

ARTICLE – Rapidly rising housing prices despite the coronavirus crisis

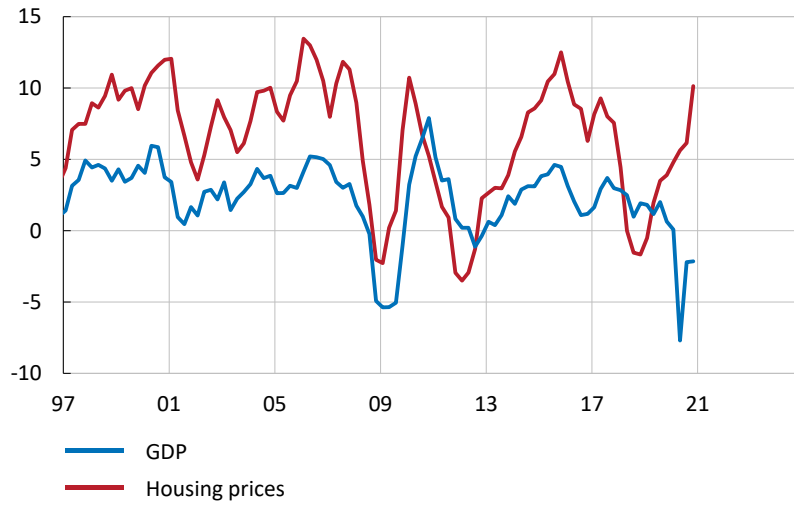
Despite the substantial negative effects of the coronavirus crisis on the real economy, Swedish housing prices have increased sharply since last spring. A similar development can be seen in many other comparable countries. The price upturn deviates from historical correlations and is difficult to explain with factors traditionally used to shed light on housing demand, such as interest rates and disposable income. Instead, the most important explanations probably have to do with the unusual economic effects of the pandemic. Households being partially forced to save as a result of restrictions has freed up scope for housing consumption. At the same time, widespread working from home has probably sparked a desire among households for a larger home and a willingness to spend more money on their housing. In addition, the negative effects of the crisis on the labour market have only affected households with permanent employment to a minor extent and these households normally find it easier to obtain a mortgage. This may have helped prices resist the generally weak development in the real economy.

Housing prices have not followed historical correlations with economic activity during the crisis

Since the spring of 2020, the pandemic has had substantial negative economic effects in Sweden, but despite this, housing prices have risen sharply, after a brief downturn at the beginning of the pandemic. In March this year, prices in the country as a whole were 15.5 per cent higher compared to the same month last year. Housing prices normally fall in recessions, which means that the development during the pandemic deviates considerably from historical correlations (see Figure 50). The development is similar in several other comparable countries (see Figure 51). As the pandemic has affected society and the real economy in a similar way in different countries, the explanations behind developments on the housing market in Sweden can also apply to other countries to a large degree.

Figure 50. Housing prices and GDP in Sweden

Annual percentage change

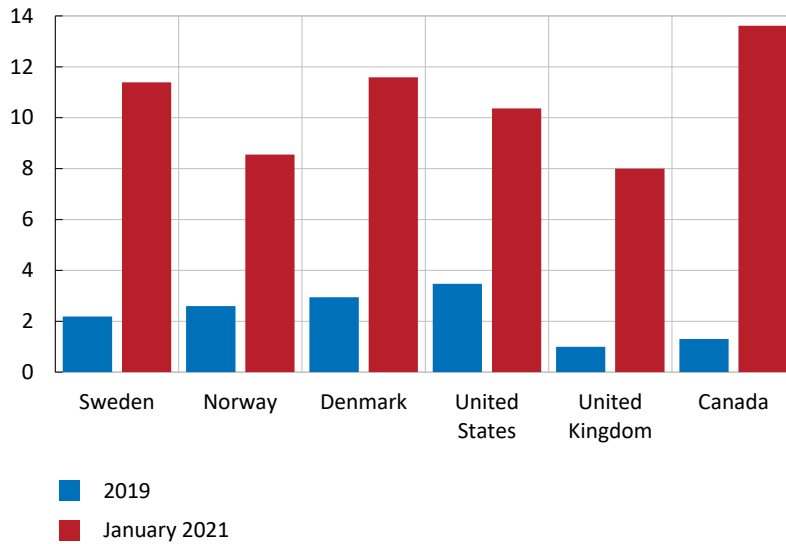


Note. Housing prices according to the property price index for single-family dwellings. GDP is calendar adjusted.

Source: Statistics Sweden.

Figure 51. Housing price development in Sweden and other countries in 2019 and over the past year

Annual percentage change



Note. 2019 refers to the annual average compared to 2018. January 2021 refers to the change since January 2020.

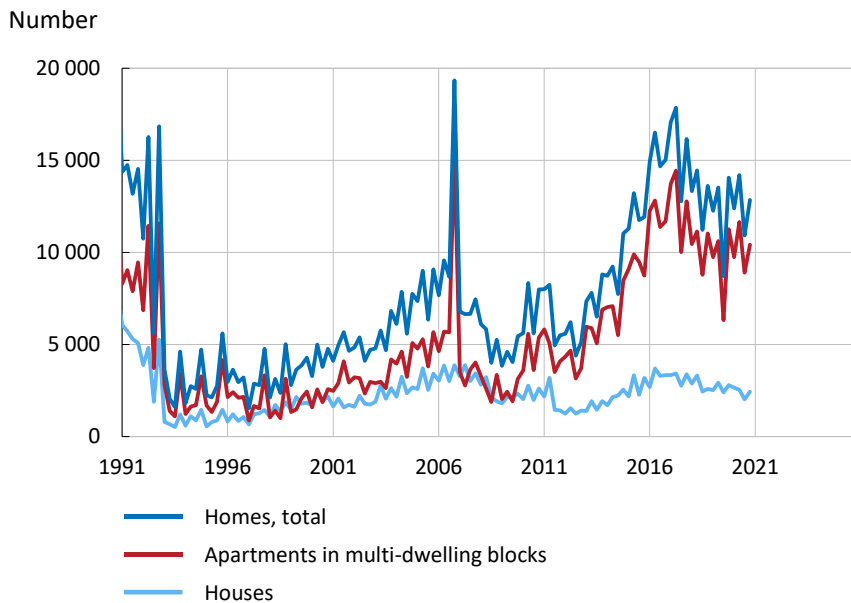
Sources: Valueguard and national sources.

Minor changes in the housing stock – increased demand most important factor for price development over the past year

The rise in housing prices could be due to low supply, high demand or a combination of the two. Housing construction has increased from a low level after the financial crisis just over 10 years ago and has been high in recent years. For a long time, more apartments in multi-dwelling blocks have been built than detached houses (see Figure 52).²⁹ During the coronavirus crisis, no dramatic changes have occurred in the construction of new housing. But despite the relatively high level of housing construction in recent years, the number of new homes over one year is less than 1 per cent of the existing stock. The total supply of housing is thus changing very slowly. And this is also true of the composition of the housing available, for example the number of detached houses in relation to tenant-owned apartments and the number of large apartments in relation to small ones. In the short term, therefore, price movements on the housing market are mainly being driven by variations in demand.³⁰

²⁹ For a historical review of housing construction in Sweden, see R. Emanuelsson, "Supply of housing in Sweden, Sveriges Riksbank Economic Review, No. 2, 2015.

³⁰ There are exceptions, however, when housing construction affected price formation in the short run. An example was 2016-2017, when housing construction increased sharply in Sweden and housing prices fell significantly in the autumn of 2017. See, for example, G. Katinic, "Perspectives on housing construction", Economic Commentaries, No. 2, 2018, Sveriges Riksbank, "Reduced housing construction is subduing GDP growth", article in Monetary Policy Report, February, Sveriges Riksbank, 2018 and "New production of housing and financial stability", article in Financial Stability Report, No. 2, 2018, Sveriges Riksbank.

Figure 52. New housing starts in Sweden

Source: Statistics Sweden.

The increased demand is difficult to explain in terms of traditional factors

Mortgage rates and disposable income cannot explain the rapidly rising housing prices

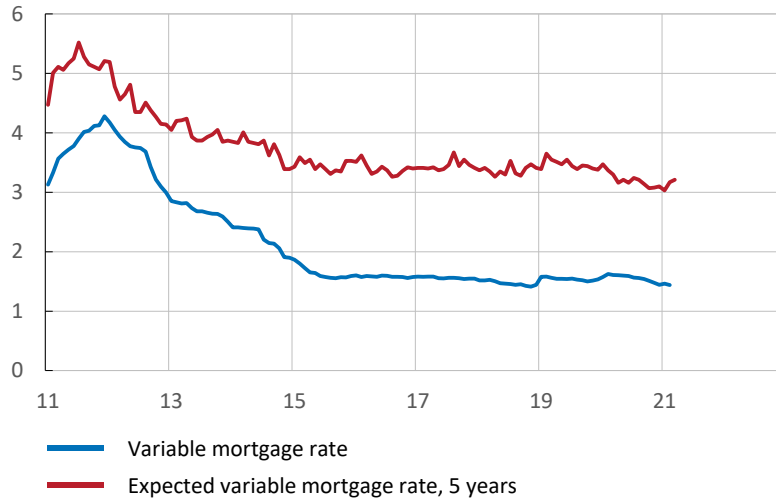
The mortgage rate and disposable income have historically been among the most important factors to explain rising housing prices in Sweden.³¹ A reasonable starting-point is therefore to look at how these factors have moved during the pandemic.

The repo rate has been held unchanged at zero per cent during the pandemic. At the same time, the Riksbank's purchases of covered bonds have helped reduce banks' funding costs and probably counteracted an upturn in mortgage rates. A sign of this is that the upturn in yields on covered bonds last spring was relatively short-lived and limited, and these yields have gradually fallen back since then (see Figure 18). Overall, mortgage rates have been stable during the pandemic and cannot explain the fact that housing demand has risen so rapidly and been unusually high compared with previous recessions. Neither are there any clear signs that households' interest rate expectations have fallen significantly during the pandemic, even though they are marginally lower now than a year ago (see Figure 53).

³¹ See, for example, C-A. Claussen, "Are Swedish houses overpriced?", *International Journal of Housing Markets and Analysis*, v. 6(2), pp. 180–196, 2013 and P. Birch Sørensen, "The Swedish housing market: trends and risks", report to the Swedish Fiscal Policy Council, 2013.

Figure 53. Variable mortgage rate and expected variable mortgage rate 5 years ahead

Per cent

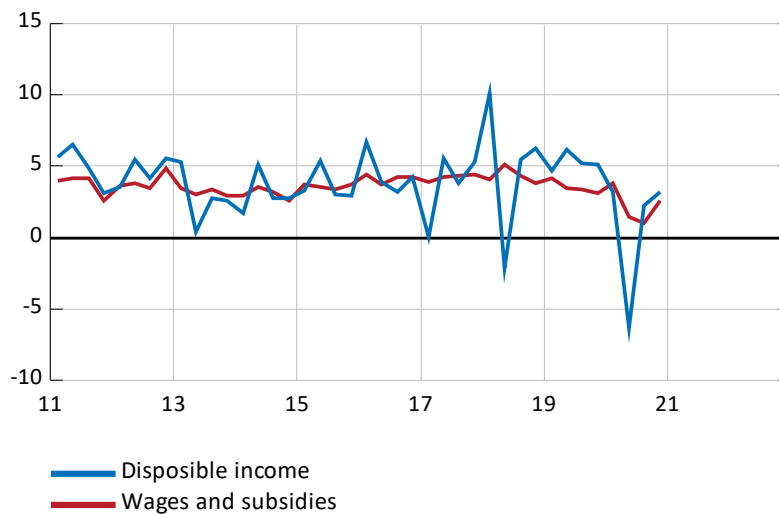


Sources: National Institute of Economic Research and Statistics Sweden.

In addition, the upturn in housing prices has occurred at the same time as household income has fallen. In 2020, disposable income fell by just over 1 per cent compared to 2019. Suspended share dividends led to a reduction in capital income, while extensive fiscal policy support measures in the form of short-time work scheme wages and general government transfers helped to alleviate the downturn in income from wages (see Figure 54). But since household income from wages and transfers saw weak growth in 2020, it is difficult to explain the upturn in housing prices in terms of growth in household income.

Figure 54. Disposable income

Annual percentage change, current prices



Source: Statistics Sweden.

Overall, the development of the mortgage rate and disposable household income does not explain the rapidly rising housing prices over the past year.³² Explanations must therefore be sought elsewhere.

Relief from the amortisation requirements has reduced households' mortgage payments and increased their scope for borrowing in the short term...

Even though mortgage rates have not fallen, monthly mortgage payments have decreased for many households in the short term, due to the decision by Finansinspektionen (FI) in April 2020 to allow banks to grant both existing and new borrowers a temporary exemption from amortisations up until August this year.³³ By the end of January this year, 230,000 mortgagors – or about 10 per cent – had made use of this possibility. According to FI's analysis of new mortgagors, households with an exemption have on average received an additional SEK 4,500 per month, which corresponds to interest payments on a mortgage of several million kronor.³⁴ FI's analysis also shows that these households have borrowed more and bought more expensive housing compared with other new mortgagors.³⁵ But even though the exemption from amortisations has reduced mortgage payments for many households in the short term, nine out of ten mortgagors have so far not been affected by it. The effects on housing prices could be significant to the extent that households with exemptions constitute "marginal buyers", i.e. those with the highest propensity to pay. A reasonable conclusion is nevertheless that the exemption from amortisations may have contributed to the price upturn but is not one of the most important explanations.

...and sharply rising equity prices may have contributed to increased purchasing power

Financial wealth is often used as an explanatory factor in empirical studies of housing prices, even though it has proved to be less significant than the development of interest rates and disposable income.³⁶ Equity prices are responsible for most of the variation in financial wealth. During the pandemic, equity and housing prices have largely followed each other, even though equity prices have varied significantly more. The equity market fell very sharply at the beginning of the crisis, while the downturn in

³² A simple regression analysis also shows that housing prices are unusually high in relation to the development of interest rates and disposable income. In the model, housing prices are explained by household disposable income and a 3-month mortgage rate after tax and property tax. All variables are expressed in real, inflation-adjusted terms. The model is a modified version of the one used by C-A Claussen, "Are Swedish houses overpriced?", *International Journal of Housing Markets and Analysis*, v. 6(2), pp. 180–196, 2013.

³³ From the beginning, the exemption was to apply until the end of August this year, with the possibility of an extended period if conditions were to deteriorate. In March this year, FI announced that the exemption will cease on 31 August.

³⁴ In FI's random sample of new mortgagors, just over 9 per cent have applied for and been granted an exemption from amortisation on all or some of their new mortgage. Overall, the group in the random sample that has been granted an exemption has been able to avoid about 90 per cent of their total amortisations.

³⁵ See Finansinspektionen, "The Swedish Mortgage Market", 2021.

³⁶ See C-A. Claussen, "Are Swedish houses overpriced?", *International Journal of Housing Markets and Analysis*, v. 6(2), pp. 180–196, 2013 and E. Dermani, J. Lindé and K. Walentin, "Is a bubble forming in Swedish house prices?", *Sveriges Riksbank Economic Review*, No. 2, 2016.

housing prices was relatively modest. Since then, the equity market has recovered very strongly (see Figure 19). And during this period, housing prices have also risen sharply.

The strong stock market growth has contributed to a rise in financial wealth and given some households greater purchasing power on the housing market. But one reason equity prices do not normally affect housing demand to any significant extent is that equity ownership is much more unevenly distributed than housing ownership in the population. This makes it probable that the rising equity prices may have contributed to rising housing prices on certain sub-markets but not been of decisive significance for overall development.

The most important explanations probably have to do with the effects of the pandemic on the economy

More money over for households when other consumption is suspended

A factor that has probably contributed to the development of housing prices in both Sweden and comparable countries is that households have been more or less forced to save. This is associated with the fact that it has been difficult to travel and to visit restaurants and hotels due to both regulated and self-imposed restrictions (see Figure 36). The saving ratio, that is saving in relation to disposable income, has risen significantly during the pandemic. This has led to households having greater scope for spending more of their income on housing services. A household with a disposable income of SEK 50,000 a month that consumes 2 per cent less of its income every month would, for example, be able to spend SEK 1,000 more a month on housing services.³⁷

A sign that households' economic resources have been moved from consumption of goods and services to housing expenses can be found in FI's mortgage survey. It indicates that new mortgagors in the autumn of 2020 borrowed more compared to one year previously, both in relation to the value of the home (a higher loan-to-value ratio) and their income (a higher debt-to-income ratio). Both the average loan-to-value ratio and the average debt-to-income ratio were at their highest since surveys began.³⁸ An important explanation for why households want to put more money into their homes is because they are spending more time there.

³⁷ Average disposable income in the random sample of new mortgagors in FI's mortgage survey was SEK 48,970 a month. See Finansinspektionen, "The Swedish Mortgage Market", 2,021.

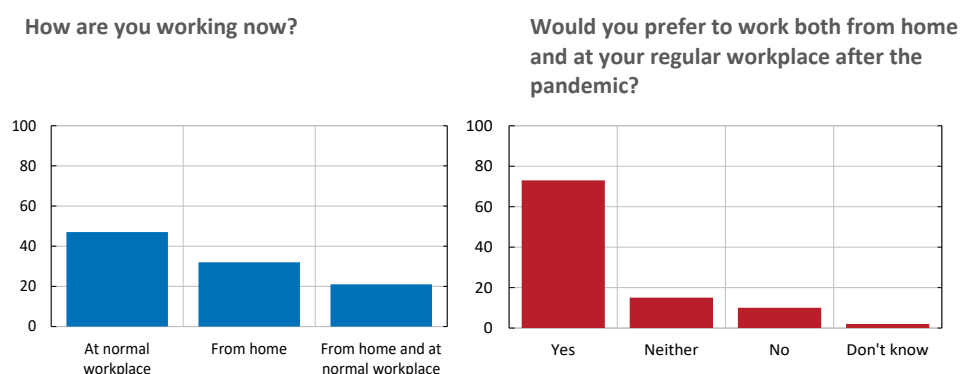
³⁸ The surveys have been published annually since 2012. See Finansinspektionen, "The Swedish Mortgage Market", 2,021.

Home-working has increased the demand for larger and better homes

Working from home – all or part of the time – has been very common during the pandemic, which has been confirmed by surveys (see Figure 55). In addition, surveys indicate that a clear majority of households would prefer to work from home part of the time even when the pandemic is over (see Figure 55). This suggests that the demand for good home-working conditions may have permanently increased, which in turn may have affected the demand for housing. Such a shift in demand could be reflected in rising relative prices of homes with a larger living area.³⁹

Figure 55. Survey responses regarding home-working among Swedish households

Per cent



Note. The survey included 2055 randomly selected individuals who work full-time or part-time at workplaces across Sweden. The survey was conducted on 14–18 January 2021.

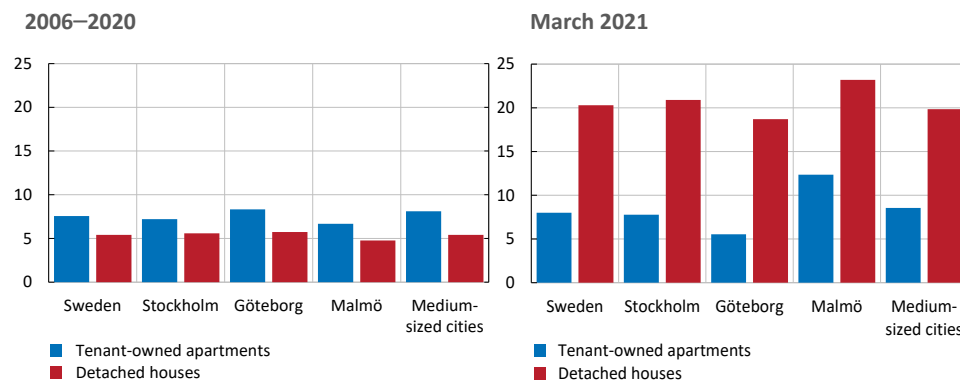
Source: Netigate.

In Sweden, the clearest trend in relative prices during the pandemic is more rapidly rising prices for detached houses than for tenant-owned apartments. This is true both of more aggregated price data and of developments in different parts of the country (See Figure 56). The development is in contrast to the trend over the past 15 years, when prices of tenant-owned apartments rose significantly more rapidly than detached house prices (see Figure 56).

³⁹ In one of the articles in the Riksbank's analysis of the housing market in 2011, a greater preference for housing services compared with other consumption, in combination with falling real interest rates and rising disposable income, were deemed to the most important explanations behind the sharply rising housing prices in Sweden from the mid-1990s up until 2010. However, it was not possible to establish what the increased housing preferences were due to; see C-A. Claussen, M. Jonsson and B. Lagerwall, "A macroeconomic analysis of housing prices in Sweden", in the Riksbank's commission of inquiry into risks on the Swedish housing market, Sveriges Riksbank, 2011.

Figure 56. Price growth in detached houses and tenant-owned apartments in Sweden 2006–2020 and over the past year

Annual percentage change



Note. 2006–2020 refers to average annual percentage change from January 2006 to January 2020.

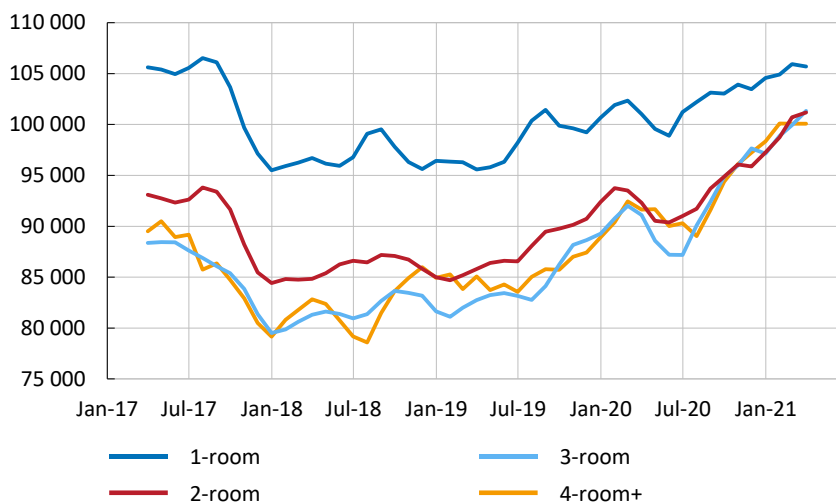
Source: Valueguard.

Many people working from home could also lead to a lower value than previously being attached to proximity to the workplace. This could contribute to prices rising more outside big cities or in areas that take longer to commute from. However, the data offers no clear support for such a hypothesis. For example, housing prices have risen rapidly both in big cities and in medium-sized cities (see Figure 56). And prices of apartments in central Stockholm, which have been very high for a long time, have accelerated during the pandemic (see Figure 57). Price growth over the past year is as high as in Greater Stockholm. Apartment prices have also risen in Göteborg and Malmö at the approximately the same rate in the central areas as in the whole metropolitan area.⁴⁰

An interesting tendency is that prices of larger apartments, for example in central Stockholm, have increased more rapidly than prices of smaller apartments (see Figure 57). This could reflect that apartment buyers also want to have a larger living area. However, developments in other parts of the country are not entirely clear. In some region, prices of smaller apartments have increased just as much as or more than prices of larger apartments. This suggests that price growth in the country as a whole reflects a demand not just for a larger living area, but also for better housing generally.

⁴⁰ According to Swedish estate agent statistics, prices of tenant-owned apartments increased in March by 7.1 per cent in central Stockholm and 6.8 per cent in Greater Stockholm, compared with the same month last year. The corresponding figures were 6 per cent in central Göteborg and 6.8 per cent in Greater Göteborg, and 10 per cent in central Malmö and 12.1 per cent in Greater Malmö.

Figure 57. Apartment prices per square metre in central Stockholm SEK



Source: Mäklarstatistik.

Another sign of households wishing to spend more money on their homes than on other consumption is that the demand for goods related to the home has increased during the pandemic. Some of the components of household consumption that have increased the most are interior decoration and furniture.⁴¹ In addition, FI's mortgage survey indicates that supplementary loans increased significantly in 2020. Supplementary loans mean that the mortgagor increases the mortgage on their home in order to use the money for other purposes. Another term for this is mortgage equity withdrawal. The fact that this type of loan grew in 2020 may have to do with a greater desire to renovate the home. Credit institutions that report the purpose of the loans state that a majority of them were intended for "home improvements".⁴²

Those who have kept their jobs may continue to demand housing

Another feasible explanation for housing prices not having been affected by the economic downturn according to historical patterns has to do with developments on the labour market. The coronavirus crisis has been shown to have striking asymmetrical economic effects, where some sectors have coped well while others, such as hotels and restaurants, have encountered huge problems (see Figures 38 and 39). Temporary employment is more common in these sectors. And the first to be made redundant in a crisis are normally people with less permanent jobs, something which has been very noticeable during the pandemic (see Figure 58). On the other hand, employment among permanently employed workers has only been affected to a small degree (See Figure 58).⁴³

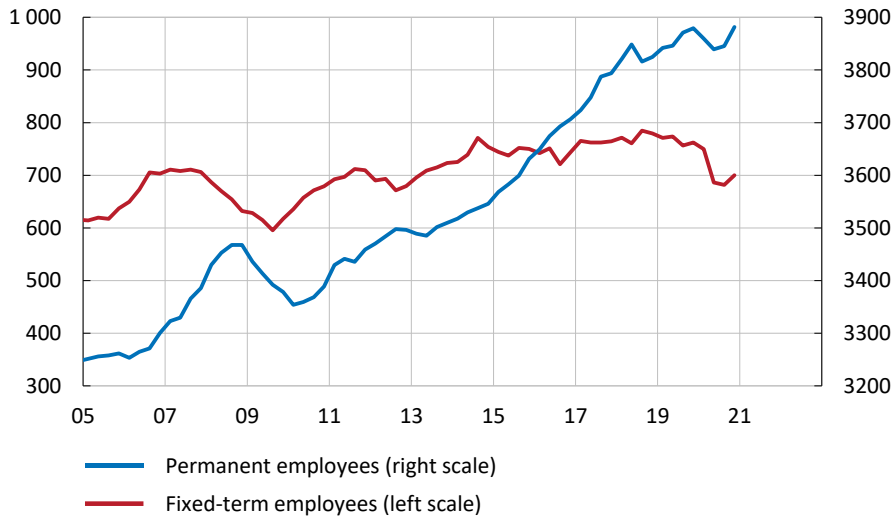
⁴¹ See Statistics Sweden, "Swedish economy, statistical perspective", no 3 2021.

⁴² See Finansinspektionen, "The Swedish Mortgage Market", 2021.

⁴³ See I. Häkkinen Skans "The coronavirus crisis and the labour market - effects in the short and long term", Economic Commentaries no. 1, Sveriges Riksbank, 2021.

Figure 58. Number of persons employed, by form of employment

Thousands, seasonally-adjusted quarterly data



Source: Statistics Sweden.

Temporarily employed persons already had a weak position on the housing market before the pandemic, due in part to them as a rule finding it more difficult to obtain a mortgage from banks. Employment among those already well established on the housing market and with permanent jobs has instead been affected to a small extent.

Interaction between several factors

There are several explanations for why housing prices have risen during the pandemic, and these have also interacted and reinforced one another. Households have had more money over when other consumption has been suspended, which has enabled them to spend more money on their home. Working from home has also meant that many want to do so. But the prerequisite for this to be able to happen at all was that households could keep their jobs, despite the economic downturn. The Riksbank’s assessment is that housing prices are continuing to rise but the rate of increase is expected to slow during the course of the year.