



Economic Commentary

**The Riksbank's asset purchases
during the coronavirus pan-
demic**

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NR 12 2021, 21 June

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Summary

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A little more than a year has passed since the Riksbank took the first monetary policy measures in March 2020 to curb the negative impact of the coronavirus pandemic on the Swedish economy. One of the Riksbank's measures was to expand asset purchases. Its aim was to keep the level of interest rates low and to facilitate the supply of credit, and the purchases would be carried out within the framework of a new purchasing programme. Over the past year, this programme has gradually been expanded to an amount of SEK 700 billion and has been extended until December 2021. Furthermore, it covers purchases of Swedish government bonds and treasury bills, municipal and covered bonds and commercial paper issued by non-financial corporations. As a result of the expansionary monetary policy, the Riksbank had purchased securities for a nominal amount of about SEK 461 billion by 31 March 2021. This development is illustrated in Figure 1 below.

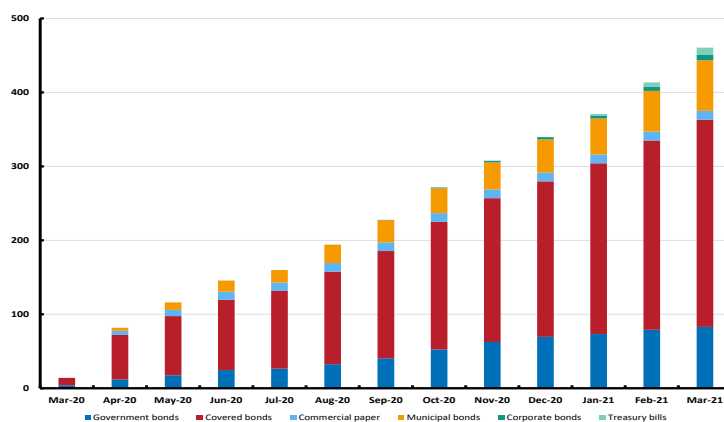
All purchases have been made on the secondary market and most of them via weekly auctions. Furthermore, a number of considerations have guided the way in which purchases have been made, such as market neutrality, transparency and the monetary financing prohibition. In order to achieve a broad impact on interest rates, the Riksbank strives to ensure that its holding reflects market variations in maturities and issuers.

In this Commentary, we look back at the Riksbank's securities purchases over the past year. We describe the purchases made by the Riksbank, how these have been implemented in practice and the reasoning behind them. In this way, this Commentary contributes to greater transparency regarding key considerations in the design and implementation of the Riksbank's securities purchases. The focus of the Commentary is the period until 31 March 2021.

¹ The authors would like to thank Jens Iversen, Maria Johansson, Christina Nordh-Berntsson, Anders Nordlander, Albina Soutanaeva, Jens Vahlquist and Anna Wilbe for valuable input. The views expressed in Economic Commentaries are the authors' personal opinions and are not to be regarded as the Riksbank's view in these issues.

Figure 1. The Riksbank's accumulated asset purchases

Nominal amounts, SEK billion



Note Between 18 March 2020 and 31 March 2021

Source: The Riksbank

1 Central banks are expanding asset purchases

In the spring of 2020, the spread of COVID-19 put a large part of the world economy on pause, changing the lives of many people in a very short time. Supply and demand for goods and services declined sharply as a result of various restrictions, while uncertainty as to what the long-term effects would be spread to the global financial markets and caused asset prices to fall. In the Swedish financial markets, yield differentials between government bonds and riskier assets increased and there were signs of a deterioration in the functioning of the markets.² There was an impending risk that this would impair the credit supply in the entire Swedish economy, which could further exacerbate the economic downturn. In order to counter the economic effects of the crisis, the Executive Board therefore decided on 16 March that the Riksbank would expand its purchases of Swedish securities, which, before the coronavirus pandemic, only included government bonds.³ This Commentary describes purchases until 31 March 2021 and all amounts are expressed in nominal terms.

The Riksbank was not alone in expanding its asset purchases, as both the European Central Bank (ECB) and the Federal Reserve (Fed) in the United States launched extensive purchase programmes. In the spring of 2020, the Fed bought US government bonds for over USD 1,000 billion in a short time in response to clear signs of a deterioration in the functioning of the government bond market.⁴ The Fed also started purchasing other securities, as shown in Table 1 below. Like the Fed, the ECB took action and launched

² See von Brömsen and Gustafsson (2021) for an account of the initial effects of the pandemic.

³ Press release, 16 March 2020, "Decision: Purchases of bonds for monetary policy purposes". The Riksbank also took other measures, such as loans in US dollars and Swedish kronor to banks but these are not included in this Commentary. See the Monetary Policy Report, September 2020 for more information on these.

⁴ See Schrimpf et al. (2020) for a review of the factors which led the otherwise stable market for US government securities to show signs of dysfunctionality in March 2020.

asset purchases. The ECB extended the previously active *Asset Purchase Programme* (APP) by EUR 120 billion and introduced the *Pandemic Emergency Purchase Program* (PEPP), which has been successively extended to a total amount of EUR 1,850 billion.⁵

Table 1. Asset purchases by the ECB, Fed and Riksbank during the coronavirus pandemic

Types of securities in the purchase programmes

	Government securities	Commercial paper	Regional and municipal bonds	Covered bonds	MBS & ABS
ECB*	✓	✓		✓	✓
Fed	✓	✓	✓		✓
The Riksbank	✓	✓	✓	✓	

Note. Mortgage Backed Securities (MBS) and Asset Backed Securities (ABS) are similar to covered bonds in that there is an underlying collateral for the bonds in the form of a loan portfolio. The difference lies, among other things, in different regulatory requirements and in which party has the underlying collateral on its balance sheet. *The ECB has also purchased bonds issued by supranational bodies.

Source: ECB, Federal Reserve and the Riksbank

The different types of securities included in the purchase programmes of the Riksbank, ECB and Fed are shown in Table 1 above. Overall, asset purchases have contributed to keeping the level of interest rates low and to providing support for the credit supply. At the beginning of the pandemic, purchases also had a stabilising effect on the financial markets.

2 The decisions behind the Riksbank's purchases

The first framework for the purchase programme was established by decision of the Executive Board on 16 and 19th of March 2020 and meant that the Riksbank would offer to purchase securities up to a sum of SEK 300 billion over the period until December 2020. The purchase programme would include purchases of 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.⁶ For all categories, the purchases concerned securities issued in Swedish kronor. Purchases of government bonds and covered bonds began immediately on 18 and 25 March respectively and purchases of the remaining securities after that.⁷

⁵ See Cantú et al. (2021) for an account of central bank actions in the wake of the coronavirus pandemic.

⁶ The purchases of government bonds were in addition to the government bonds in an amount of SEK 45 billion that the Riksbank purchased between July 2019 and December 2020, as decided in April 2019 (Monetary Policy Report, April 2019). On 16 March 2020, purchases in an amount of SEK 24 billion remained from the programme from 2019.

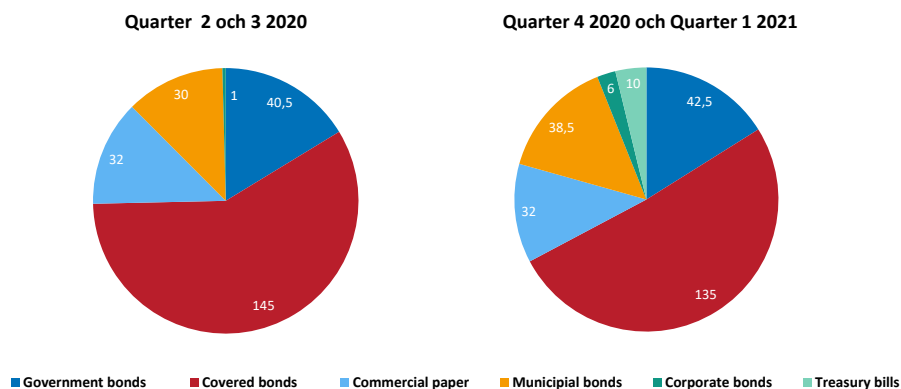
⁷ Commercial paper 2 April, municipal bonds 28 April and corporate bonds 16 September.

After the two initial decisions, there followed a couple of weeks with a series of Executive Board meetings that resulted in the successive determination of purchase amounts for shorter periods within the framework of the previously decided purchase programme. These decisions meant that, during the second and third quarters of 2020, the Riksbank offered to purchase government bonds, covered bonds and municipal bonds for an amount of SEK 215.5 billion, according to the breakdown shown in Figure 2 below. In addition, the Riksbank offered to purchase commercial paper for an amount such that its holding would not exceed SEK 32 billion, as well as corporate bonds for SEK 10 billion between September 2020 and June 2021. A summary of these decisions, and the following ones, is given in Table 4 of the Appendix.

In connection with the monetary policy decisions of July and November 2020, the design of the purchase programme for the fourth quarter of 2020 and the first quarter of 2021 was established. The monetary policy stimulation measures contributed towards stabilising the initially turbulent financial markets, but, at both meetings, the situation was judged to remain fragile.⁸ The continued spread of infection cemented the image that the coronavirus pandemic was here to stay for a longer time and it was still uncertain when the economy would be able to recover. As a consequence of this development, the purchase programme was extended and expanded on both occasions. In July, the programme was extended until 30 June 2021 and the envelope amount was expanded to SEK 500 billion. In November, the programme was extended until 31 December 2021, and the envelope amount was expanded to SEK 700 billion. During the autumn, the Riksbank also revised down its forecasts for GDP growth over the coming six months, as well as the inflation prospects for the coming years.

Figure 2. The Riksbank's decisions on asset purchases

Nominal amounts, SEK billion



Note. The purchase amounts relating to corporate bonds are based on a steady monthly purchase rate of SEK 1 billion over the entire period during which the purchases are to be made. In April 2019, the Riksbank decided on purchases of government bonds in 2020, which are included in the figure (see footnote 6).

Source: The Riksbank

⁸ See Monetary Policy Report, September 2020 for a brief account of the impact of the measures and of the transmission mechanisms involved in the various asset purchases.

Overall, the rate of purchases increased during the second six months of pandemic measures (Q4 2020 and Q1 2021). During these two quarters, the Riksbank offered to purchase government bonds, covered bonds, municipal bonds and treasury bills for SEK 226 billion, according to the breakdown shown in Figure 2 above. An innovation for this period was that the Riksbank began to purchase treasury bills, starting on 18 January. The purchase offer for commercial paper and corporate bonds was unchanged.

IN BRIEF – Legal conditions



All of the Riksbank's asset purchases are justifiable in terms of monetary policy and are made with the support of Chapter 6, Article 5 of the Sveriges Riksbank Act (1988:1385). Furthermore, the Riksbank's purchases of securities issued by the state or other public body must be carried out in such a way that they comply with the provisions against monetary financing in the Sveriges Riksbank Act (Chapter 8, Article 1, paragraph 3) and Article 123 of the Treaty on the Functioning of the European Union.⁹ The practical consequences of this are presented in section 3.1.

3 The Riksbank's holdings and purchases in practice

3.1 Government bonds

Since February 2015, the Riksbank has purchased Swedish government bonds for monetary policy purposes to varying extents.¹⁰ As a result, the Riksbank's holdings of government bonds amounted to SEK 339.9 billion when the new purchase programme began on 18 March 2020. The following weekly auctions have resulted in the Riksbank purchasing government bonds for a total amount of SEK 83 billion during the period from 18 March 2020 to 31 March 2021.¹¹

The majority of these purchases consisted of nominal government bonds, SEK 75.5 billion. Other purchases consisted of real and green government bonds, SEK 7 billion and SEK 0.5 billion respectively. The distribution of nominal, real and green government bonds in the Riksbank's total holdings in relation to the distribution in the outstanding

⁹ The prohibition on monetary financing means that the Riksbank's purchases of securities issued by the state or other public body are subject to certain terms and conditions which mean that these actors must mainly rely on the markets in the part of their financing that takes place through the issue of securities (cf. the European Court of Justice's decisions of 16 June 2015 in case C-62/14 Gauweiler et al. and of 11 December 2018 in case C-493/17 Weiss et al.) (Monetary Policy Report, November 2020).

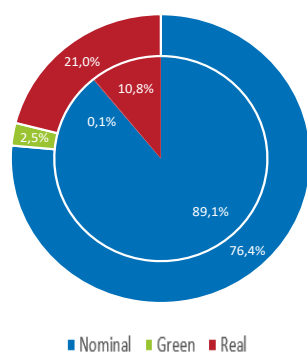
¹⁰ The Riksbank has actually been active on the market since 2012, but only for preparatory purposes in the period 2012-2015. This was to ensure that the necessary systems, agreements and knowledge were in place in the event that the Riksbank would have to implement extraordinary measures quickly in the future. Purchases up until 2015 amounted to SEK 10 billion.

¹¹ Of these, SEK 59 billion were purchased under the purchase programme launched in 2020 and SEK 24 billion under the government bond programme launched by the Riksbank in July 2019 and concluded in December 2020.

stock is shown in Figure 3 below. The figure shows that nominal government bonds constitute the majority of the market, as well as of the Riksbank's holdings.

Figure 3. Breakdown into nominal, real and green government bonds

Inner circle, the Riksbank's holdings. Outer circle, outstanding volume



Note. 31 March 2021. The outstanding volume refers to the bonds issued by the Swedish National Debt Office.

Source: The Riksbank and Bloomberg

Nominal government bonds make up a larger proportion of the Riksbank's holdings (89 per cent) than of the market (76 per cent). One reason for this is that real government bonds have been included in the Riksbank's purchase programme to a more limited extent than nominal government bonds. Historically, real government bonds were part of a purchase programme for the first time in July 2016 and the programme launched in 2020 included them as of the fourth quarter of 2020.¹² One reason for the Riksbank's smaller holdings in green government bonds is that this type of bond is new. At present, there is only one green government bond outstanding in Swedish kronor and it was issued for the first time on 1 September 2020. The Riksbank's purchase programme included it as of January 2021.

The purchases are carried out via an electronic auction (see *IN PRACTICE - Auctions*) and taking into account the prohibition on monetary financing (according to *IN BRIEF - Legal conditions*). In practice, this means that purchases are made on the secondary market and that auctions are not placed directly in connection with the Swedish National Debt Office's issues on the primary market. Moreover, as a result of the prohibition on monetary financing, the Riksbank should not hold a predominant share of the total outstanding stock of government bonds.¹³ The Riksbank's holdings, broken down by maturity, are shown in Figures 13 and 14 in the Appendix. The figures show that purchases made after 17 March 2020 have been spread across all maturities for real

¹² Monetary Policy Report, April 2016, Monetary Policy Report, July 2020. Both nominal and real government bonds were included within the framework of the purchase programmes launched by the Riksbank in 2019.

¹³ Monetary Policy Report, February 2021.

government bonds and have mainly been focused around longer maturities for nominal bonds. This is because the Riksbank strives to have a balanced distribution in its holding.

IN PRACTICE – Auctions

Before each auction, the Riksbank publishes what are known as the Specific Terms for the next auction on its website. These show which specific securities the Riksbank is offering to buy at the present time, as well as the purchase amounts.¹⁴ Decisions on Specific Terms are taken on a regular basis by the Head of the Markets Department after consultation with the Heads of the Monetary Policy and Financial Stability Departments. These all have the right to delegate the decision to another appropriate person.

The auction itself is then carried out via an auction system provided by Bloomberg.¹⁵ Using this system, counterparties specify how much of a specific bond they wish to sell and at which price (expressed in interest).¹⁶ The bids are secret between the counterparties and allocation is carried out according to the multi-price method, which, in practice, means that the allocation is made at different interest rates. The counterparty that has offered to sell at the highest interest rate, that is to say the lowest price, receives its allocation first, at the interest rate it has offered. The counterparty offering the second highest interest rate then receives its allocation, at that rate. Allocation then continues according to the same principle until the entire requested auction volume has been met. The auction lasts for one hour, with the results being published on the Riksbank's website approximately ten minutes after it has closed.

3.2 Treasury bills

On 18 January 2021, the Riksbank made its first purchase of treasury bills. During the first quarter of 2021, the Riksbank purchased treasury bills on a weekly basis for a total amount of SEK 10 billion.¹⁷

The purchases are carried out in the same way as for government bonds, via an electronic auction (see *IN PRACTICE - Auctions*) and taking into account the prohibition on monetary financing (according to *IN BRIEF - Legal conditions*). The purchase of treasury bills is limited to include only bills with a remaining maturity of more than 70 days on auction day.¹⁸ The ECB also applies this rule to PEPP in purchases of securities funding public debt.¹⁹ In addition, the Riksbank strives to ensure that the holding is relatively evenly distributed between maturities. The Riksbank's holdings of treasury bills are shown in Figure 4 below. Due to the short maturity of the bills, there are relatively few

¹⁴ The Terms also contain additional information, such as delivery and payment date and purchase interval.

¹⁵ Bloomberg is a financial information company that focuses on news, financial data and software for financial trading and analysis.

¹⁶ Monetary policy counterparties may bid for all of the Riksbank's asset purchases. In the purchase of government bonds and treasury bills, the Swedish National Debt Office's primary dealers may also participate.

¹⁷ According to Executive Board decision, November 2020 (Monetary Policy Report, November 2020).

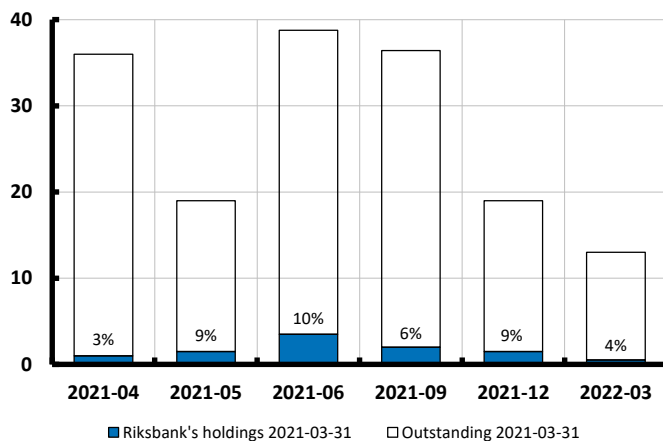
¹⁸ Ibid.

¹⁹ Decision of the European Central Bank (EU) 2020/440 of 24 March 2020 on a temporary pandemic emergency purchase programme (ECB/2020/17)

outstanding bills at any given time that the Riksbank can buy. The bills that are available for purchase also change continuously as they mature and new bills are issued on a monthly basis. This means that it is difficult to achieve a fully even distribution of maturities.

Figure 4. The Riksbank's holdings of treasury bills, by maturity

Nominal amounts, SEK billion



Note. Per cent refers to the Riksbank's holding as a proportion of the outstanding stock

Source: The Riksbank and Bloomberg

3.3 Covered bonds

The market for secured bonds showed signs of a deterioration in the functioning of the market in March 2020, yields rose (particularly for bonds with longer maturities) and liquidity deteriorated significantly.²⁰ To ensure that the market returned to a more normal functioning, the Riksbank purchased covered bonds for a sum of SEK 45 billion during the course of three weeks starting on 25 March.

Since then, the purchase amounts have varied between SEK 5 and 7 billion per auction, and the total purchases amounted to SEK 280 billion at 31 March 2021. The purchases have been carried out in the same way as for government bonds and treasury bills (see *IN PRACTICE - Auctions*).

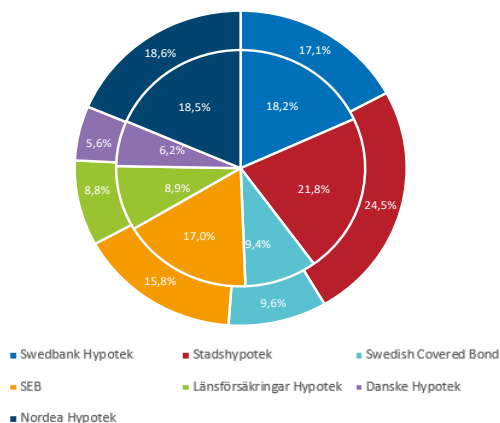
The Riksbank has offered to purchase bonds issued by Swedish institutions with resale agreements.²¹ These institutions' outstanding loan stock accounts for around 90 per cent of the market for covered bonds and has an AAA rating on underlying collateral pools. These institutions and their respective market shares are shown in the outer circle of Figure 5 below.

²⁰ See Monetary Policy Report, September 2020.

²¹ Press release 20 March 2020, "Decision: Purchases of covered bonds for monetary policy purposes".

Figure 5. Breakdown of issuers of covered bonds

Inner circle, the Riksbank's holding. Outer circle, outstanding volume



Note. 31 March 2021. The outstanding volume refers to the issuers' benchmark bonds

Source: The Riksbank and Bloomberg

The Riksbank has focused its purchases around the so-called benchmark bonds of the institutions.²² As a rule, these bonds are the issuers' largest and account for approximately 90 per cent of their outstanding loan stock. What is special about the benchmark market is that the larger banks have committed themselves, through resale agreements, to quoting ask and bid prices in the bonds, and also that there is a well-established repo market.²³ This helps to ensure that the liquidity of these bonds is better than that of non-benchmark bonds.

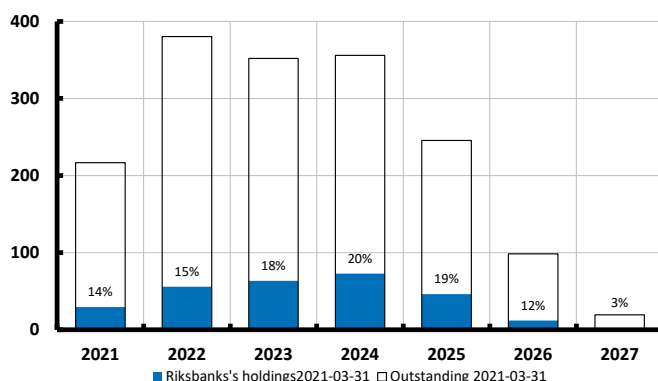
In order to ensure that purchases are conducted on a market-neutral basis and with a broad impact on interest rates, the Riksbank strives for the holding to reflect market variations in issuers and maturities. The composition of the holdings with respect to issuers is shown by the inner circle of Figure 5 and, with respect to maturity, by Figure 6 below. In addition to these considerations, purchases are also limited to bonds with a remaining maturity of more than one year.²⁴ When bonds have less than a year to maturity, they lose their benchmark status and liquidity deteriorates significantly.

²² There are no uniform requirements that a covered bond needs to meet in order to achieve benchmark status. These issuer-specific requirements are defined in the resale agreements and usually include provisions relating to maturity and outstanding volume. For more information on what characterises the benchmark market, see Finansinspektionen (2015).

²³ The fact that there is a functioning repo market means that participants have the opportunity to repo in (borrow) and repo out (fund) their holdings. The issuers act as guarantors and always repo out bonds when a participant has in a negative position.

²⁴ Press release 20 March 2020, "Decision: Purchases of covered bonds for monetary policy purposes".

Figure 6. The Riksbank's holdings of covered bonds distributed by maturity
Nominal amounts, SEK billion



Note. The outstanding volume refers to the issuers' benchmark bonds. Per cent refers to the Riksbank's holding as a proportion of the outstanding volume.

Source: The Riksbank and Bloomberg

3.4 Municipal bonds

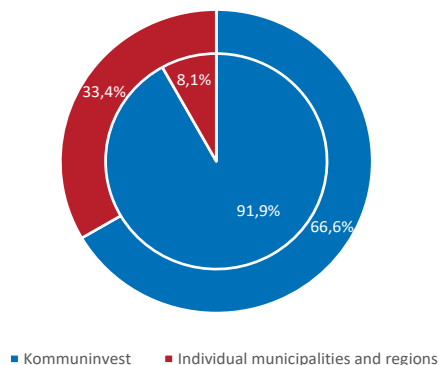
The Riksbank's first purchases of municipal bonds were made on 28 April 2020, and by 31 March 2021, the Riksbank had purchased municipal bonds for a total of SEK 68.5 billion. Initially, purchases consisted only of fixed coupon bonds but, since July 2020, variable coupon bonds have also been included in purchases.²⁵

The Riksbank offers to buy municipal bonds issued by Kommuninvest i Sverige AB (KI), as well as by individual municipalities and regions. In order to ensure that purchases are conducted in a market neutral manner, the Riksbank allows the purchase offer to reflect the respective issuer's market share. The relationship between the Riksbank's purchase offers and actual purchases is shown in Figure 7 below. Interest in auctions at which the Riksbank offers to buy bonds issued by individual municipalities and regions has been lower than for auctions at which the Riksbank has offered to buy bonds issued by KI. As a result, the Riksbank's holdings of municipal bonds consist mostly of bonds issued by KI.

²⁵ Press release 22 April 2020, "Decision: Municipal bond purchases for monetary policy purposes".

Figure 7. Breakdown of bonds issued by individual municipalities and regions and Kommuninvest in Sweden AB

Inner circle, the Riksbank's holdings. Outer circle, outstanding volume



Note. 31 March 2021. The outstanding volume refers to bonds the Riksbank has the opportunity to purchase. The distribution of the two bond types in the Riksbank's total purchase offer corresponds to their distribution in the outstanding volume.

Source: The Riksbank and Bloomberg

The market is different for each of the two bond types. KI's ambition is that all of its bonds should reach benchmark size as quickly as possible, while bonds issued by individual municipalities and regions are generally significantly smaller in terms of outstanding volume.²⁶ KI has also concluded resale agreements with the larger banks, which means that they are obliged to quote ask and bid prices for KI's bonds. In addition, KI offers a repurchase facility for its bonds and there is also a functioning repo market for bonds issued by KI. These factors contribute to a higher turnover in bonds issued by KI than in bonds issued by individual municipalities and regions.

The Riksbank's bid procedure is different for the two bond types. Bonds issued by KI are purchased in the same manner as the securities mentioned earlier, via an electronic auction (see *IN PRACTICE - Auctions*). Bonds issued by individual municipalities and regions are instead purchased via analogue auction, meaning that the counterparties call in their bids by telephone. The main difference, however, is not that counterparties call in their bids, but that, before the auction, the Riksbank specifies the required maturity and type of coupon instead of specific bonds. This means that counterparties have the opportunity to sell bonds from several different issuers at the same time. However, purchases are limited to bonds with a long-term credit rating of AA+ or better with Standard & Poor's, or equivalent credit rating from another rating institution. Allocation takes place according to the multi-price method as in the electronic auction, but the low level of interest shown in these bonds means that, in general, all bids on market terms receive an allocation. The auction lasts for one hour and the results are then published on the website.

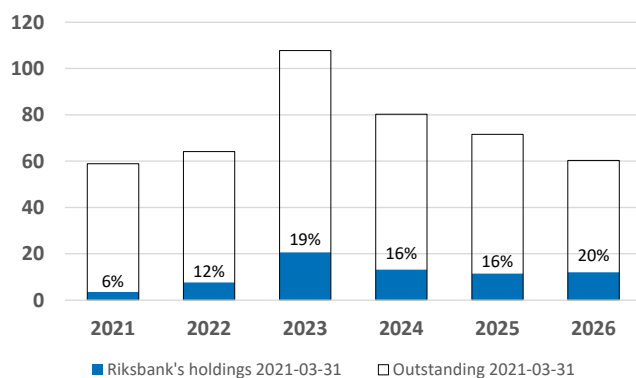
Purchases of municipal bonds must also be carried out in such a way that they do not conflict with the prohibition on monetary financing (in *IN BRIEF - Legal conditions*). The

²⁶ A bond issued by KI achieves benchmark size when it has SEK 3 billion or more in outstanding volume (Kommuninvest i Sverige AB, *Swedish benchmark programme*)

practical implications are the same as for government bonds and treasury bills and are set out in section 3.1. In addition to equal treatment of issuers, the Riksbank also strives to spread its holdings evenly between maturities.²⁷ The distribution of maturities is shown in Figure 8 below.

Figure 8. The Riksbank's holdings of municipal bonds, by maturity

Nominal amounts, SEK billion



Note. Outstanding volume refers to the bonds the Riksbank has the opportunity to purchase. Per cent refers to the Riksbank's holding as a proportion of the outstanding volume.

Source: The Riksbank and Bloomberg

3.5 Corporate debt securities

The market for corporate debt securities showed signs of a deterioration in its functioning in March 2020, which led to concerns about the companies' market funding. In order to support the credit supply, the Executive Board decided, on 19 March 2020, to start purchasing bonds and certificates issued by companies under the framework of the purchase programme.²⁸ On 2 April 2020, the Riksbank started to purchase commercial paper with maturities of up to three months to help companies manage their most pressing funding requirements.²⁹ As of 11 May 2020, certificates with maturities of up to six months have also been included.³⁰

Prior to the start of the corporate bond purchases, an analysis was carried out, which meant that the Riksbank's first purchase of corporate bonds was carried out on 16 September 2020. The analysis was needed because the corporate bond market is heterogeneous, which is to say that corporate bonds are not a standardised asset class. The Riksbank intended to build up high preparedness should there be a need to scale up

²⁷ Press release 22 April 2020, "Decision: Municipal bond purchases for monetary policy purposes"

²⁸ Press release 19 March 2020, "Decision: Additional measures to mitigate the effects of the corona pandemic on the Swedish economy".

²⁹ Press release 26 March 2020, "Decision: Purchase of commercial paper".

³⁰ Press release 8 May 2020, "Decision: Continuing purchases of commercial paper".

purchases of corporate debt securities in the future, and to ensure that purchases are conducted in a market-neutral manner with a broad impact on interest rates.³¹

Commercial paper

The Riksbank has established criteria for the purchase of commercial paper in order to take account of the structure of the market and to reduce risks on the Riksbank's balance sheet.³² These criteria include credit ratings and maturity restrictions, and are shown in Table 2 below.

Table 2. Criteria for the Riksbank's purchases of commercial paper

Criteria	Requirements for compliance
Credit rating	BBB- /Baa3 or higher
Direct financing	Certificates issued in the past week may not be purchased
Maturity	3 and 6 months
Market neutrality	The Riksbank's holding may not exceed 70 per cent of the outstanding volume of an individual issuer

Note. 31 March 2021.

Source: Sveriges Riksbank

Purchases are made via analogue auctions where the Riksbank specifies its desired purchase volume before the auction and also, unlike other auctions, at what price.³³ This allows counterparties to sell several different commercial papers to the Riksbank at each auction. If the bid volume exceeds the desired volume, the allocation shall be reduced in proportion to the size of each bid. The price offered by the Riksbank varies depending on the maturity of the commercial paper and its credit rating. Since the Riksbank decides on prices in advance, interest among counterparties in selling to the Riksbank depends on the market price. If the paper is traded on the market at prices lower than those at which the Riksbank is offering to buy, it is advantageous to sell to the Riksbank.

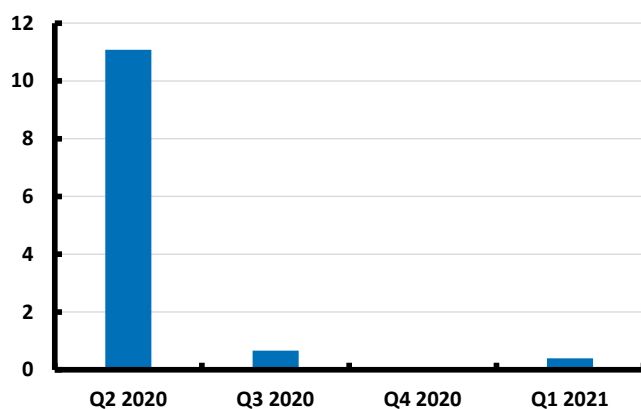
³¹ Monetary Policy Report, June 2020.

³² Ibid.

³³ The price at which the Riksbank offers to purchase is specified as the minimum accepted interest rate for each credit class and maturity. In the Specific Terms, the price is referred to as the "bid rate".

Figure 9. The Riksbank's purchases of commercial paper

Nominal amounts, SEK billion



Source: The Riksbank

The Riksbank thus sets a ceiling on the holding, but has limited control over the actual amount of purchases. This relationship is clearly evident in Figure 9, which shows that the majority of the Riksbank's purchases were made at an early stage of the pandemic, when there was great uncertainty in the market. In this way, the purchases acted as a stabilising measure, with purchase offers being utilised on a smaller scale following the recovery of the market. This means that the Riksbank's holding amounted to SEK 400 million on 31 March 2021, as most certificates had expired by that time. By 31 March 2021, the Riksbank had purchased commercial paper for a total amount of SEK 12.1 billion.

Corporate bonds

In the corporate bond market, there is no well-functioning repo market and no market makers. This, combined with large differences between different corporate bonds, means that liquidity in the market is sometimes poor. As the market is less standardised, the Riksbank started to make corporate bond purchases via bilateral purchases. This means that the Riksbank has traders who identify bonds that are suitable for purchase and are available from dealers. Since December 2020, bilateral purchases have also been complemented by electronic auctions every two weeks (see *IN PRACTICE – Auctions*).

In the same way as for commercial paper, the Riksbank has set criteria for the purchase of corporate bonds. These criteria are shown in Table 3 below. Since 1 January 2021, the Riksbank has also applied what is known as norm-based negative screening based on sustainability criteria, as shown by Table 3. This means that the Riksbank only buy bonds from issuers that comply with the principles for sustainability.³⁴ The Riksbank has also developed internal routines that are applied when risks related to issuers and

³⁴ See Andersson and Stenström (2021) for a more detailed account of how the Riksbank takes sustainability into account when purchasing corporate bonds.

bonds need to be examined more closely before a purchase. Reviews take place regularly and aim to understand, and possibly limit, the financial risks that may arise for the Riksbank.

Table 3. Criteria for the Riksbank's purchases of corporate bonds

Criteria	Requirements for compliance
Credit rating	Baa3/BBB- or higher
Direct financing	Bonds issued in the past month may not be purchased
Maturity	Between 6 months and 5 years
Market neutrality	The Riksbank's holding may not exceed 50 per cent of the outstanding volume of an individual issuer or of an individual bond
Sustainability	The issuer complies with specific standards and norms for sustainability

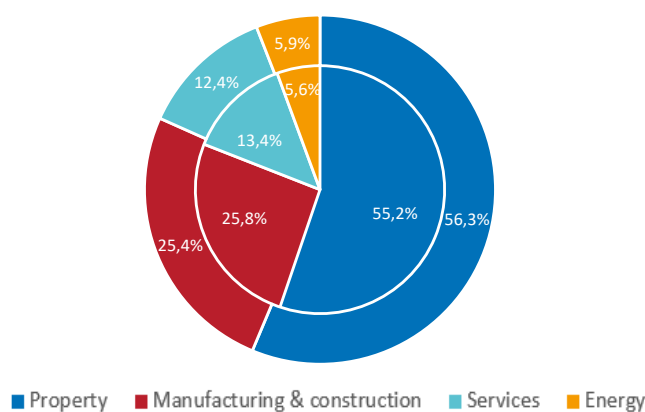
Note. 31 March 2021. The Riksbank's approach to sustainability is based on the UN Global Compact, the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights.

Source: Sveriges Riksbank

The bonds that meet the criteria form a selection of bonds that the Riksbank can offer to buy. The Riksbank strives for the holding to reflect this selection. These bonds can be categorised according to the sectors in which the issuers operate and, as Figure 10 shows, the Riksbank's holdings are close to this sector breakdown. By 31 March 2021, the Riksbank had purchased corporate bonds for an amount of SEK 7 billion. The Riksbank's holdings in relation to the total outstanding volume of purchasable corporate bonds correspond to about 2 per cent for each sector.

Figure 10. Sector breakdown

Inner circle, Riksbank's holdings. Outer circle, outstanding volume



Note. 31 March 2021. Outstanding volume refers to the bonds the Riksbank has the opportunity to purchase

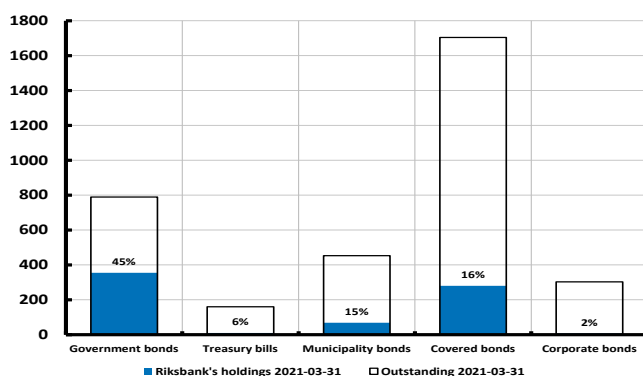
Source: The Riksbank and Bloomberg

4 The purchases are contributing to a larger balance sheet

From 18 March 2020 until 31 March 2021, the Riksbank has purchased corporate bonds for a total amount of SEK 460.6 billion. This has contributed to the Riksbank's balance sheet having grown clearly during the pandemic. The Riksbank's holdings of securities denominated in Swedish kronor amounted to SEK 717 billion on 31 March 2021 and the Riksbank's balance sheet total amounted to SEK 1,320 billion, corresponding to nearly 30 per cent of GDP.³⁵ In addition to securities, the Riksbank's assets include the gold and foreign exchange reserves, loans to banks and receivables from the IMF. The Riksbank's holdings in relation to the outstanding stock of securities are illustrated by Figure 11 below.

Figure 11. The Riksbank's holdings of government bonds, treasury bills, municipal bonds, covered bonds and corporate bonds

Nominal amounts, SEK billion



Note. Per cent refers to the Riksbank's holding as a proportion of the outstanding volume of bonds the Riksbank has had the opportunity to buy. Commercial paper is not included as the Riksbank only owned SEK 400 million on this date.

Source: The Riksbank and Bloomberg

The asset purchases are causing both the asset side and the liability side of the Riksbank's balance sheet to grow. The Riksbank funds asset purchases by creating new electronic money (central bank reserves). This means that purchases, in addition to being an asset, also create an interest-bearing liability on the Riksbank's balance sheet. This liability increases by the corresponding amount for which the Riksbank purchases securities and increases the liquidity surplus in the banking system.³⁶ The banks invest surplus liquidity either in Riksbank Certificates with a maturity of one week or overnight in the Riksbank's deposit facility. The interest rate on Riksbank Certificates is the repo rate decided by the Executive Board, which is currently zero per cent, and the interest rate in the deposit facility is 0.1 percentage points below the repo rate. The average interest

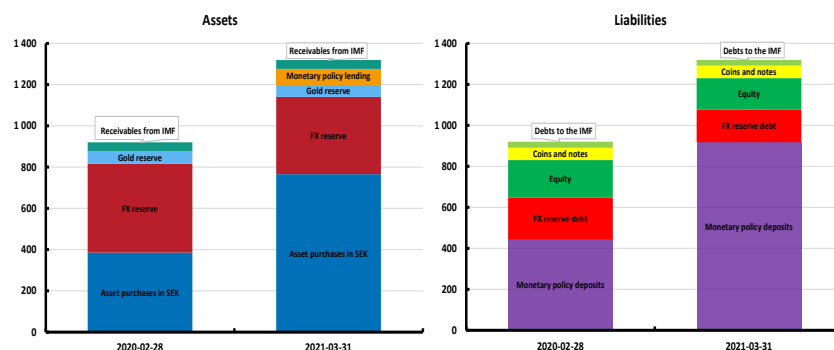
³⁵ See Ingves (2021) for a discussion of the role of the balance sheet in monetary policy. See Di Casola (2021) for an analysis of the conclusions of the research literature on the effects of balance sheet measures.

³⁶ See Armelius et al. (2020) for a review of the course of events when the Riksbank purchases securities.

rate paid by the Riksbank on the monetary policy liability is thus affected by how the liquidity surplus has been distributed between Riksbank Certificates and overnight deposits.³⁷ On 31 March 2021, total deposits in the Riksbank amounted to SEK 918 billion and the average interest rate was about -0.06 per cent. The change in the Riksbank's balance sheet during the pandemic is illustrated by Figure 12 below.

Figure 12. The Riksbank's financial assets and liabilities

SEK billion



Note. Market value.

Source: The Riksbank

5 Concluding remarks

Monetary policy has played an important role during the coronavirus pandemic and, with many key interest rates being low even before the outbreak of the pandemic, asset purchases have been a key measure. At time of publication of this Commentary, the purchase programmes are still active and the size of central bank balance sheets is likely to mean that asset purchases will also have a major role to play in the period ahead, whether this means continuing to buy securities, reinvesting maturities or disposing of holdings.

This Commentary has described what shaped the Riksbank's purchases and holdings until 31 March 2021. The Riksbank's asset purchases have also continued beyond this period and, according to the current format of the purchase programme, will continue until 31 December 2021. Furthermore, the Executive Board plans to keep the holdings at this level at least until the end of 2022 by means of new purchases to compensate for various asset types reaching maturity.³⁸ The purchase programme and the considerations made by the Riksbank when purchasing are under constant development to adapt to prevailing market conditions. This Commentary thus contributes to greater transparency not only about the purchases already made by the Riksbank but also about key issues that will continue to affect the design and implementation of the Riksbank's asset purchases.

³⁷ Between 1 March 2020 and 31 March 2021, the volume of Riksbank Certificates that the Riksbank has offered the market for purchase has been relatively constant at around SEK 380 billion.

³⁸ Monetary Policy Report, April 2021.

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APPENDIX

Table 4. The Riksbank's asset purchase decisions during the coronavirus pandemic

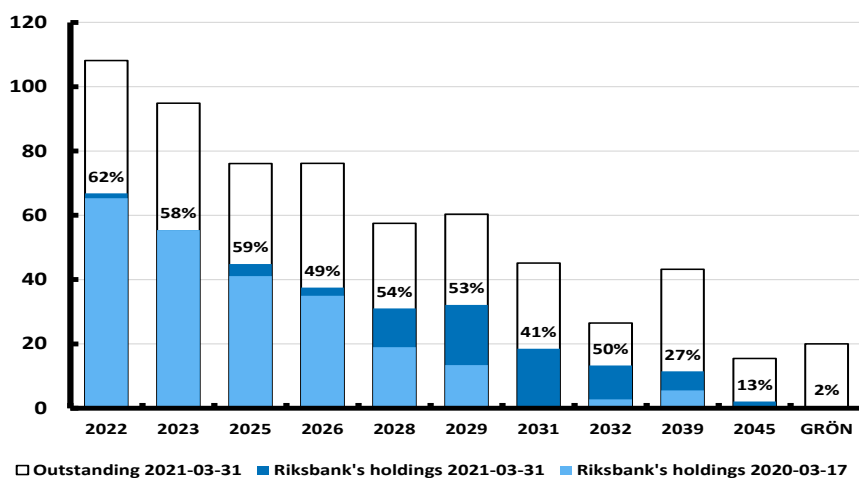
Nominal amounts, SEK billion

Asset	Period	Amount
Government bonds	18 March 2020	2.5
	30/3-30/4 2020	5
	1/5-30/9 2020	18
	1/10-31/12 2020	20
	1/1-31/3 2021	13.5
		59
Treasury bills	1/1-31/3 2021	10
Covered bonds	25 March 2020	10
	30/3-30/4 2020	50
	1/5-30/9 2020	85
	1/10-31/12 2020	65
	1/1-31/3 2021	70
		280
Municipal bonds	27/4-30/6 2020	15
	1/7-30/9 2020	15
	1/10-31/12 2020	15
	1/1-31/3 2021	23.5
		68.5
Corporate bonds	1/9 2020 -30/6 2021	10
Commercial paper	2/2 2020	4
	8/4 2020-31/3 2021	32

Note. 16 March 2020 to 30 November 2021. The purchases of commercial paper may exceed SEK 32 billion over the specified period, but the holding may not exceed SEK 32 billion at any time.

Source: The Riksbank

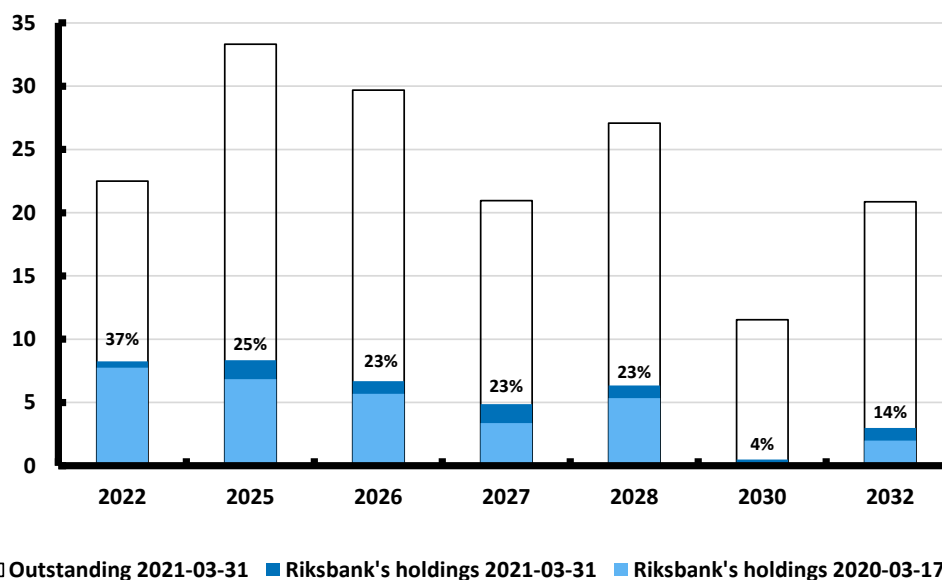
Figure 13. The Riksbank's holdings of nominal government bonds, by maturity
Nominal amounts, SEK billion



Note. Per cent refers to the Riksbank's holding as a proportion of the outstanding volume. On 17 March 2020, the Riksbank also had a holding of SEK 63 billion in bond 1047. This bond matured in December 2020 and is therefore not included in this figure.

Source: The Riksbank and Bloomberg

Figure 14. The Riksbank's holdings of real government bonds, by maturity
Nominal amounts, SEK billion



Note. Per cent refers to the Riksbank's holding as a proportion of the outstanding volume.

Source: The Riksbank and Bloomberg



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