

ARTICLE – The coronavirus crisis and the Riksbank's asset purchases

When the coronavirus pandemic broke out in the spring of 2020, the economic situation deteriorated rapidly, conditions on the financial markets worsened and prospects seemed very uncertain. In a short time, the Riksdag and the Government, the Riksbank and other authorities implemented a series of measures to prevent the economic downturn from becoming even deeper and to support the economy during the recovery. The Riksbank's programme for asset purchases formed part of the Riksbank's crisis management. This article describes the motives behind the purchases and summarises the experiences so far. Given the objective of the programme, the Riksbank's assessment is that the purchases have fulfilled their function and that they have contributed to limiting the harmful effects of the pandemic on the Swedish economy.

The coronavirus pandemic – an unusual crisis in several ways

Two years ago, in March 2020, the Riksdag Committee on Finance organised a hearing on monetary policy, as it usually does at that time of year. Although the hearing took place only one month after the publication of a new Monetary Policy Report, the Riksbank noted that the assessments in the report had already become irrelevant. The spread of the coronavirus that had taken place across the world since then had considerably aggravated the situation and the disease and measures to limit the spread of infection caused a drop in demand and disruptions on the supply side. It was clear that the Swedish economy would be affected, but how strongly and to which extent nobody knew at this point. Would production fall quickly and then rise as quickly, resulting in a graph shaped like a V? Or would it instead develop like a U or, in the worst case, an L?

Deep but short-lived economic downturn

Two years later, we do not have the final result as the pandemic is not quite over yet, but nevertheless we have a clear picture of its economic effects. When countries shut down large sections of society in the spring of 2020 in order to reduce the spread of infection, this led to a sharp drop in output and rising unemployment. In Sweden and the countries that are most important for Swedish trade, a recovery started in the

summer of 2020. Many of these countries saw a recovery from much or all of the decline in output in 2021, despite new waves of increased infection.³⁹

For Sweden, the level of GDP at the end of 2021 was in line with the Riksbank's forecast before the outbreak of the pandemic (see figure 25 Chapter 3). At the same time, unemployment in Sweden has receded and is approaching the pre-crisis level. Long-term inflation expectations, as well as underlying inflation, were around 2 per cent at the end of 2021.⁴⁰ So far, the economic damage caused by the crisis therefore seems to have been temporary, which is unusual, for example in comparison with the global financial crisis and, not least, the Swedish crisis of the 1990s.⁴¹ There are several explanations for this. Two important ones are the extensive economic policy support that was implemented in Sweden and around the world, and the COVID-19 vaccination programmes which were launched at the beginning of 2021.

The pandemic was the root cause of the crisis

One important difference between the coronavirus crisis and previous crises is that, this time, the root cause was a pandemic which, together with the measures to mitigate the spread of infection, caused an economic downturn, both through the demand and supply side of the economy, and through disruptions in the financial system. It also happened at the same time across large parts of the world. The economy was therefore affected by a shock that was difficult to relate to previous crises in modern time, as it differed in nature from previous shocks.⁴² This contributed to the great uncertainty over developments in both the short and long terms. The uncertainty was increased by the fact that the situation changed rapidly – too rapid for the economic indicators on which the Riksbank and others rely in normal times to provide a current picture.⁴³ It was therefore initially difficult to get to grips with the way in which the coronavirus crisis had affected the economy.

Active fiscal policy to weather the storm

It quickly became clear, however, that the consequences of the pandemic were major for the entire Swedish business sector, where certain branches of the trade and service sectors were affected particularly severely. Companies did not know how much their operations and employees would be affected and, for many of them, the question was whether operations could even continue. The number of redundancy notices rose to levels far beyond those seen in previous crises (see Figure 26 in Chapter 3). There was a great risk of waves of bankruptcies and redundancies. In order to help viable businesses overcome the crisis and avoid such a development, fiscal policy

³⁹ However, the recovery has been slower in other parts of the world, where many economies are still burdened by the pandemic.

⁴⁰ But due to rapidly rising energy prices, CPI inflation was significantly above 2 per cent; see Chapter 1.

⁴¹ However, the effects that can be measured in the economic statistics do not mention the great human suffering caused by the pandemic.

⁴² It is difficult to draw parallels with previous pandemics, given the major changes in society that have taken place since they occurred; see S. Laséen (2021), "How lasting are the economic consequences of pandemics? 220 years of Swedish experiences", *Economic Review* no. 2, Sveriges Riksbank.

⁴³ Inflation also became more difficult to measure, as the pandemic had a significant impact on household consumption patterns. See the article "Changed consumption during the pandemic affects inflation" in *Monetary Policy Report*, February 2021, Sveriges Riksbank.

needed to play a more active role than in previous crises. The Riksdag and the Government implemented a number of crisis measures with financial support for companies, including short-time work compensation schemes, reorientation support, support for individuals and strengthened safety nets for those who had lost their jobs.

Monetary policy in a new environment to prevent an even deeper downturn

The coronavirus crisis also brought new challenges for monetary policy in comparison with previous crises. Among other things, these challenges were linked to changes in the economic environment. For many central banks, including the Riksbank, the pandemic occurred in a situation where an expansionary monetary policy had been conducted over a long period in order to bring inflation up to the inflation targets. Policy rates were therefore low even before the crisis and several central banks had built up a portfolio of government bonds with the aim of further reducing the level of interest rates. Monetary policy in Sweden, as well as in other countries, also needed to relate to structural changes to the way companies and banks obtain funding (see next section) – changes with significance for the risks in the financial system and the way monetary policy can affect output, employment and inflation via the financial markets.

Another challenge for monetary policy was the great uncertainty as to how the pandemic and measures to mitigate the spread of infection would affect the economy. What measures were needed, how extensive should they be and how long would they be in place to make it easier for businesses and households to overcome the crisis? It was also of great importance to ensure that the situation was not aggravated by the spread of the crisis to the financial markets. The pandemic could then have caused an even deeper economic downturn. Several of the Riksbank's measures therefore also had pre-emptive features to prevent a severe credit crunch.

The importance of liquidity, continued lending and low interest rates

Even though the coronavirus crisis had unusual components, at the start of the pandemic it was fairly clear what the Riksbank's crisis management needed to focus on, although it was not possible to know in advance exactly what measures were required and how extensive they needed to be.

The financial lifeblood must be kept flowing

Something that often happens early in crises is that companies have shortages of liquid funds. When demand for companies' products and services falls sharply, their incomes decrease, making it more difficult to pay wages, for example. This, in turn, leads to more redundancy notices and layoffs. Companies therefore try to maintain their debt-servicing ability, among other means through the loan and credit possibili-

ties that companies have via customers, the banks and the issuing of their own securities. The shortage of liquid funds, and concern for such a shortage, thus creates high demand for credit, which creates stress in the financial markets.

Demand for loans increases among banks at the same time as it becomes increasingly uncertain whether companies are able to repay loans. As a result, the risk of losses on lending increases and the banks therefore tighten the terms for obtaining loans.⁴⁴ Moreover, the banks' own funding is inherently sensitive to shocks, as banks borrow money at short maturities but lend it for longer maturities. The banks' borrowing thus normally needs to be repaid before the bank recovers the money it lends. Uncertainty over the financial strength of companies and the poorer outlook mean that companies' equity values are falling and investors are more likely to seek relatively safe, more liquid assets. Interest rates in various financial markets rise in step with demands for compensation for holding higher-risk securities. Markets function less well and may, in some cases, cease to function. Stress on the financial markets thus increases as a result of tighter financial conditions.

Crises therefore involve a great risk that problems will arise in what is sometimes likened to the economy's blood circulation, that is, the flow of payments and credits. This may exacerbate the economic situation through a self-reinforcing spiral of worsening financial conditions and credit tightening, and it is therefore essential to prevent this happening. What the Riksbank can do, among other things, is to supply money to the financial system so that lending is not affected by a lack of liquidity. The structure of the system means that the Riksbank directs its actions toward the banks and the financial markets. However, the actual aim of the measures is to help keep lending to households and businesses going in order to mitigate the effects of the crisis.

The pass-through of monetary policy needs to be safeguarded

The Riksbank has the statutory task of maintaining price stability, which the Riksbank has specified as a target for inflation of 2 per cent. Monetary policy is adjusted so that the inflation target can be reached in the short term. One prerequisite for this is that the effect of monetary policy can spread through the financial markets and onward through the economy, including via the interest rates faced by companies and households, so that the policy ultimately has the intended effect on inflation.

However, when one or more of the financial markets is functioning less efficiently and uncertainty and risk premiums are pushing up market interest rates, the effect of monetary policy will be less or non-existent. The Riksbank then needs to take further measures to ensure that monetary policy reaches households and companies as planned – that the so-called transmission works. In this way, there is no contradiction between, on the one hand, striving to meet the inflation target and support the real

⁴⁴ The poorer prospects for companies also mean that, for accounting reasons, the banks need to allow for increased loan losses, which weakens their performance and risks slowing down credit granting.

economy, and, on the other, combating problems in various financial markets and ensuring that increased risk and uncertainty do not drive interest rate setting. The functioning of the transmission is a condition for achieving the inflation target.

Measures must be fit for purpose

In order to ensure the supply of liquidity and the transmission of monetary policy, the Riksbank's measures need to be adapted so that they can solve problems arising in the financial system. The Riksbank therefore needs to be prepared to shift or broaden its focus and consider new measures at the same pace as structural changes occur on the financial markets.

Traditionally, the Riksbank's focus has mainly been on the banks, partly because Swedish companies have mainly used bank loans to obtain funding. That is still the case. However, since the global financial crisis, companies, especially larger ones, have increasingly chosen to seek funding directly on the financial markets by issuing certificates and bonds. Wholesale funding now accounts for about one third of companies' loan financing, which, in terms of size, corresponds to just over a quarter of Swedish GDP. It is positive that companies have more options for financing. However, the market is still undeveloped and has a number of other characteristics that make it susceptible to shocks.⁴⁵ During the pandemic, there was therefore reason for the Riksbank not to focus its measures solely on the banks.

The Riksbank's asset purchases formed part of the crisis management

On 12 March 2020, two days after the hearing in the Committee on Finance, the Riksbank held an extraordinary monetary policy meeting and decided on the first crisis measure.⁴⁶ The Riksbank then considered that there was an imminent risk of a major credit crunch that would exacerbate the economic downturn and reduce the chances of meeting the inflation target. This meeting was followed by some twenty more monetary policy decisions, at meetings or per capsulam, in 2020 on measures to ensure the banks' ability to obtain funding, secure lending to companies and households, maintain the low level of interest rates for bank loans and securities borrowing and support the economy.⁴⁷

⁴⁵ Among other things, the market is concentrated to a few larger companies, and real estate companies account for almost half of the outstanding value of all corporate bonds issued. See also S. Wollert (2020), "Swedish corporate bonds during the coronavirus pandemic", *Staff Memo*, October, Sveriges Riksbank, and the article "The Swedish market for corporate bonds" in *Monetary Policy Report*, July 2020, Sveriges Riksbank.

⁴⁶ A programme for lending of up to SEK 500 billion to the banks for onward lending to companies.

⁴⁷ See *Account of Monetary Policy 2020* for details of the Riksbank's meetings in 2020 and the measures decided at each meeting. The decisions taken in 2021 are described in Chapter 2.

A broad combination of substantial measures was necessary

Most of the Riksbank's measures were launched in March and April 2020.⁴⁸ As the future was so uncertain, it was impossible to fine-tune measures and, as the situation was deteriorating quickly, it was not appropriate to apply one measure at a time and then wait for and evaluate the effects. As a precaution, to reduce uncertainty and to create stability, it was necessary to act quickly, broadly and on a large scale. The Riksbank therefore implemented a long series of measures in a short period of time to ensure that there was plenty of liquidity, that the transmission of monetary policy could function and that the level of interest rates could be kept down. An even larger and more lasting downturn in the economy could thereby be avoided, which was also positive for inflation prospects.

Acquisition of assets to maintain the effect of monetary policy and keep the level of interest rates down

The Riksbank's programme for the purchase of various securities was part of its crisis management and was designed to influence the financial markets widely. Purchases of government bonds, which have been part of the Riksbank's monetary policy since 2015, restrain the general level of interest rates and the longer-term interest rates in the economy. These purchases can also be a signal to the market that the Riksbank expects the repo rate to be kept low in the future. Lower government bond yields can also contribute to lowering the yields on higher risk bonds.⁴⁹ Purchases of municipal bonds can be seen as a complement to purchases of government bonds to affect longer market rates. Covered bonds, that is, bonds guaranteed by property and tenant-owned apartments, account for approximately 70 per cent of the total funding of Swedish banks' mortgage loans.⁵⁰ Rising premiums on these bonds, as at the beginning of the coronavirus crisis, may therefore affect lending, and the interest rates faced by households and companies rise. Purchases of covered bonds can lower the level of interest rates and funding costs for banks and thus support lending in the economy.

The purchase of corporate debt securities is an unusual measure for the Riksbank and other central banks and was carried out during the pandemic to stabilise the situation in markets affected by uncertainty and rising risk premiums. If the corporate bond market does not function, companies obtaining funding in this way, which are primarily large companies, will to a greater extent turn to the banks to borrow and thus risk choking off lending to smaller companies. Supporting the market for corporate debt securities will thus also make it possible to ease stress affecting other types of lending.

⁴⁸ Table 1 in the Appendix summarises the Riksbank's measures and the main purpose of each measure. See also the article "How the Riksbank's measures have worked during the corona crisis" in *Monetary Policy Report*, September 2020, Sveriges Riksbank.

⁴⁹ See J. Alsterlind, H. Erikson, M. Sandström and D. Vestin (2015), "How can government bond purchases make monetary policy more expansionary?", *Economic Commentaries*, no. 12, Sveriges Riksbank.

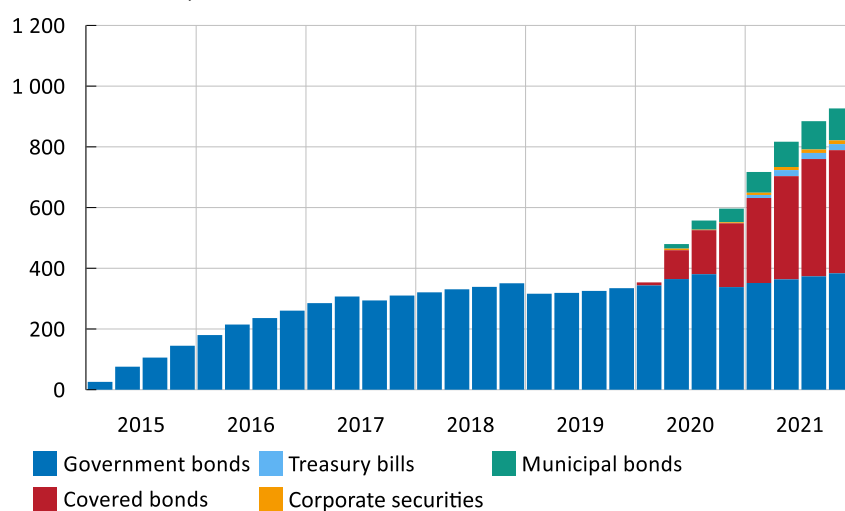
⁵⁰ See R. Eidstedt, D. Forsman and E. Ünlü (2020), "The funding of the major Swedish banks and its effect on household mortgage rates", *Economic Commentaries* no. 14, Sveriges Riksbank.

Decisions on the framework of the programme and on the purchase of individual securities

The Riksbank took its first decision on the asset purchase programme in response to the pandemic on 16 March 2020. In this decision, the Riksbank set a framework for purchases in a total of up to SEK 300 billion until December 2020.⁵¹ After supplementary decisions a couple of days later, the purchases comprised Swedish nominal and real government bonds, bonds issued by Swedish municipalities and regions and Kommuninvest i Sverige AB, covered bonds issued by Swedish institutions and bonds and commercial paper issued by Swedish non-financial corporations. Figure 33 shows the Riksbank's holdings of securities from the start of government bond purchases in 2015 to the end of the last quarter of 2021.⁵²

Figure 33. The Riksbank's holdings of securities

Nominal amounts, SEK billion

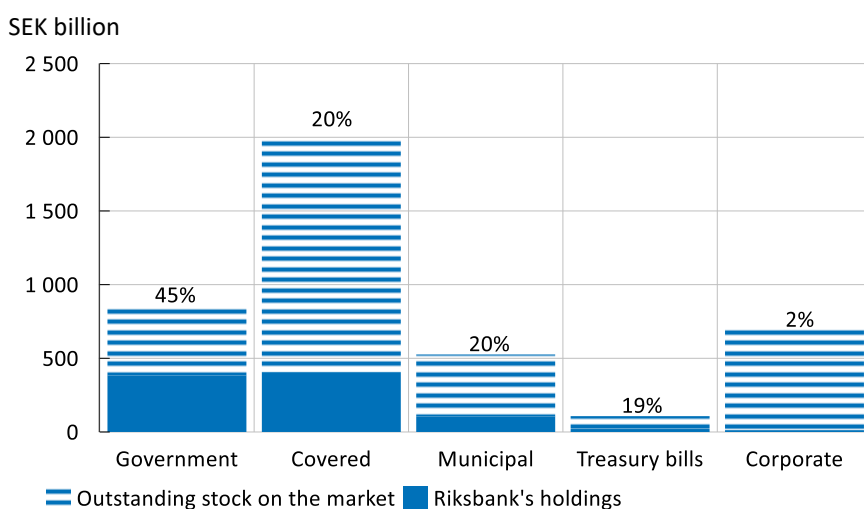


Note. Corporate securities refers to bonds and certificates issued by Swedish non-financial corporations.

Source: The Riksbank.

⁵¹ The framework amount for the pandemic programme and the purchases of government bonds made under the programme were in addition to the purchases made in 2020, which were decided upon before the pandemic.

⁵² More details on the Riksbank's asset purchases in practice are available in D. Hansson and J. Birgning (2021), "The Riksbank's asset purchases during the coronavirus pandemic", *Economic Commentaries* no. 12, Sveriges Riksbank.

Figure 34. The Riksbank's holdings of securities compared with the outstanding stock on the market

Note. The diagram shows the Riksbank's holdings in government bonds, covered bonds, municipal bonds, treasury bills and corporate bonds compared with the total outstanding stock for each type of security in the Swedish market. The figures are shown in billions of Swedish kronor as of 31 December 2021. The holding as a share of the outstanding stock has been rounded to the nearest percentage point.

Sources: Statistics Sweden and the Riksbank.

After the initial purchases, the Riksbank established a system in which decisions were taken on the distribution and size of purchases of various securities under the programme for one quarter at a time. This provided the flexibility to adapt monetary policy and asset purchases continuously to the situation in the markets and the economic outlook and inflation prospects. In June and November 2020, the Riksbank also adjusted the framework for the programme and extended it to ensure that the economy would receive long-term and sufficiently extensive support. In total, the framework was extended so that purchases could be made for up to SEK 700 billion until the end of December 2021.⁵³ The Riksbank did not make any further changes to the framework in 2021 and the programme expired on 31 December 2021. As from the first quarter of 2022, the asset purchases made by the Riksbank have been focused solely on compensating for maturing securities.

Figure 34 shows the Riksbank's holdings of various securities at the end of December 2021 in relation to how much of the various securities were on the market. The Riksbank's holding of approximately 45 per cent of government bonds reflects the fact that the Riksbank also purchased government bonds before 2020. The purchase programme during the pandemic resulted in a holding of municipal bonds, covered bonds and treasury bills equivalent to about 20 per cent of the total outstanding stock of the respective securities. Purchases of corporate bonds and commercial paper were considerably smaller. At the end of 2021, the Riksbank owned just under 2 per cent of these bonds and no commercial paper.

⁵³ The decision in November meant that the purchase programme also included treasury bills and green government and municipal bonds to ensure an even broader impact on interest rates.

Developments in the spring of 2020

So far, this article has described the Riksbank's asset purchases during the crisis and their purpose. But what effects have the purchases had? One general observation is that the combination of measures implemented by the Riksdag, the Government, the Riksbank and other Swedish authorities, together with measures in other countries, succeeded in counteracting the turbulence that arose on the financial markets when the pandemic started. The shock to the economy caused by the pandemic was thus not aggravated via the financial markets. The Riksbank's measures, including asset purchases, contributed to this. However, it is difficult to identify the contribution made by any specific measure. It is also difficult to estimate the effect of a measure designed partly to **prevent** something from happening or getting worse – if the measure is successful, there is no worse outcome for comparison.

However, a notion of the effectiveness of the measures can be obtained by observing the development of lending and the financial markets during the coronavirus crisis, partly via different interest rates and credit stocks, and partly through the more subjective assessments of developments over the period made by companies and banks.⁵⁴

The rapid deterioration of credit conditions risked deepening the economic crisis

The spread of the coronavirus and the uncertainty over future developments increased during the winter of 2020, and the precarious situation of companies caused increasing concern in the financial markets. As figure 35 illustrates, the Swedish stock exchange, like stock exchanges around the world, began to fall sharply toward the end of February. Investors wanted to hold safe assets rather than high-risk assets, and this led to a sharp rise in risk premiums in March. This was reflected in the growing differences between the yields on higher risk bonds and the yield on government bonds that figure 36 shows.⁵⁵

Companies were finding it more difficult to obtain funding via commercial paper and corporate bonds, and, in parallel, Swedish banks were finding it more difficult to ensure their financing as, among other things, demand for their covered bonds was falling. The high pressure to sell higher risk bonds, particularly corporate debt securities but also covered bonds, became increasingly difficult to manage in the markets. There was a greater and greater difference between the price at which investors could

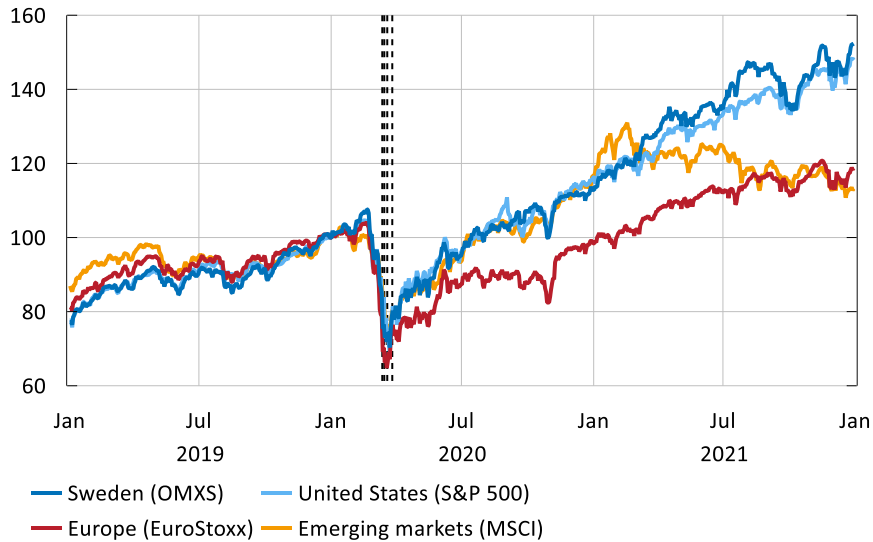
⁵⁴ A detailed chronological review of developments in the financial markets at the start of the pandemic and the measures implemented by the Riksbank and others can be found in P. Gustafsson and T. von Brömsen (2021), "Coronavirus pandemic: The Riksbank's measures and financial developments during spring and summer 2020", *Sveriges Riksbank Economic Review*, no. 1, Sveriges Riksbank. See also Chapter 3 of the final report of the Swedish coronavirus commission, "Sverige under pandemin" (Sweden during the pandemic), SOU 2022:10.

⁵⁵ Figures 34 and 35 illustrate developments in 2019–2021. Figures 1 and 2 in the Appendix only show the development of stock exchanges and yield spreads during the acute situation in March and April 2020. Figures 3 and 4 in the Appendix show how interest rates developed 2019–2021 and March–April 2020 respectively.

consider buying and the price at which corporate bond issuers wanted to sell.⁵⁶ For a period, no new corporate bonds were issued at all.

Figure 35. Equity market movements in local currency

Index, 3 January 2020=100



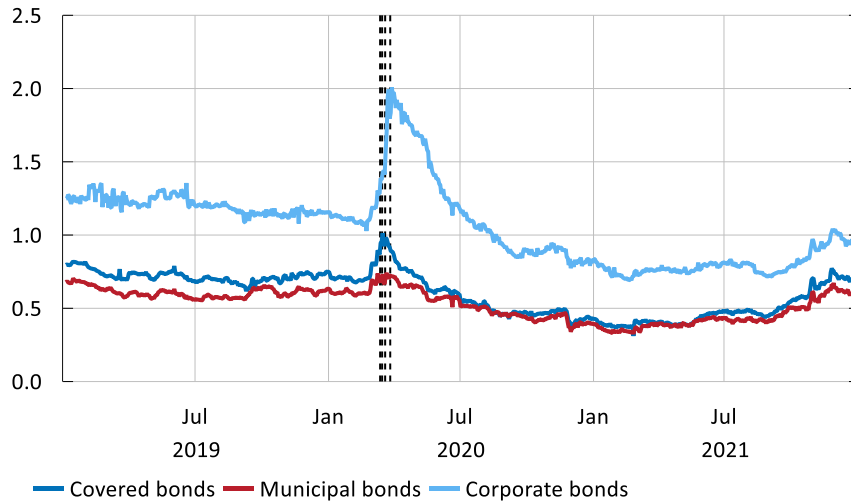
Note. Broken lines mark the Riksbank’s decisions on 12, 16, 19 and 26 March and the decision on 2020 June.

Source: Macrobond.

⁵⁶ See Figures 5 and 6 in the Appendix. More details concerning this development can be found in S. Wollert (2020), “Swedish corporate bonds during the coronavirus pandemic”, *Staff Memo*, October 2020, Sveriges Riksbank.

Figure 36. Yield spread between different types of bonds and government bonds in Sweden, 5 year maturity

Percentage points

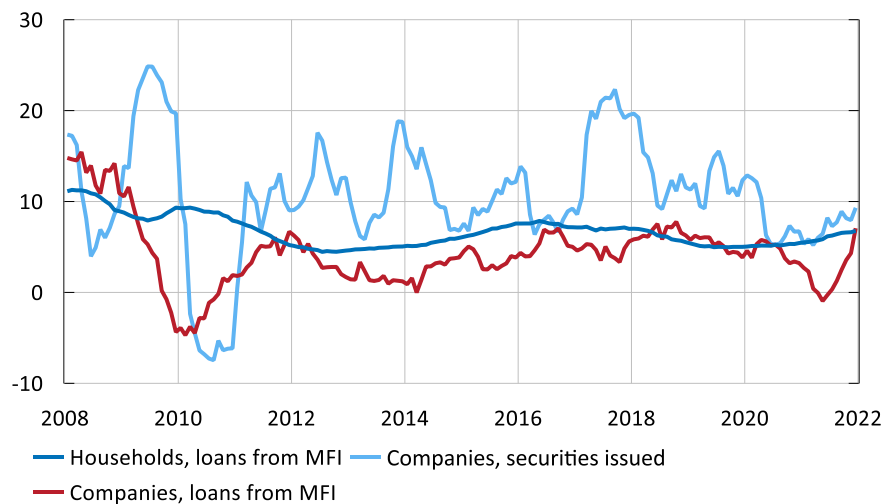


Note. Covered bonds, corporate bonds and government bonds are zero coupon rates calculated using the Nelson-Siegel method. Corporate bonds include companies with credit ratings of BBB or higher. Municipal bonds are benchmark bonds, issued by Kommuninvest i Sverige AB. Broken lines mark the Riksbank’s decisions on 12, 16, 19 and 26 March 2020.

Sources: Bloomberg, Macrobond, Refinitiv and the Riksbank.

Figure 37. Household and corporate borrowing

Annual percentage change



Note. Lending by monetary financial institutions to households and non-financial corporations adjusted for reclassifications and bought and sold loans. Securities issued by non-financial corporations have been adjusted for currency impact. Loans from MFIs constitute around two thirds of total lending to companies, while securities issues constitute around a third.

Source: Statistics Sweden.

Surveys by the Riksbank, the National Institute of Economic Research and Almi and other contacts that the Riksbank had with companies, banks and actors on the financial markets confirmed the urgent situation. Companies talked about a lack of liquidity as a result of reduced revenues, while conditions for external funding had deteriorated. Many considered that the banks were being overwhelmed by loan applications and that interest rates on loans had risen. At the same time, the banks felt that their funding had become more problematic in both the short and the long term.

However, the aggregated statistics indicate that the situation did not develop into a severe credit crunch. Lending rates to households and companies increased slightly but were stable in principle (see Figure 4 in Chapter 1). Figure 37 shows that, in principle, lending from banks and other monetary institutions to households was not affected. Companies reduced their securities issuance but could partially replace that source of funding with bank loans. Lending to companies increased during the spring and summer of 2020. A breakdown shows that the banks' short-term lending to companies of all sizes increased by 40–50 per cent in a short time at the start of the pandemic (see Figure 7 in the Appendix). Lending at longer maturities also increased, but mainly to large companies, which could indicate that the banks were being influenced by the uncertain future prospects and holding back parts of their lending to smaller companies (see Figure 8 in the Appendix).

The Riksbank's asset purchases and stabilisation of the situation

The widespread concern and the rapidly deteriorating outlook for Swedish companies led the Riksbank to take a number of measures starting on 12 March. On 16 March, the Riksbank announced, among other things, the asset purchase programme described above. Judging by how Swedish interest rates developed immediately after this announcement, it may have contributed to dampening the upturn.⁵⁷ These two dates, together with the decision of 19 March to include the purchase of corporate debt securities in the programme and the announcement on 26 March of the starting point and details of the purchase of commercial paper, are marked in figure 35 and figure 36.⁵⁸

The financial conditions began to stabilise at the end of March and in April. This was probably due to several interacting factors. More and more comprehensive measures were launched internationally. Figure 13 in Chapter 2 illustrates how measures by the Federal Reserve, the ECB and the Bank of England, including their purchases of securities, caused the balance sheets of these central banks to grow strongly. Previously announced measures in Sweden also became more concrete and began to be implemented. The risk premiums on covered bonds fell to close to zero after the Riksbank

⁵⁷ See P. Gustafsson (2022), "An event study of the effects of asset purchases on financial prices during the pandemic", *Staff Memo*, March, Sveriges Riksbank.

⁵⁸ It is important to note that the Government and authorities other than the Riksbank announced measures at the same time. For example, the scheme for short-time work compensation was presented on 16 March. By this point, conditions in Sweden were also being affected by the extensive programmes of measures announced and implemented globally, not least by other central banks.

offered to buy bonds.⁵⁹ The yield spread between corporate and government bonds stabilised in connection with the Riksbank's announcement of the details of the purchase of commercial paper on 26 March and the start of the purchases on 2 April (see figure 36 and Figure 2 in the Appendix).

The Riksbank laid out its plan for the purchase of corporate bonds in mid-2020 and began purchases in September. By that time, the market had recovered and yields on corporate bonds were only slightly above the pre-pandemic levels. There was good reason to believe that the Riksbank's earlier announcement of future purchases of corporate bonds had contributed to this. Although the desired effect on the market had already been achieved, it was important that the Riksbank actually also carried out the purchases. Failure to do so could increase market uncertainty and risk future signals about the purchase of securities having less effect. It was also important to carry out the purchases so that they could quickly be scaled up if the market situation were to deteriorate.

Developments from the summer of 2020 onwards

During the summer of 2020, concern over companies' ability to pay subsided, investors became more willing to hold high-risk assets and the situation in the financial markets became calmer. The supply of credit was maintained, interest rates fell and the yield spread between higher risk bonds and government bonds decreased in trend terms (see figure 36). However, although a financial crisis had been averted and developments had become more stable, the situation was still fragile. The spread of infection had fallen during the spring and summer, but how the pandemic would develop and what that would mean for the recovery and for inflation in the period ahead was very uncertain. During the autumn, there was a setback with an increased spread of infection and increased restrictions in many countries. Monetary policy needed to secure and signal long-term support for the credit supply and for the recovery. The Riksbank therefore expanded the framework amount and extended the programme for the purchase of assets until the end of 2021. In addition, the Riksbank increased the pace of purchases during the first quarter of 2021 in relation to the last quarter of 2020.

Low interest rates and expansionary financial conditions have supported the recovery

The asset purchase programme was put in place in a situation where the unease and unwillingness of investors to hold riskier assets led to an ever greater spread of yields on these assets and on government bonds. By purchasing assets, the Riksbank was able to take over part of the risk from the market. This helped prevent interest rate differentials from increasing further and eventually helped them to decrease. Later in the pandemic, when the situation in the financial markets had stabilised and the development of interest rates was no longer primarily being driven by risk premiums,

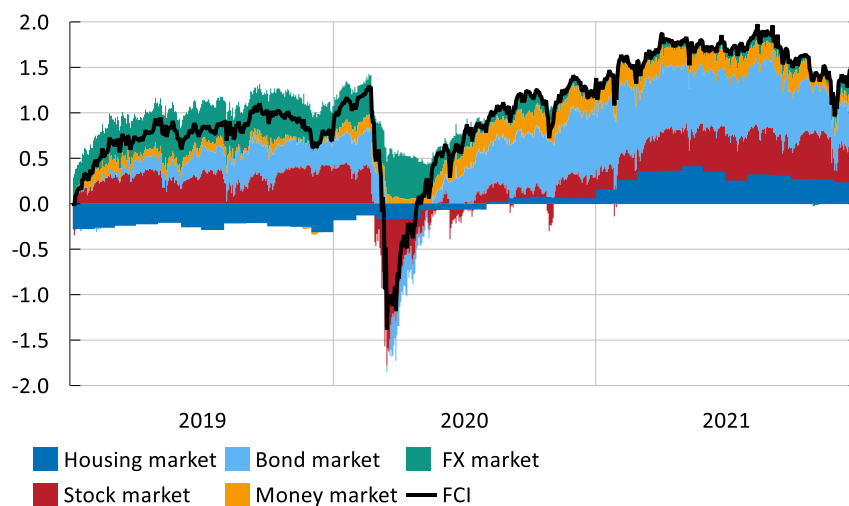
⁵⁹ However, it is difficult to determine exactly how much the Riksbank's purchases contributed to this. See J. Alsterlind (2021), "The development of risk premiums on covered bonds during the coronavirus pandemic", *Economic Commentaries* No. 13, Sveriges Riksbank.

the purchases were aimed more broadly at holding down the level of interest rates in the economy and stimulating demand.

Figure 38 illustrates the Riksbank's financial conditions index (FCI) and gives an overall view of developments in the financial markets during the pandemic.⁶⁰ As shown in the diagram, there was a rapid shift from expansionary to very tight financial conditions in early 2020 due to developments in the stock and bond markets. After the acute situation, conditions became increasingly expansionary from the summer of 2020 until the summer of 2021. The financial conditions have thus provided support for the recovery (see Chapter 1).

Figure 38. Financial conditions index

Standard deviations



Note. A higher value indicates more expansionary financial conditions. The coloured columns show the contributions of the different sub-markets to the index.

Source: The Riksbank.

This development is partly due to the low level of interest rates in the economy. Is it possible to say something more specific about the contribution of asset purchases to this? As mentioned earlier, this is problematic for several reasons, not least because many other measures were implemented simultaneously.⁶¹ One way of trying to identify the effects is to study developments in the financial markets in connection with the Riksbank's announcements concerning the purchases. One such study of the effects seen when the Riksbank launched its purchase programme and later announced

⁶⁰ For details on this index, see J. Alsterlind, M. Lindskog and T. von Brömsen (2020), "An index for financial conditions in Sweden", *Staff Memo*, February, Sveriges Riksbank.

⁶¹ Some conclusions can be drawn concerning the effects based on studies of the Riksbank's purchases of government bonds prior to the pandemic. One difficulty, however, is that purchases during the pandemic consisted mostly of other securities. For analyses of the effects of the purchases of government bonds, see for example O. Melander (2021), "Effects on financial markets of the Riksbank's government bond purchases 2015–2017", *Economic Review* No. 1, Sveriges Riksbank, H. Erikson (2021), "Central bank bond purchases and premiums – the Swedish experience", *Staff Memo*, December, Sveriges Riksbank and R. De Rezende, D. Kjellberg and O. Tysklind (2015), "Effects of the Riksbank's Government Bond Purchases on Financial Prices", *Economic Commentaries* No. 13, Sveriges Riksbank.

changes to the framework amount and duration of the programme indicates that purchases contributed to more expansionary financial conditions via lower yields, a weaker exchange rate and higher equity prices. In particular, interest rates on municipal bonds and covered bonds were affected and these bonds formed a large part of the Riksbank's buying programme.⁶²

Important for the economic outlook and inflation prospects to have sustained support from monetary policy

In the winter and spring of 2021, the economic outlook brightened. Vaccination against COVID-19 took off and it became clear that the second large wave of infection and tighter restrictions were not having the same effects on the Swedish and international economies as the first wave did in the spring of 2020. The recovery was well on the way, but continued support was needed to strengthen the labour market, increase resource utilisation in the economy and thereby raise inflation prospects (see Chapter 2). The Riksbank, like many other central banks, considered that monetary policy needed to be persistent and that there was a high risk that the winding-up of the crisis measures and reduced support from monetary policy, or expectations of this, could break the economic upswing. However, several crisis measures that were introduced in the acute initial stage of the crisis could be phased out in 2021. Among other things, the Riksbank closed loan facilities, for which there had been low demand for some time, and decided to restore the requirements for collateral that the banks have to provide in the case of loans from the Riksbank.

At the start of 2021, the Riksbank signalled that the entire envelope of the asset purchase programme of up to SEK 700 billion would probably be fully utilised. Decisions taken in 2021 concerned how the remaining amount should be allocated to various securities and, as can be seen in figure 33 above, the Riksbank gradually tapered the purchases it made during the year. Other central banks with similar buying programmes also continued to expand their holdings of securities in 2021, although the purchase rates and the distribution of securities differed slightly. Toward the end of the year, the issue of a future reduction of the expansionary monetary policy became more relevant, as did the question of when and at what pace the central banks' portfolios of securities should be decreased (see Chapter 4).⁶³

The highly expansionary monetary policy reflects the extent of the crisis

In 2021, the debate on central bank asset purchases began to be coloured by concerns about the side effects the measures could have and the risks to which they were contributing. Among other things, there was a concern that the purchases had contributed to a general rise in asset prices and, in the case of the Riksbank, housing prices in particular.⁶⁴ However, housing prices rose during the pandemic, despite the fact that mortgage rates remained largely unchanged. This indicates that other factors

⁶² P. Gustafsson (2022), "An event study of the effects of asset purchases on financial prices during the pandemic", *Staff Memo*, March, Sveriges Riksbank.

⁶³ See also the article "Foreign central banks' plans for a gradually less expansionary monetary policy" in *Monetary Policy Report*, September 2021, Sveriges Riksbank.

⁶⁴ This, in turn, has led to further discussions on the distributional effects of monetary policy; see Chapter 4.

than the expansionary monetary policy and purchases of covered bonds influenced developments (see Chapter 4). Among other reasons, the purchases were made to facilitate bank funding in an emergency situation, to counteract an increase in mortgage rates and to reduce the risk of a slump in the housing market that would have further burdened household finances during the pandemic.

More generally, the Riksbank has conducted a monetary policy during the pandemic aimed at mitigating the crisis and supporting the recovery and inflation. This expansionary policy has exacerbated certain vulnerabilities and risks and it is important to identify and manage these.⁶⁵ As always, however, monetary policy has had to focus on the economic outlook and inflation prospects and should be evaluated from that perspective. It is therefore important that asset purchases and other measures are placed in relation to the extent of the crisis and the major negative effects it had and risked having on the real economy and inflation.

The asset purchases have been part of the successful management of the coronavirus crisis

One issue that all economic decision-makers wrestled with in March 2020 was how the coronavirus crisis would develop. How deep would the economic downturn be, how long would the economy be affected, and what needed to be done to counter an even deeper decline and give the economy the best chance to recover? In order to reduce uncertainty and create stability, but also for preventive reasons, it was necessary to act quickly, broadly and on a large scale rather than fine-tuning individual measures. For the Riksbank, this was a matter of ensuring that there was plenty of liquidity and preventing the financial market turbulence from escalating further due to problems in granting credit, as well as of ensuring a low general level of interest rates. The Riksbank therefore implemented a wide range of measures over a short period of time, including the asset purchase programme.

Two years later, it is clear that the coronavirus crisis has been a burden on the economy, but also that the recovery has exceeded many analysts' expectations. Measures by the Riksdag and the Government, the Riksbank and other authorities contributed to averting a financial crisis and, with the support of an expansionary fiscal and monetary policy, the economic situation has become stronger. From this perspective, overall crisis management has been successful. It is, however, difficult to determine the significance of individual measures. Given the objectives of the asset purchase programme, the Riksbank's assessment is that the purchases have fulfilled their function and that they have contributed to limiting the harmful effects of the pandemic on the Swedish economy.

⁶⁵ One example is the high level of household indebtedness, which requires broad reforms in housing and tax policy; see *Financial Stability Report 2021:2*, Sveriges Riksbank.