

ARTICLE – How the Riksbank’s measures have worked during the corona crisis

Like many other central banks, the Riksbank's monetary policy during the corona crisis has been focused on ensuring that the interest rates faced by companies and households are kept low and that the credit supply in the economy functions. This creates the conditions for a good recovery in the Swedish economy, which will help inflation to rise towards the target in the longer run. Important measures adopted include purchases of various types of interest-bearing securities and loans to banks for onward lending to companies. Developments so far indicate that the measures have largely functioned as intended. In addition, initiatives in other policy areas are interacting with the Riksbank's measures to maintain the credit supply to Swedish companies. For example, government loan guarantees are making it easier for fundamentally healthy small companies with liquidity problems to gain access to credits.

Turbulence on the financial markets at the start of the crisis

When the corona crisis broke out in earnest in the spring, strong turbulence arose on the financial markets in the form of major stock market falls and very high volatility, among other things. As the crisis struck directly at companies' revenues, many of them rapidly found themselves facing severe liquidity problems. This also increased the risk for their financial backers. The household sector was also impacted by falling wealth values and increased unemployment.

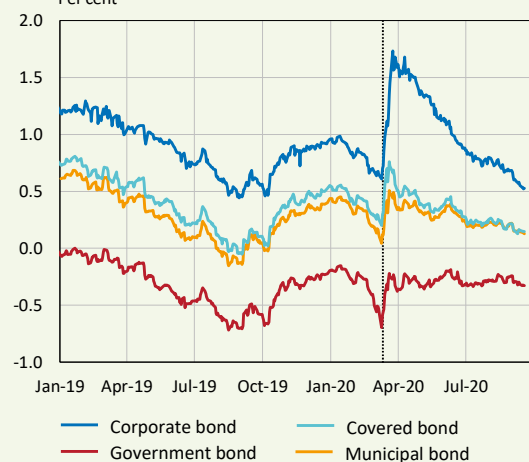
Market rates and companies' access to credits were thereby affected by the financial unease. One effect was heightened demand for liquid assets, otherwise known as a *dash for cash*.⁸ In particular, this concerned safe assets in US dollars with short maturities and central bank reserves.

Interest in holding fixed-income instruments with long maturities decreased for many investors. Rates for these securities rose to varying extents (see Figure 1:12).

The higher risk the instruments had, the more the yields rose. The markets for corporate bonds and covered bonds encountered particularly large problems. The yield for corporate bonds rose most of all. There were several reasons for this. As the corona crisis had a negative effect on many companies' earnings, there was an increase in the credit risk for holders of the instruments issued by these companies, that is, the risk of not getting back the money they had invested. This caused the premium for credit risk demanded by the participants to rise. A further effect was that the market largely consisted only of sellers, which caused liquidity to deteriorate substantially. Those participants wishing, despite everything, to purchase corporate bonds therefore demanded a higher liquidity premium, reflecting how it may become difficult to dispose of instruments if they need to be

sold. One sign of this was that the difference between the rates for purchasing and selling, known as the bid-ask spread, increased strongly (see Figure 1:13).⁹

Figure 1:12. Bond yield rates with 5 years to maturity
Per cent



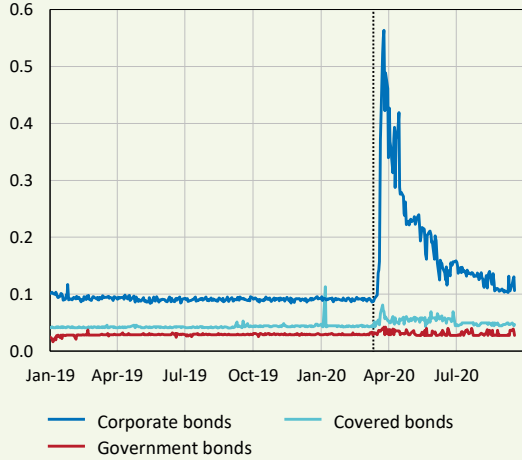
Note. Zero coupon rates calculated using the Nelson-Siegel method. The corporate bond series illustrates a heterogeneous group of bonds for companies with credit ratings of BBB or higher. Municipal bonds are issued by Kommuninvest i Sverige AB. The broken vertical line marks 11 March, when the WHO declared that COVID-19 was a pandemic.

Sources: Macrobond, Refinitiv and the Riksbank

⁸ For a description of this phenomenon, see, for example, "Interim Financial Stability Report, May 2020", Bank of England.

⁹ The price of a bond has an inverse relationship to its yield; the lower the price, the higher the yield.

Figure 1:13. Bid-ask spread
Percentage points

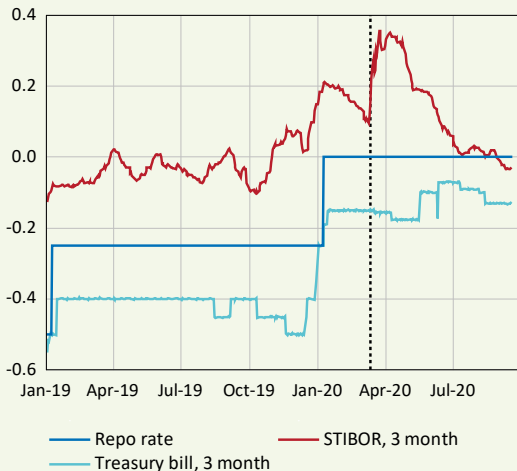


Note. The broken vertical line marks 11 March, when the WHO declared that COVID-19 was a pandemic.
Source: ASTRID (Reuters)

Many funds that owned corporate bonds and found themselves facing liquidity problems chose to sell covered bonds, which were easier to dispose of on the market. In this way, the rising yields spread from corporate bonds to covered bonds.¹⁰

The increased unease on the market was also expressed in the gap between different short fixed-income investments. While short-term government securities' yields fell somewhat, a clear upswing took place in the interbank rate, which is the interest rate the banks pay for loans to one another (see Figure 1:14).

Figure 1:14. The repo rate and market rates
Per cent



Note. The broken vertical line marks 11 March, when the WHO declared that COVID-19 was a pandemic.
Sources: Macrobond, Refinitiv and the Riksbank

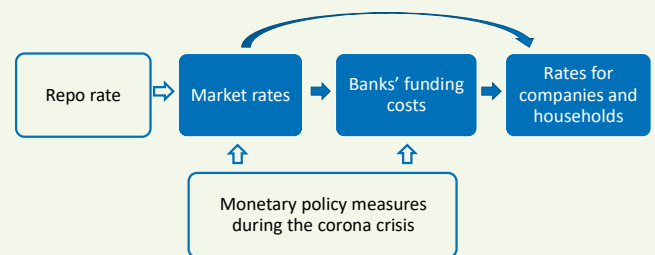
In summary, the initial phase of the corona crisis meant that interest rates on long-term loans rose, as did the premiums

for higher-risk fixed-income instruments. In a situation where many companies had already entered into acute liquidity problems, there was a risk of clear credit tightening for both households and companies in the Swedish economy. Such a development could have further exacerbated the crisis. The Riksbank therefore adopted measures that contributed towards holding down the interest rates faced by Swedish companies and households and that made it easier for the banks to continue to provide companies and households with credit.

How do the monetary policy tools work?

Figure 1:15 describes in a simplified manner how different monetary policy tools can affect the level of interest rates in Sweden. The blue boxes in the diagram illustrate the transmission from the repo rate to the interest rates that companies and households ultimately face. The monetary policy tools that have been in focus for the Riksbank during the corona crisis can support this transmission by directly affecting different paths between the repo rate and final interest rates. As we will see, the efficiency of the measures may depend on the prevailing circumstances.

Figure 1:15. Effect of monetary policy measures on interest rates in Sweden



Purchases of government bonds aim to affect longer interest rates in general in the economy through having a direct effect on the yield on government securities. Via what is known as the signalling channel, purchases can contribute towards signalling that the repo rate will be low in the period ahead. And via what is known as the premium channel, the term premium, which is the extra return demanded by investors if they are to hold long instead of short fixed-income instruments, can fall. This is because the Riksbank is reducing access to bonds on the secondary market through its purchases. In a turbulent situation where investors wish to shift their holdings from long to short fixed-income instruments, this premium channel can be particularly effective. Under the condition that premiums for liquidity and credit risk are not substantially changed, the lower yields for government bonds spread onwards to other bond markets. Purchases of government bonds thus have a broad impact on market rates.

¹⁰ For a more detailed description, see Financial Stability Report 2020:1, Sveriges Riksbank.

Purchases of municipal bonds affect longer market rates in approximately the same way as purchases of government bonds. But the municipal bonds do not have the same position among investors as government securities as regards risk and liquidity, which is reflected in a slightly higher yield level (see Figure 1:12). The purchases can be seen as a complement to purchases of government bonds to affect market rates and have a broad impact in the Swedish economy.

Purchases of covered bonds affect rates on the market for these bonds through approximately the same mechanisms as purchases of government bonds. The effect becomes that the premium that the investors wish to pay, in addition to the yield on government securities, falls. This can be particularly significant if turbulence arises on the financial markets. As the major Swedish banks fund a large part of their lending by issuing covered bonds, the Riksbank's purchases have a direct effect on the banks' funding costs and, ultimately, also on final interest rates to households and companies.

Purchases of commercial paper in the form of bonds and certificates can be particularly effective in a stressed market situation.¹¹ As the Swedish secondary market is relatively small and underdeveloped, and it is difficult to sell these instruments, the knowledge that the Riksbank is active on the market can reduce the liquidity premium demanded by purchasers of the instruments.¹² Historically, Swedish companies have primarily obtained funding via bank loans. In recent years, however, wholesale funding through the issue of commercial paper has increased strongly. Purchases of commercial paper conducted by the Riksbank on the secondary market are aimed at holding down the cost of companies' market-based funding, as illustrated by the bow-shaped arrow in Figure 1:15 from market rates to final interest rates.

Loans to banks for onward lending to companies aim to keep the volume of bank loans to companies up, as a further part of maintaining the credit supply in the economy. The Riksbank lends money to the banks against collateral, on the condition that they increase their lending to companies. This condition is not absolute, but the interest rate becomes particularly low if the banks increase corporate lending.

Further complementary measures during the crisis

In addition to the measures described above, the Riksbank has adopted further complementary measures by offering the banks liquidity, holding their funding costs down and counteracting rising interbank rates. Its objective has been to avoid a credit crunch in the Swedish economy and reduce the risk of the corona crisis developing into a financial crisis. The Riksbank has offered weekly extraordinary market operations, in the form of loans against collateral of 3 and 6

months' maturity to the banks without special conditions for lending to companies, to more generally hold the banks' funding costs down.

In addition, the Riksbank has amended the interest terms in the standing loan facility, meaning that the banks pay a lower interest rate for overnight loans. The requirement for collateral in loans to the banks has also been eased by allowing a larger proportion of covered bonds to be accepted, including those issued by the banks themselves. This lets the banks borrow more from the Riksbank.

One further measure the Riksbank has adopted is to offer loans to the banks in US dollars, which aims to secure the banks' access to liquidity in foreign currency but which can also help keep their funding costs down. The offer of a large volume of loans in US dollars has been made possible through a so-called swap agreement with the US central bank, the Federal Reserve.

Table 1:1 includes a complete list of the measures adopted and the extent to which they have been utilised so far.

The measures have helped keep the level of interest rates low and support the credit supply

One sign that the measures have functioned as intended is the development of the bond market. Following the upturn in March, the long-term market rates for riskier asset types have fallen in Sweden (see Figure 1:12). The downturn on the corporate bond market is particularly clear. The difference between rates for purchasers and sellers, the bid-ask spread, has fallen a great deal on this market, indicating that part of the decline reflects a decreased liquidity premium (see Figure 1:13). Government bond yields have stayed approximately unchanged compared with the period before the crisis (see Figure 1:12).

Overall, the clearest effect of the Riksbank's bond purchases has been the reduced gap between other bond rates and government security rates.

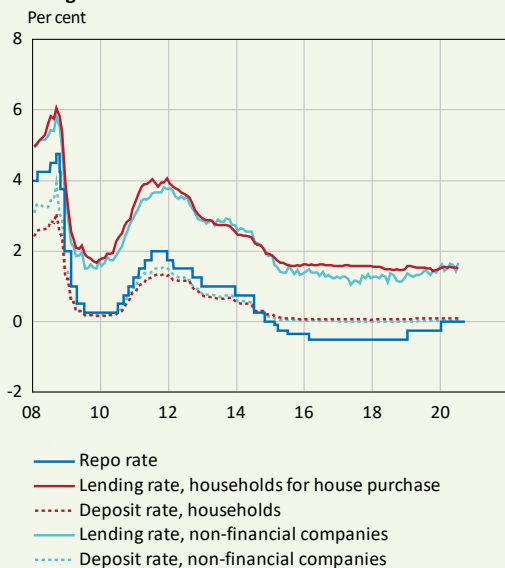
The Riksbank's measures have also had a clear effect on the money market. Since the start of the crisis, the interbank rate has fallen substantially to a level close to or slightly below the repo rate (see Figure 1:14).

The Riksbank's measures have thus contributed to holding market rates and the banks' funding costs down, which has ultimately benefited companies and households in the form of low lending rates. This is confirmed by the interest rates faced by Swedish companies and households not having changed notably since the start of the crisis (see Figure 1:16). This is supporting the economic recovery and contributing to inflation rising towards the target in the longer run.

¹¹ Commercial paper with maturities shorter than 1 year at date of issue are known as certificates. If the maturity is longer, they are known as bonds.

¹² See the article "The Swedish market for corporate bonds", Monetary Policy Report, July 2020, Sveriges Riksbank.

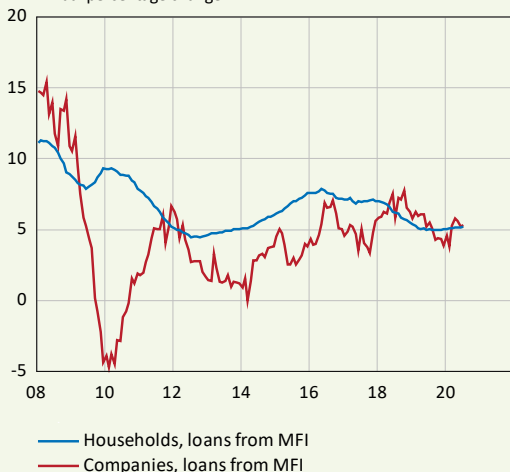
Figure 1:16. Repo rate together with the average deposit and lending rate to households and companies, new and renegotiated loans



Note. MFIs' average deposit and lending rates are a weighted average of all interest rates for different maturities.
Sources: Statistics Sweden and the Riksbank

As we saw earlier, yields on corporate bonds have fallen back substantially, which has contributed to holding down costs for companies' market-based funding (see Figure 1:12). There are also signs that the measures have contributed to keeping the credit supply going in the Swedish economy. The development of total lending to households and companies has been stable throughout the crisis (see Figure 1:17).

Figure 1:17. Lending to households and companies
Annual percentage change

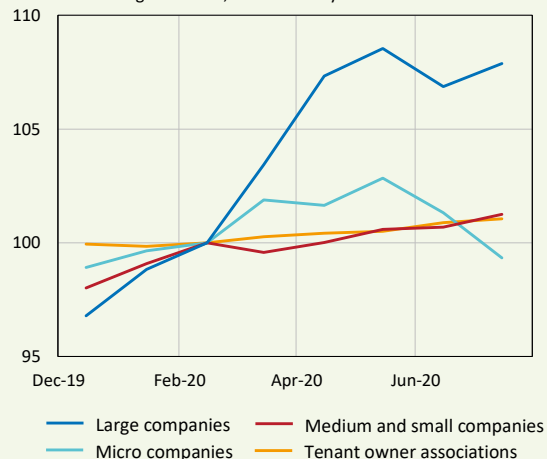


Note. Lending by MFIs to households and non-financial corporations adjusted for reclassifications and bought and sold loans.
Source: Statistics Sweden

Initiatives in other policy areas important for maintaining the credit supply to Swedish companies

The Riksbank's lending to the banks for onward lending to companies includes all non-financial corporations and sole proprietors. The Riksbank has also widened the circle of counterparties, giving smaller banks that primarily have small and medium-sized enterprises as customers the opportunity to borrow from the Riksbank for onward lending to companies. However, it is clear that the banks' lending has primarily increased to larger companies (see Figure 1:18).

Figure 1:18. Bank lending to Swedish companies
Outstanding bank loans, index February 2020 = 100



Source: KRITA (Statistics Sweden)

Lending to smaller companies, the group of companies that has encountered the greatest problems with its liquidity supply, has not increased to the same extent. There are several conceivable explanations for this.¹³ Firstly, demand for credit among these companies may have been low, as taking on more debt entails risk. Secondly, the banks' willingness to lend money to these companies has been limited, for various reasons.

Access to credit for viable small and medium-sized enterprises could be facilitated by having the state intervene and guarantee part of the banks' loans to these companies, for example. Such programmes have already been launched by the government and Swedish National Debt Office and interact with the Riksbank's measures concerning the credit supply to Swedish companies.

¹³ See E. Frohm, J. Grip, D. Hansson and S. Wollert, "Two-tier credit developments during the corona pandemic", Economic Commentaries No. 6 2,020, Sveriges Riksbank.