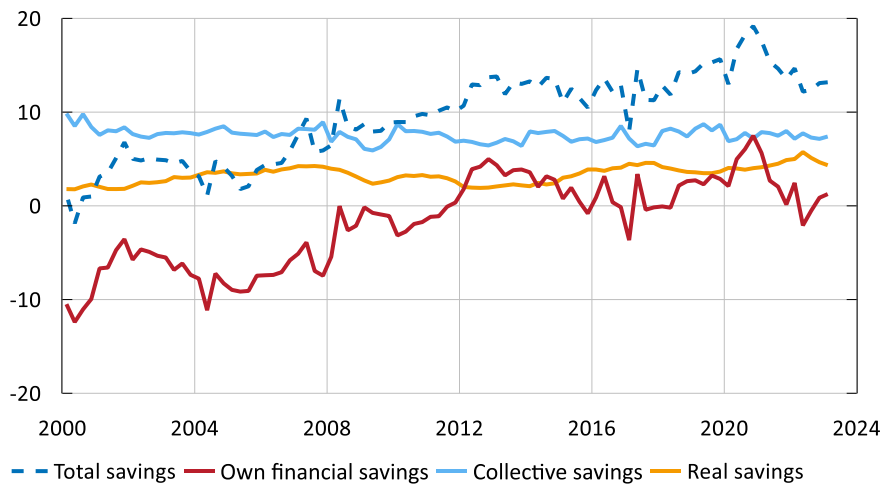
The saving ratio has risen since the start of the century

Household savings describe the difference between households' income and how much they consume, for example over one year. Swedish household savings have grown substantially this century. At the start of the century, the household saving ratio, meaning savings as a share of disposable income, was around zero. In 2022, the saving ratio amounted to almost 15 per cent (see Figure 53).

Household savings are usually divided into three types. In Sweden, the largest component consists of collective savings, which is to say premium and occupational pensions, which households cannot affect in the short term. Insurance savings in Sweden are high from an international perspective. Another component of savings is made up of real investment, primarily in housing. The third component is made up of households' own financial savings. This includes equities, funds and bank deposits. The saving ratio has grown over the last twenty years due to the increase in own financial savings in Sweden. During the pandemic, it increased substantially to the historically high figure of just over 5 per cent in 2020. Following the pandemic, the saving ratio has returned to the levels that were normal before the pandemic.

Figure 53. Household savings

Percentage of disposable income, seasonally adjusted data



Note. Households+HIO.

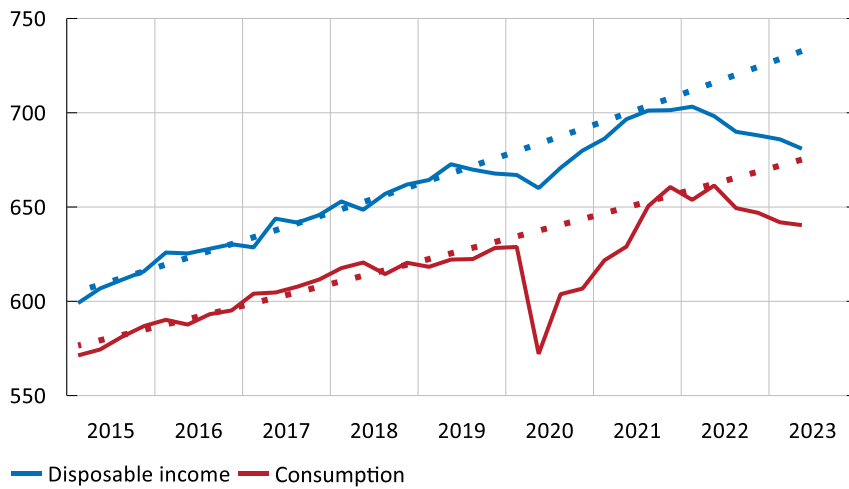
Sources: Statistics Sweden and the Riksbank.

Savings increased rapidly during the pandemic

During the pandemic, several factors combined to lead to a rapid increase in household savings. The fall in household consumption was greater than in normal economic slowdowns. Consumption normally varies less than other components of demand, which is usually explained by the theory that households will try to even out their consumption as much as possible over time. However, households usually reduce consumption and increase savings in economically uncertain times and the uncertain cyclical position during the pandemic probably reduced household consumption. In addition, the pandemic brought about restrictions that changed household behaviour. Consumption of hotel and restaurant visits, travel, and culture and entertainment decreased considerably. At the same time, disposable household income was held up by various support measures such as the strengthening of unemployment benefit and government support for short-time work. The consequence was that household consumption fell significantly faster than disposable income, which meant that the saving ratio increased rapidly (see Figure 54).

Figure 54. Disposable household income and consumption

SEK billion, constant prices, seasonally adjusted values



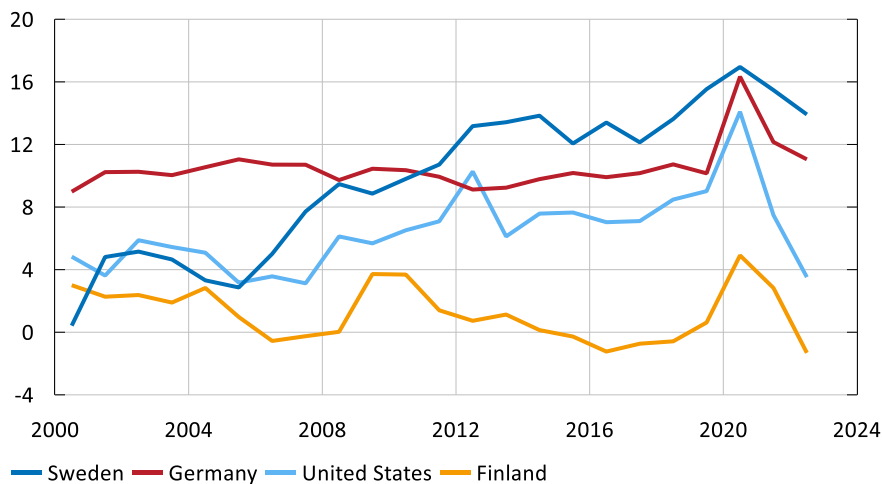
Note. The dotted line shows an exponential trend estimated for the period 2015–2019.

Sources: Statistics Sweden and the Riksbank.

Household savings developed similarly in several other advanced economies that introduced restrictions and support measure during the pandemic. Household saving ratios rose noticeably in both the United States and several European countries (see Figure 55). Since the pandemic, saving ratios have fallen back. They have fallen particularly significantly in the United States, where they are now lower than before the pandemic.

Figure 55. Household savings in various countries

Percentage of disposable income



Note. Households+HIO, annual data.

Source: The OECD.

Have households saved a buffer?

It has been discussed whether the higher than normal savings during the pandemic have led to the household sector as a whole having built up buffers in the form of temporary excess savings that can be used to increase consumption following the pandemic.⁵¹ Excess savings here refer to the difference between ‘normal’ savings and a temporarily higher saving ratio. To gain an understanding of how much consumption could be affected, the size of excess savings can be estimated. Such estimates have recently been made using several different approaches.⁵² Here follows one such estimate, adjusted to Swedish circumstances and available data from the National Accounts. As the aim is to calculate how much households have saved as a buffer for future consumption, it is appropriate to base the calculation on households’ own financial savings. This is the measure that corresponds best with households’ liquid assets, which is to say bank deposits and the like that can quickly be used for consumption. In addition, it was own financial savings that changed during the pandemic. However, defining all of households’ own financial savings since 2020 as excess savings would probably lead to an overestimation, as households also had positive financial savings before the pandemic. For the period t , we can express excess savings as:

$$\begin{aligned} \text{Households excess savings}_t & \\ &= \text{Households own financial savings}_t \\ &\quad - \text{Households normal own financial savings} \end{aligned}$$

Savings can be expressed either as kronor or as a percentage of disposable income (the saving ratio). For the sake of simplicity, it is assumed here that households’ ‘normal’ financial saving ratio is the same size as average financial savings in the five years preceding the pandemic.⁵³ Adding together households’ accumulated excess savings since the pandemic in 2020 gives us an approximation of the size of the buffer (see Figure 56).

Swedish households’ accumulated excess savings increased rapidly at the start of the pandemic and amounted to about SEK 120 billion in the first quarter of 2022. This corresponded to almost 5 per cent of annual disposable household income. Excess savings subsequently decreased to almost SEK 70 billion in the second quarter of

⁵¹ See, for example F. de Soyres, D. Moore and J Ortiz (2023), “Accumulated Saving During the Pandemic: An International Comparison with Historical Perspective”, FEDS Notes, Federal Reserve, and N. Battistini, V. Di Nino and J. Gareis (2023), “The consumption impulse from pandemic savings – does the composition matter?”, ECB Economic Bulletin.

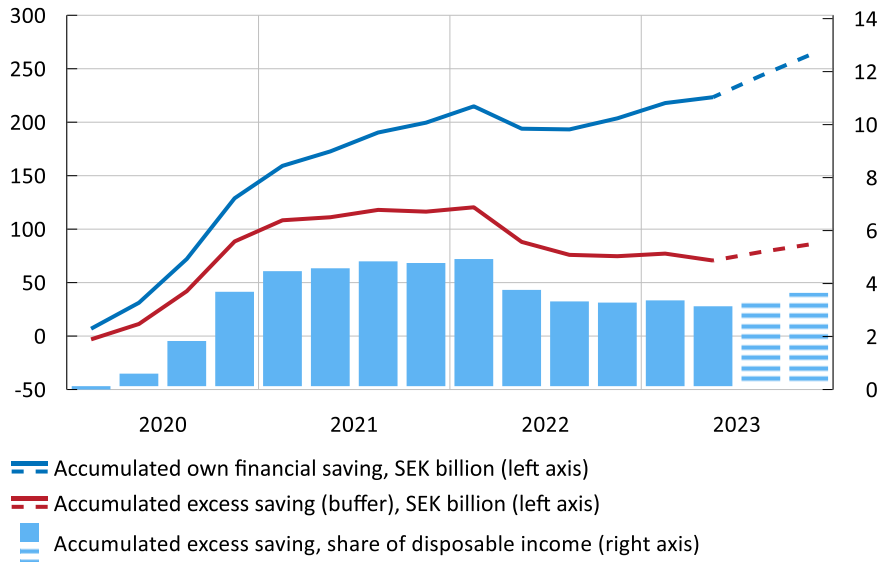
⁵² Calculating excess savings is difficult, both conceptually and methodologically. The size of excess savings depends both on the type of savings included and on what is considered to be the ‘normal’ saving level. The choice of method can have a major impact on the conclusions that can be reached on the size of excess savings. For the United States, there are examples of studies finding that households have significant surpluses left and of studies finding that households have already used up their excess savings. See, for example, H. Abdelrahman and L. Oliveira (2023), “The Rise and Fall of Pandemic Excess Savings”, FRBSF Economic Letter, Federal Reserve Bank of San Francisco and F. Soyres, D. Moore and J. Ortiz (2023), “Accumulated Saving During the Pandemic: An International Comparison with Historical Perspective”, FEDS Notes, Federal Reserve.

⁵³ In the calculations, the average saving ratio has been subtracted. Subtracting average savings in kronor instead gives a similar result.

2023. In the period ahead, accumulated excess savings as a share of disposable income are expected to stabilise.

Figure 56. Accumulated excess savings in Sweden

SEK billion and per cent of disposable income



Note. Accumulated excess savings refers to own financial savings minus average own financial savings in 2015–2019. Seasonally adjusted quarterly data. Disposable income is totalled over four quarters.

Sources: Statistics Sweden and the Riksbank.

It is difficult to estimate excess savings as results are greatly affected by data and choice of method. The assumptions made concerning the ‘normal’ level of the saving ratio prior to the pandemic affect the analysis. In this analysis, we assess the normal level of savings on the basis of the household saving ratio in the last five years before the pandemic. In this case, five years is deemed to be an appropriate period from which to start. If too long periods are used, major structural changes that affect households’ behaviour may have taken place and if too short periods are used, temporary fluctuations can be given too much importance. It is significant whether the normal saving ratio is defined on the basis of the mean value or on the basis of the (linear) trend over this five-year period. If the normal saving ratio is defined on the basis of the trend, Swedish households have had negative excess savings since mid-2022, with financial savings being lower than they would have been if they had followed the trend seen in the years prior to the pandemic.⁵⁴ The saving ratio in Sweden was relatively stable between 2015 and 2018 but increased significantly in 2019, meaning that the trend over the whole five-year period becomes a rising one. However, the saving ratio in 2019 is not deemed to signify a changing trend.

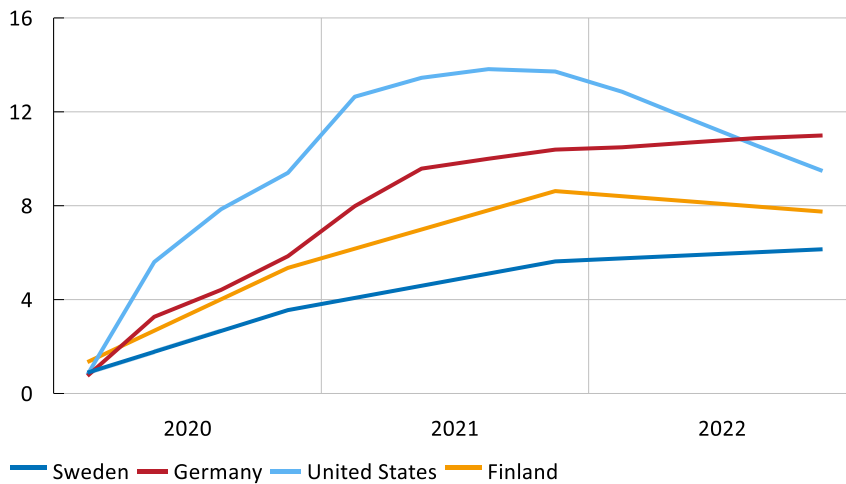
⁵⁴ See, for example, Ashworth (2023), “About those pandemic savings”, Financial Times

Consequently, a mean value for the last five years (2015–2019) is used in the calculations.⁵⁵

International comparisons often use calculations of the total saving ratio, unadjusted for pension funds savings and real savings.⁵⁶ Calculated in this manner, Sweden’s accumulated excess savings are approximately the same size as those of other advanced economies (see Figure 57). In the United States, excess savings have decreased significantly more than it has in Europe. This is partly because excess savings there were built up to a greater extent by stimulus packages that partly used cash payments to help sustain disposable income for low-income households.⁵⁷

Figure 57. Accumulated excess savings in selected countries

Percentage of disposable income



Note. Accumulated excess savings refer to the total saving ratio minus the average total saving ratio for 2015–2019. Annual data. Disposable income is totalled over four quarters.

Sources: The OECD and the Riksbank.

Households’ liquid assets have increased

The excess savings brought about by the pandemic can be seen in the Financial Accounts, which describe households’ financial assets and liabilities. The extent to which assets can affect short-term consumption depends on how liquid they are. Households have financial assets of many different kinds, the most liquid of which are bank deposits. Since the outbreak of the pandemic, households’ bank deposits have

⁵⁵ It is also significant whether the saving ratio is defined on the basis of the last five years or the last ten years. If the normal saving ratio is defined on the basis of the *trend* for 2013–2019, Sweden had excess savings of about SEK 130 billion in the second quarter of 2023. If the normal saving ratio is instead defined on the basis of the *mean value* for 2013–2019, Sweden had excess savings of about SEK 10 billion in the second quarter of 2023.

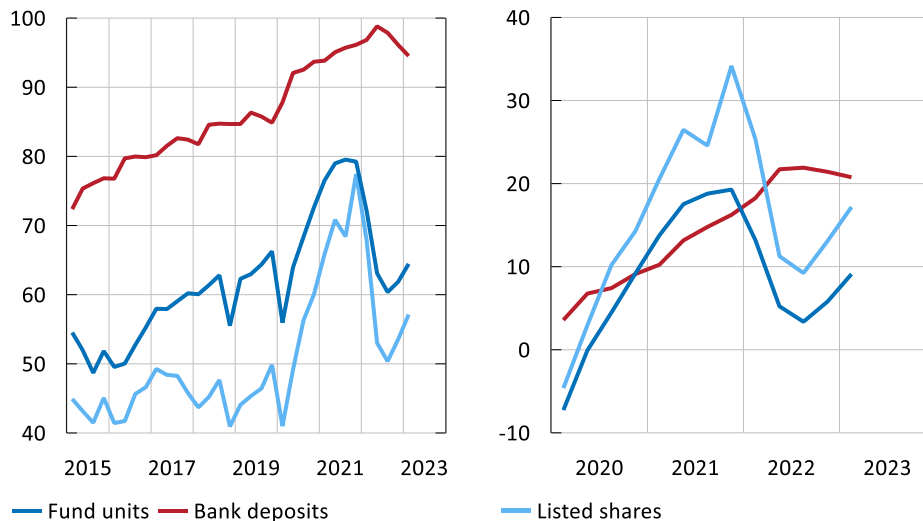
⁵⁶ See, for example F. de Soyres, D. Moore and J Ortiz (2023), “Accumulated Saving During the Pandemic: An International Comparison with Historical Perspective, FEDS Notes, Federal Reserve.

⁵⁷ See, for example, N. Battistini, V. Di Nino and J. Gareis (2023), “The consumption impulse from pandemic savings – does the composition matter?”, ECB Economic Bulletin.

increased by over SEK 500 billion.⁵⁸ The value of equity and fund holdings grew substantially between 2020 and 2021, before falling at the start of 2022 (see Figure 58). However, these assets are slightly less liquid than bank deposits.

Figure 58. Households' financial assets

Percentage of disposable income (left) and accumulated value since Q4 2019, per cent of disposable income (right)



Note. Disposable income is totalled over four quarters.

Sources: Statistics Sweden and the Riksbank.

Households' buffers may correspond to around 3 per cent of consumption

The analyses of savings and assets both suggest that the household sector as a whole still has reserves that could be used for consumption. To illustrate how large an impact such reserves could have, accumulated excess savings of approximately SEK 70 billion correspond to approximately 3 per cent of household consumption in 2022 and just over 1 per cent of Sweden's GDP.

Whether the excess savings will be used for consumption largely depends on how they are distributed among households, not only in terms of household wealth but also the composition of this wealth. Households' marginal propensity to consume, which is to say how much households adjust their consumption when their disposable incomes vary, differ in magnitude according to the size of their income and wealth. Households with less resources tend to change consumption more when their disposable incomes change.⁵⁹ The wealthiest households and households with the highest incomes only consume a fraction of their incomes. In addition, the distribution of a household's various asset types also affects its marginal propensity to consume.

⁵⁸ Here, the Riksbank makes no adjustment of the Financial Accounts against a 'normal value'.

⁵⁹ See, for instance, K.E. Dynan, J. Skinner and S.P. Zeldes (2004), "Do the Rich Save More?", *Journal of Political Economy* 112(2).

In comparison to similar groups with more liquid assets, wealthy households with a large proportion of illiquid assets, such as property, have a higher propensity to consume if their incomes increase.⁶⁰ Furthermore, households with large loans may choose to amortise more rather than increase their consumption if their disposable income increases over the short term.⁶¹

It is therefore difficult to estimate the extent to which Swedish households will use their excess savings. Sweden does not keep any statistics on individual household's wealth and savings. This makes it impossible to obtain a good overview of the distribution of excess savings among wealth groups and thereby how likely it is that households as a whole will use saved funds to increase consumption. Analyses of the United States and euro area indicate that all wealth groups increased their savings during the pandemic but that the main share of excess savings has been among the richest tenth of households.⁶²

In the Riksbank's forecast, households are not expected to consume their excess savings in 2023–2024. This is partly because households are expected to reduce their consumption and increase their savings in economically uncertain times, partly because savings are expected to increase when interest rates rise. Additionally, as in the United States and euro area, a large part of Swedish excess savings is presumably concentrated in households with high incomes, where the marginal propensity to consume is lower. Households are therefore not expected to reduce their excess savings in order to sustain consumption in 2023 and 2024, but there is an upside risk here.

⁶⁰ See G. Kaplan, G.L. Violante and J. Weidner (2014), "The Wealthy Hand-to-Mouth", *Brookings Papers on Economic Activity*, Spring.

⁶¹ See K. Dynan (2012), "Is a Household Debt Overhang Holding Back Consumption?" *Brookings Papers on Economic Activity*.

⁶² See H. Abdelrahman and L.E. Oliveira (2023), "The Rise and Fall of Pandemic Excess Savings", *FRBSF Economic Letter*, Federal Reserve Bank of San Francisco.