

Submission to the Riksdag

2023/24:RB4

Restoration of equity

Summary

The Riksbank proposes that the Riksdag decides to restore the Riksbank's equity to the base level in 2024.

The Riksbank shall make a submission to the Riksdag for restoration of equity if equity falls below one third of the target level stipulated in the Riksbank Act. According to the annual report for 2023, the Riksbank's equity is SEK –18,182 million, which is below this limit. The reason why equity is negative is because the Riksbank reported a loss in 2022 caused by a sharp rise in interest rates that year both in Sweden and abroad due to a dramatic increase in inflation. The higher interest rates reduced the market value of the Riksbank's bonds in Swedish krona and foreign currency to a level below their acquisition cost. This unrealised loss caused the Riksbank's equity to decrease and become negative.

The holdings of Swedish bonds have subsequently decreased due to maturities and sales, but are still contributing to a high level of interest-rate risk. This was illustrated in 2023 when unrealised losses first increased when market interest rates rose and then decreased in the autumn when interest rates fell. Together with the exchange-rate risk associated with the holdings of foreign bonds, this means that the Riksbank's financial position is still very sensitive to the development of financial prices in the near term.

However, the interest-rate risk will decrease in 2024 as the holdings of Swedish bonds decrease due to sales, maturities and because the outstanding maturity of the Riksbank's remaining holdings is shortened by a further year. An increase in interest rates of 1 percentage point today would reduce the value of the Swedish assets by approximately SEK 19 billion. One year ahead, the same rate increase would only reduce it by about SEK 5 billion. However, the Riksbank will still have considerable interest rate risk in the foreign currency reserves and currently the interest rate sensitivity of the foreign currency reserves is in line with the interest rate sensitivity of the Swedish

bonds. The extent to which impairments due to rising interest rates affect the reported result depends on the size of the buffers in the revaluation accounts for price effects at the end of the year. The Riksbank has made its considerations in the submission against this background.

The Riksbank proposes that the Riksdag decides to restore the Riksbank's equity to the base level of SEK 41,733 million in 2024. After the General Council's decision on the allocation of profit for the financial year 2023, which the Riksdag is to approve in spring 2024, the Riksbank's equity will amount to SEK -1,991 million. To restore equity to the base level in 2024 therefore requires a contribution of SEK 43,724 million.

Pursuant to the Riksbank Act, the Riksbank shall assess whether unrealised gains on the balance sheet justify making a submission to restore equity to a level lower than the base level or not at all. According to the government bill to the act, unrealised changes in the value of the gold reserve should not be taken into account. According to the annual report for 2023, the Riksbank had unrealised gains totalling around SEK 39 billion, excluding unrealised gains due to gold-value effects. Unrealised gains provide some protection against new losses, but in practice this protection is limited, as each buffer can only absorb unrealised losses from the same asset that caused the gains.

During the first two months of this year, the amounts in the revaluation accounts for exchange rate effects have increased from SEK 25.7 billion to SEK 30.4 billion, while the amounts in the revaluation accounts for price effects have decreased from SEK 13.6 billion to SEK -2.7 billion. In February, unrealised gains thus amounted to a total of SEK 27.7 billion, excluding unrealised gains due to gold-value effects. This illustrates how sensitive the Riksbank's balance sheet still is to fluctuations in financial prices.

The buffers of unrealised gains that now exist give some protection against a further reduction in the Riksbank's equity in the near future - the positive balance on the revaluation account for exchange rate effects provides some protection against the impairments as a result of a stronger krona, while the interest rate risk associated with holdings of Swedish bonds is decreasing rapidly. The buffers can therefore absorb some new losses but do not provide sufficient protection to justify restoring the Riksbank's equity to a lower level than the base level. Restoration to the base level reduces the likelihood of the Riksbank having to make a new submission to restore its equity in the relatively near future.

According to the Riksbank Act, the Riksbank may propose a restoration of its equity to a level higher than the base level. If required to secure the Riksbank's ability to be self-financing in the long term, the submission may correspond, at most, to an amount that restores equity to the target level. The Riksbank has considered this but concluded that a restoration of equity to the base level is sufficient at present.

As mentioned the Riksbank's result is still sensitive to variations in financial prices, but the Riksbank has taken measures to reduce this sensitivity. For example, the hedging of a quarter of the foreign currency reserves has made

the result less sensitive to changes in exchange rates. At the same time, as described above, unrealised gains in the revaluation accounts provide some protection against a further reduction in the Riksbank's equity in the near future. The unrealised gains are deemed large enough so that a restoration of equity to the target level is not justified at present.

The Riksbank's assessment is that the financial position will improve going forward, but at a very slow pace. The Riksbank is therefore investigating how it can strengthen its self-financing in other ways. The development of the Riksbank's finances is sensitive to the volume of currency in circulation, market interest rates and the exchange rate in the longer term. Added to this is the sensitivity to short-term fluctuations in financial prices. In many scenarios, self-financing is limited and there is therefore a need to strengthen the Riksbank's capacity for long-term self-financing. The Riksbank is currently analysing the legal, operational and economic aspects of changes to the Riksbank's operations that entail a more efficient management of state resources while at the same time strengthening the Riksbank's capacity for self-financing.

Even if the Riksbank's equity is now restored to the base level, developments in 2024 could be such that equity falls far below the base level after year-end closure and allocation of profit for the 2024 financial year. Against this background, the Riksbank sees that an alternative to restoring equity in 2024 is that the Riksdag decides to restore it in two steps in 2024 and 2025. If the Riksdag makes such a decision, the first part of the restoration should take place in 2024 and amount to at least SEK 25 billion. The decision should also state that the second part shall, based on the allocation of profit for 2024, restore the Riksbank's equity to the base level that will apply in 2025. This mitigates the risk of an unfavourable development in 2024 reducing the Riksbank's equity. This would result in better conditions for the Riksbank to build up equity to the target level in the long term.

Such an option is likely to lead to a larger total capital injection than if equity were restored to the base level all at once in 2024. This is because unrealised losses at the end of the year affects the Riksbank's reported result, while the corresponding unrealised gains remain in revaluation accounts. An unfavourable development in 2024 would therefore lead to losses, while a favourable development would not improve the result to the same extent.

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Proposal for Riksdag decision

The Riksbank proposes

that the Riksdag decides to instruct the Government, or the authority appointed by the Government, to transfer SEK 43,724 million from the state budget to the Riksbank in 2024 to restore the Riksbank's equity to the base level of SEK 41,733 million.

Stockholm, 26 March 2024

On behalf of the Executive Board

Erik Thedéen

/Monika Gustavsson

Erik Thedéen, Anna Breman, Per Jansson, Martin Flodén and Aino Bunge took part in this decision.

The rapporteur was Lena Strömberg.

Background and presentation of the case

According to Chapter 8, Article 15 of the Sveriges Riksbank Act (2022:1568), the Riksbank shall make a submission to the Riksdag to restore equity if equity falls below one third of the target level. As described in more detail in this submission, the Riksbank's equity is lower than this level according to the Riksbank's annual report for the financial year 2023. The Riksbank therefore makes this submission to the Riksdag in which the Riksbank proposes that the Riksbank's equity be restored to the base level of SEK 41,733 million in 2024.

The submission begins with some background to the Riksbank's reported loss in 2022, which led to a substantial reduction in the Riksbank's equity. This is followed by a justification of the amount that the Riksbank considers appropriate to restore equity. The submission is accompanied by three annexes containing details of the development of the Riksbank's revaluation accounts, capital and costs.

Measures to fulfil policy mandates have resulted in a larger balance sheet

Since the global financial crisis of 2008–2009, the Swedish economy has been both exposed and at risk of being exposed to shocks with major negative consequences. To mitigate these consequences, the Riksbank has strengthened its foreign currency reserves and purchased Swedish securities, especially bonds. The Riksbank has taken these measures to fulfil the statutory objective of price stability and perform the task of promoting a safe and efficient payment system.¹

The foreign currency reserves contain assets convertible into liquid funds in currencies that Swedish banks may need and therefore consist mainly of government bonds issued in euro and US dollars.² The market value of these assets increased in the 2010s. Towards the end of the decade, the value of the foreign currency reserves was around SEK 450 billion, which the Riksbank then considered appropriate, partly to cover the needs that may arise in the short term in a financial crisis. Since then, the size of the foreign currency reserves has been reduced somewhat and at the end of 2023 was valued at around SEK 415 billion.

The strengthening of the foreign currency reserves was originally financed by foreign currency loans from the Swedish National Debt Office. In recent

¹ The measures were taken in part pursuant to Chapter 6, Article 5 of the Sveriges Riksbank Act (1988:1385).

² As at 31 December 2023, the foreign currency reserves consisted of assets in US dollars (62 per cent), euro (21 per cent) and minor holdings of assets in pounds sterling, Canadian dollars, Australian dollars, Norwegian kroner and Danish kroner. More details on the gold and foreign currency reserves can be found, for example, in Kjellberg and Vestin (2019), "The Riksbank's balance sheet and financial independence", *Economic Review* No. 2, Sveriges Riksbank.

years, however, the Riksbank has repaid these loans and instead financed its holdings of foreign bonds in the foreign currency reserves with Swedish kronor. This has contributed to an increase in the interest-bearing debt to the Riksbank's counterparties (see further the description under the next heading) and has led to the value of the assets in the foreign currency reserves, expressed in kronor, now fluctuating more with the krona exchange rate.

Since 2015, the Riksbank has purchased Swedish bonds and other securities on a large scale in two phases.³ In the first phase, the Riksbank bought Swedish government bonds to make monetary policy more expansionary as the policy rate was deemed to be close to its lower bound. The purpose of the purchases was to support an increase in inflation at a time when inflation had been below the 2-percent target for several years and the longer-term inflation expectations of households and companies had started to fall further and further below the target. The ultimate aim of the purchases and the expansionary monetary policy was to safeguard the role of the inflation target as a nominal anchor for price- and wage-setting in the Swedish economy.

The second purchasing phase came in connection with the covid-19 pandemic of 2020–2021.⁴ A primary aim of the purchases in this phase was to provide broad support to the strained credit supply to companies and households, thereby preventing the major financial market turmoil from turning into a financial crisis. A second purpose was to keep interest rates low and support the economy during a period of great uncertainty about future developments. This asset-purchasing programme expired at the end of 2021. The Riksbank then had holdings of Swedish bonds, including the previously built-up holdings of Swedish government bonds, of just over SEK 900 billion in nominal terms.⁵

The Riksbank's result has become more sensitive to changes in interest rates and exchange rates

The strengthening of the foreign currency reserves and the purchases of Swedish bonds and other securities have increased the assets and the liabilities on the Riksbank's balance sheet. The Riksbank purchased the bonds through its monetary policy counterparties, primarily commercial banks. The purchases were paid for by the Riksbank increasing the balances on the counterparties' accounts in the RIX payment system, where the banks make payments

³Before 2015, the Riksbank held a small portfolio of Swedish government bonds for contingency purposes. For more details on the two phases of purchases, see Andersson, Beechey and Gustafsson (2022), *The Riksbank's asset purchases 2015–2022. Riksbank Study no. Sveriges Riksbank*.

⁴Specific details on the asset purchases during the pandemic can be found in Gustafsson and von Brömsen (2021), "Coronavirus pandemic: The Riksbank's measures and financial developments in the spring and summer of 2020. *Economic Review* no. 1. Sveriges Riksbank, and the article *The coronavirus crisis and the Riksbank's asset purchases. Account of monetary policy 2021*.

⁵The amount includes a small holding of Swedish treasury bills. These matured in early 2022.

between themselves and transactions with the Riksbank. These funds are continuously deposited with the Riksbank, either as placements in Riksbank Certificates or as overnight deposits, and thus become a liability to the counterparties on the Riksbank's balance sheet. One consequence of the growth in the size of the Riksbank's assets and liabilities is that the Riksbank's result is now more affected when interest rates increase or decrease and when the krona exchange rate changes in relation to other currencies.⁶ The Riksbank has taken measures to reduce the sensitivity to such changes. To, for example, limit losses if the krona appreciates, the Riksbank hedged a quarter of the foreign currency reserves in 2023.⁷ In addition, the Riksbank started selling Swedish government bonds in April 2023. These sales have to some extent helped reducing the risks of losses if interest rates were to increase.⁸

The Riksbank's reported result can be divided into an underlying result and into changes in the market value of the foreign and Swedish bonds owned by the Riksbank. Simplified, the underlying result is the difference between net interest income and the costs of running the Riksbank's operations. Net interest income is the difference between the interest income from the Riksbank's bonds and the interest costs associated with the financing of bond purchases, a financing that is reflected by the liabilities to the Riksbank's counterparties. Since the Riksbank pays a variable interest rate, linked to the policy rate, on these liabilities, changes in the policy rate have a direct effect on the Riksbank's net interest income.⁹

The Riksbank has chosen to report all its assets at market value, in line with the ECB guidelines.¹⁰ This means that when interest rates change, the value of the bond holdings also changes. The market value decreases when interest rates increase and vice versa - this applies to both foreign and domestic bonds. The value of and interest income from the foreign bonds in SEK is also affected by changes in exchange rates. If the krona depreciates, foreign bonds become more valuable and yield more in krona terms. Conversely, their value and return decrease when the krona appreciates.

When the market value of the bonds changes in relation to what the Riksbank paid for them, either gains or losses occur. As long as the Riksbank does not sell the bonds, the gains or losses are unrealised and are recorded during

⁶ For more details, see Kjellberg and Åhl (2022), The Riksbank's financial result and capital are affected by higher interest rates. *Economic Commentary* no. 8. Sveriges Riksbank and the article Effects of the asset purchases on the Riksbank's financial result. *Account of monetary policy 2022*.

⁷ "Decision on hedging part of the foreign exchange reserves" (DNR 2023-00863)

⁸ The Riksbank has increased the size of the monthly sales on two occasions, most recently in January 2024. See "Decision on the policy rate and government bond sales" (DNR 2024-00138).

⁹ Interest income is less affected. The nominal yield on a security is mostly fixed and the profit and loss calculations distribute the current interest income over periods. The return on holding a security to maturity is thus spread evenly over the entire life of the security.

¹⁰ See Chapter 8, Section 2 of the Sveriges Riksbank Act. It requires the fulfilment of accounting obligations and the preparation of annual accounts in accordance with the Sveriges Riksbank Act and generally accepted accounting principles, including the ECB Guideline where applicable. However, the ECB has chosen not to mark its assets purchased for monetary policy purposes to market. More details on the ECB Guideline can be found in Annex A. The Riksbank's revaluation accounts.

the year against revaluation accounts on the liabilities side of the balance sheet - see Annex A. The Riksbank's revaluation accounts. If the unrealised losses remain at year-end and the balance on the revaluation account is therefore negative at the end of the financial year, the loss is charged to the profit and loss account, the acquisition cost is written down and the revaluation account is reset to zero. This is the case even if the Riksbank has not sold the bonds, which is a prudential measure to ensure that the profit and loss account and balance sheet do not present an overly positive picture. However, unrealised gains do not affect the reported result.

In addition to foreign and Swedish bonds, the Riksbank has a holding of gold, which changes in value over time, primarily due to the development of the gold price but also due to exchange rate fluctuations as gold is priced in US dollars. The gold holding is special in several ways. For example, it can be used as collateral for foreign currency loans when needed, thus fulfilling a contingency function. Changes in the value of the holding are reported in a separate revaluation account.

The reported loss in 2022 meant that the equity became negative

The Riksbank's operations have usually generated a profit. Between 2009 and 2019, i.e. during the period when the Riksbank strengthened the foreign currency reserves and went through the first phase of buying Swedish government bonds, the Riksbank reported a profit in all but one year. This century, therefore, the Riksbank has been able to distribute a total of SEK 156 billion to government, with just over SEK 60 billion being distributed since 2009.

The purpose of the Riksbank's purchases of Swedish and foreign securities was to fulfil the Riksbank's mission and not to generate profit. When the purchases were made, the Riksbank was aware that the holding also increased the risk of financial losses if interest rates were to start rising.¹¹ However, the Riksbank shares the Swedish National Audit Office's view that the costs of the purchases of Swedish bonds have been greater than anticipated, and that expected costs, risks and side effects of the bond purchases could have been described more clearly when the purchases were made.¹²

¹¹ See the reports on asset management in the Riksbank's annual reports during the period. The risk of losses was discussed by, among others, Kerstin af Jochnick *Does the Riksbank have to make a profit?* Speech on 23 January 2015 and Martin Flodén *The Riksbank's bond purchases affect the state's finances*. Speech on 9 November 2016.

¹² "The Riksbank's comments on the Swedish National Audit Office's audit of the Riksbank's asset purchases" (DNR 2023-01418).

Sharp rise in inflation and rising interest rates led to a large unrealised loss in 2022

As in many other countries, inflation rose rapidly in Sweden in 2022, reaching over 10% by the end of the year, the highest level in over 30 years. The Riksbank therefore raised the policy rate at a historically fast pace from 0 per cent in February to 2.5 per cent in November 2022, and the general level of interest rates followed suit.¹³ Policy rates and bond yields rose both in Sweden and abroad over the year, which reduced the value of the Riksbank's asset holdings in both Swedish kronor and foreign currency. This resulted in a large unrealised loss that negatively affected the Riksbank's reported result. Previously assigned funds for financial risks, totalling SEK 5 billion, were reversed to the financial result, but the Riksbank nevertheless reported a loss of SEK 80,734 million for the financial year 2022. After the allocation of profit, equity amounted to SEK –18,182 million.

The reported loss made by the Riksbank in 2022 was thus mainly due to the fall in the market value of the Riksbank's Swedish and foreign bonds. Virtually all of the loss was unrealised. The result for 2022 was greatly affected by this, but the result will develop more smoothly in the following years. This is because the acquisition cost was written down to the low market value and this resulted in an upward adjustment of reported future interest income. See also Annex A. The Riksbank's revaluation accounts.

Profit in 2023 but equity still expected to be negative

Excluding energy prices, inflation fell at a slower pace than expected in 2023 and a weak krona increased uncertainty about developments. The Riksbank judged that inflationary pressures were still too high and therefore raised the policy rate further, from 2.5 per cent at the beginning of the year to 4 per cent in September, in order to bring inflation back to the 2-percent target within a reasonable period of time. Towards the end of the year, the decline in inflation became clearer and longer-term market interest rates fell, both in Sweden and abroad. This contributed to an increase in the market value of the Riksbank's bond holdings towards the end of the year.

The fact that the value of the bonds has varied so much over the year with the rise and fall of market rates illustrates how sensitive the Riksbank's result is with a large holding of bonds on the balance sheet. In connection with a hearing at the Committee on Finance in autumn 2023, the Riksbank presented a preliminary analysis of the result for the year based on the financial position on 30 September 2023. The analysis indicated a loss for the financial year of 2023 and that the Riksbank's equity would thus decrease further. Restoring equity to the base level would at that time have required a capital injection of almost SEK 80 billion.¹⁴

¹³See *Account of monetary policy 2022*.

¹⁴See Erik Thedéen *The Riksbank needs to restore its capital*. Speech on 24 October 2023.

However, the Riksbank's financial position improved in the final months of the year due to falling interest rates. The hedging of the foreign currency reserves by the Riksbank during the year also meant that earlier unrealised gains from exchange rate effects were realised, which contributed positively to the result. Overall, the Riksbank reported a profit of SEK 16,191 million for the financial year 2023. After allocation of profit, the Riksbank's equity is expected to amount to SEK –1,991 million.

By the end of 2023, the Riksbank had already reversed more than half of the unrealised losses that were charged to the result in 2022. These reversals can in some sense be seen as a measure of the proportion of unrealised losses that have been "realised". For 2024, further relatively large unrealised losses are expected to be reversed, after which the effects will diminish in importance as the holdings of krona-denominated bonds decrease due to maturities and sales.

The Riksbank's equity shall ensure its financial independence

A starting point for the Sveriges Riksbank Act is that the Riksbank has an independent position and that this is reflected in how the Riksbank is financed.¹⁵ According to the preparatory works to the Act, financial independence can be achieved by the Riksbank financing its own administrative costs independently and sustainably in the long term. The Riksbank's equity should be sufficiently large to ensure this. Self-financing occurs when net interest income, i.e. the difference between the Riksbank's interest income and interest expenses, covers management costs and financial provisions or reversals. As described in more detail in Annex B. The Riksbank's capital, the Riksbank also needs to make a certain profit in order to build up a buffer that can be used to absorb losses, or to rebuild the capital again if it has decreased due to a loss.¹⁶

Like banknotes and coins in circulation, equity provides interest-free financing of assets that generate returns for the Riksbank. This cost-free capital thus creates positive net interest income. If the Riksbank makes losses, equity decreases and thereby also the capacity for self-financing. The Riksbank Act stipulates that there shall be a target level for the Riksbank's equity that may amount to a maximum of SEK 60 billion, unless the Riksdag decides otherwise, and that the target level shall be adjusted upwards in line with CPI inflation each year. An amount equal to two thirds of the target level shall be the base level for the Riksbank's equity.¹⁷

¹⁵ See Government Bill 2021/22:41 p.76 and 77.

¹⁶ A profit is also needed to ensure that equity increases in line with the correction for inflation to the target level for equity.

¹⁷ See Chapter 8, Sections 9 and 10, Sveriges Riksbank Act.

The financial independence of a central bank is required by EU law.¹⁸ In its Convergence Report for 2022 and in its opinions on national legislation, the ECB has stated that situations should in particular be avoided where an national central bank's (NCB) equity is less than its statutory capital or where equity is even negative, including situations where losses exceed the NCB's capital and reserves and this situation is sustained over a longer period of time. In the ECB's view, such situations may have a negative impact on the NCB's ability to fulfil its tasks. Should a situation arise where an NCB's equity falls below the statutory capital requirement or is even negative, the Member State concerned must make sufficient funds available to its NCB, at least so that the statutory capital level can be met within a reasonable period of time so that to comply with the principle of financial independence.¹⁹

The Riksbank shall make a submission for the restoration of equity

The Riksbank shall make a submission to the Riksdag to restore equity if equity falls below one third of the target level according to the Annual Report.²⁰ The submission shall be for an amount that restores equity to the base level, unless unrealised gains on the balance sheet justify restoration to a lower level or not at all.²¹ If required to secure the Riksbank's capacity for self-financing in the long term, the submission may correspond, at most, to an amount that restores equity to the target level.²²

According to the Riksbank's annual report for the financial year 2023, the Riksbank's equity is SEK –18,182 million and it is therefore below SEK 20,867 million, which is one third of the target level of SEK 62,600 million after the upward adjustment in line with CPI inflation in December 2023.²³

¹⁸ In Case C-45/21, the CJEU interpreted the implications of the economic dimension of the independence of NCBs when a national central bank fulfils national tasks outside the European System of Central Banks (ESCB). According to the CJEU, the ability of NCBs to perform an ESCB task independently would be jeopardised if national tasks falling outside that scope were to prevent NCBs from building up adequate financial resources in the form of reserves or buffers to compensate for losses, in particular those resulting from monetary policy operations.

¹⁹ ECB Convergence Report 2022. See also, for example, ECB Opinion CON/2023/24.

²⁰ See Chapter 8, Section 15, first paragraph of the Sveriges Riksbank Act and Government Bill 2021/22:41, p. 245.

²¹ See Chapter 8, Section 15, second paragraph of the Sveriges Riksbank Act.

²² See Chapter 8, Section 15, third paragraph of the Sveriges Riksbank Act.

²³ Pursuant to Chapter 8, Section 10 of the Sveriges Riksbank Act, the target level shall be recalculated each year in accordance with the change in the consumer price index (CPI) published by Statistics Sweden. It is not clear from the Act or its preparatory works what is meant by a change in the CPI. According to the proposals in the draft bill referred to the Council on Legislation for consideration, which the Riksbank Committee's proposals are to take as a starting point according to the directives to the committee, it is clear that the annual change in the CPI refers to the annual percentage change in the CPI (see Chapter 10, Sections 1 and 8 of the draft bill referred to the Council on Legislation). According to the entry into force and transitional provisions of the Sveriges Riksbank Act, Chapter 8, Sections 9 and 10 of the Act shall apply for the first time for the financial year 2023. However, neither the transitional provisions nor the government bill specify when in the financial year the annual recalculation shall take place. As the target level of the Riksbank's equity is to be hedged in real terms through annual recalculation and no recalculation has been made at the entry into

The Riksbank shall therefore make a submission to the Riksdag to restore equity.

force of the Act (beginning of the financial year), the recalculation should be made at the end of the financial year. It follows from this that the target level should be recalculated for the first time at the end of the financial year 2023 (i.e. 31 December 2023). The recalculation should then take place on an ongoing basis at the end of the following financial year via Statistics Sweden's published outcome for the annual percentage change in the CPI in December. For 2023, the target equity level is SEK 62,640 million after adjustment, which is rounded to SEK 62,600 million. The base and minimum equity levels, calculated on the rounded target level, are then SEK 41,733 million and SEK 20,867 million respectively.

Considerations and proposal

The Riksbank's proposal for restoration is described below. The first section describes the Riksbank's considerations regarding unrealised gains on the balance sheet, as these could justify a proposal to restore equity to a lower amount than the base level. This is followed by a section on the conditions for the Riksbank's long-term self-financing, which could justify an amount that restores equity above the base level. Finally, there is a section with the Riksbank's conclusions based on these considerations and the Riksbank's proposal for restoration of equity.

Unrealised gains provide some buffer for future losses

When the value of the Riksbank's assets changes, the change is booked against revaluation accounts on the liabilities side of the Riksbank's balance sheet. Thus both positive and negative changes in the value of the assets compared to their acquisition cost are recorded on these accounts during the year, i.e. the accounts record unrealised gains or losses.

Gains and losses are treated asymmetrically in the accounts in line with the ECB's Accounting Guideline, as described in more detail in Annex A. The Riksbank's revaluation accounts.²⁴ According to the Guideline, the valuation of assets and liabilities, like income recognition, shall be characterised by prudence. Therefore, unrealised losses are taken to the Riksbank's profit and loss account at the end of the financial year, which is not the case for unrealised gains, which remain in the revaluation accounts. Revaluation accounts do not count as part of the Riksbank's equity and shall not be subject to profit distribution to government.²⁵

Unrealised gains in the revaluation accounts primarily serve as a buffer for future losses from reduced asset values that could otherwise lead to a reduction in equity. The Riksbank therefore needs to consider such unrealised gains when deciding on the amount referred to in the submission. As gold has a special status among the Riksbank's assets, the Riksbank shall not take into account unrealised gains relating to changes in the value due to gold-value effects in the proposal for restoration of equity.²⁶ The buffer function of revaluation accounts is to some extent limited, as unrealised gains on an asset can

²⁴ See Article 15.1 b) and c) of the ECB Accounting Guideline.

²⁵ See Chapter 8, Section 8 of the Sveriges Riksbank Act.

²⁶ "The government is of the opinion that changes in the value of the Riksbank's gold reserve should not affect the proposed allocation of profits or restoration of restricted equity." See Government Bill 2021/22:41, p. 149. The government made a corresponding statement in the draft proposal it submitted to the Council on Legislation following the Flam Inquiry (see "Draft legislative proposal for the Riksbank's financial independence and balance sheet", p. 22). The Riksbank Committee also points out that the funds in the revaluation accounts relating to the increase in value of the gold reserve are by definition locked to the gold reserve, unless the gold is sold (see the Riksbank Committee's final report, p. 1231).

only cover unrealised losses on the same asset that caused the gains. This is explained in more detail in Annex A. The Riksbank's revaluation accounts.

According to the annual report for 2023, the Riksbank has unrealised gains of just over SEK 39 billion, excluding those from the gold reserve. Of these, just under SEK 26 billion had arisen from exchange-rate effects, around SEK 10 billion from price effects for Swedish bonds and around SEK 3 billion from price effects for foreign bonds. Since the turn of the year 2023/24, the krona has depreciated and Swedish and foreign interest rates have risen.

During the first two months of the year, therefore, the amounts in the Riksbank's revaluation accounts for exchange-rate effects have increased from SEK 25.7 billion to SEK 30.4 billion, while the amounts in the revaluation accounts for price effects have decreased from SEK 13.6 billion to SEK -2.7 billion. Overall, unrealised gains (excluding the gold reserve) amounted to SEK 27.7 billion in February 2024. The positive balances on revaluation accounts for price effects were able to absorb a large part of the impact of the rise in market rates and the decline in the value of bonds. This reduces the risk that the unrealised losses will affect the reported result in the next annual accounts. This is an example of how sensitive the Riksbank's balance sheet remains to fluctuations in financial prices and how important the revaluation accounts are as a capital buffer.

As exchange rates are highly variable, buffers for exchange-rate effects are less stable. An appreciation of the krona to SEK 9.3 per US dollar would utilise the entire current buffer in the revaluation account for exchange-rate effects in US dollars. Over the past two years, the exchange rate has varied between around SEK 8.2 per dollar and SEK 11.4 per US dollar. More details can be found in Annex A. The Riksbank's revaluation accounts.

Equity corresponding to the target level is a prerequisite for the Riksbank's long-term self-financing

A starting point for the Riksbank Act is that the Riksbank achieves financial independence when the Riksbank independently finances its own administrative costs in the long term. As mentioned earlier, the preparatory works to the Riksbank Act states that self-financing assumes that the Riksbank's net interest income, i.e. the difference between interest income and interest expenses, covers administrative costs and any provisions for financial risks. The Riksbank receives interest income through its assets. The Riksbank's cost-free capital contributes positively to net interest income, as it provides interest-free financing of the assets that creates a return for the Riksbank. The cost-free capital includes equity and banknotes and coins in circulation.²⁷

²⁷ Banknotes and coins in circulation are regarded as a debt the Riksbank has to households, a debt on which the Riksbank does not pay interest. The Riksbank can invest the value of the banknotes and coins in circulation in assets that provide a return. This return, minus the cost of producing and handling banknotes and coins, is known as seigniorage.

The legislator weighed the consequences of possible over-financing, i.e. unjustifiably large equity for the Riksbank, against the consequences of under-financing and concluded that a target level for the Riksbank's equity capital of SEK 60 billion, hedged in real terms, is appropriate.²⁸

The volume of banknotes and coins is determined by public demand and peaked around 2009/2010 at over SEK 110 billion. Since then, currency in circulation has almost halved. The negative trend was broken in 2018, when currency in circulation increased slightly and then remained stable at a level of around SEK 60 billion. Most recently, however, currency in circulation has declined somewhat again. Future developments are uncertain, but the probability of currency in circulation continuing to decline is deemed greater than the probability of it increasing substantially. It will therefore be difficult to increase the Riksbank's earning capacity via this source and thus strengthen its capacity to build up equity. In many other countries, currency in circulation is higher than in Sweden and in some countries it is still growing.²⁹ Central banks in these countries therefore do not face the same self-financing challenge as the Riksbank.³⁰

The Riksbank's administrative costs have increased as a result of contingency needs and changes in the payments market

From the beginning of the 2000s, the Riksbank's workforce decreased and reached its lowest level in 2018, see Annex C. The Riksbank's costs. As far as possible, new resource requirements were managed by reallocating priorities. However, in 2018 the Riksbank recognised that some areas needed to be modernised and allowed to grow. This involved, above all, strengthening preparedness and responding to challenges in the payments market, including through an e-krona pilot and infrastructure projects, which not least created a need to invest in the IT environment. An increased focus on preparedness was part of the preparations to comply with the new Riksbank Act. The scope of the initiatives then increased as the legal requirements were clarified, for example, with a requirement for cash depots and the task of enabling the public to make payments in peacetime crisis situations and states of heightened alert. Furthermore, the geopolitical situation has deteriorated in recent years and increased preparedness and cyber-security have come into sharper focus.

²⁸ See Chapter 8, Section 8 of the Sveriges Riksbank Act. See also Government Bill. 2021/22:41, p. 148–150.

²⁹ In an international perspective, Sweden and Norway stand out in that the ratio of currency in circulation to nominal GDP has been on a clear downward trend (which in Sweden has lasted for several decades) and is now at a very low level compared to other countries. In the euro area and United States, currency in circulation is growing at a higher rate than GDP, which could be explained by the widespread use of the euro and US dollar in other parts of the world and the fact that the United States does not invalidate its banknotes. In the United Kingdom, Denmark and New Zealand, for example, currency in circulation is growing roughly in line with GDP.

³⁰ From this perspective, central banks in countries where currency in circulation is larger than in Sweden and perhaps also increasing have much greater opportunities to recover losses and build up their equity without capital injections from central government.

For these reasons, the Riksbank's costs at constant prices increased relatively sharply between 2019 and 2023. Looking ahead, administrative costs in real terms are expected to stabilise around the current level. This means that the net interest income to which the Riksbank's cost-free capital contributes must cover higher administrative costs than it needed to do during most of the 2010s. This therefore affects the conditions for the Riksbank's long-term self-financing.

The capacity for long-term self-financing needs to be strengthened

To illustrate the Riksbank's finances in the slightly longer term, the Riksbank has made calculations of its result and balance sheet under the assumption of how costs and income may evolve in the future, see Annex B. The Riksbank's capital. The calculations should be seen as illustrative scenarios rather than outright forecasts. They are based on the Riksbank's current financial position, including the buffers held in revaluation accounts, and the restoration of equity to the base level. The baseline scenario assumes that the Riksbank's administrative costs remain slightly above their current level at constant prices and makes assumptions about the development of interest rates and exchange rates in the longer term.

According to these calculations, the Riksbank is expected to make a loss of just under SEK 4 billion for 2024. In the baseline scenario, policy rates are projected to have fallen by the end of the year and to decline further in 2025, which would result in significantly better net interest income going forward. Despite this, it takes a very long time for the Riksbank to build up equity to the target level and thus be able to distribute profits to government again. During the time it takes to build up equity to the target level, there is a risk of new losses occurring and the capital decreasing again. This creates uncertainty about the conditions for self-financing.

Financial prices, like interest rates and exchange rates, tend to be relatively volatile and a sensitivity analysis shows that the result could be both better and worse than in the baseline scenario. However, the difference in relation to the baseline scenario is greater in the worse scenarios than in the better ones due to the asymmetric use of the revaluation accounts in the Riksbank's accounting. Moreover, these conclusions depend to a large extent on the levels to which the currency in circulation, market interest rates and exchange rate are assumed to move in the longer term. In many scenarios, self-financing looks weak. The Riksbank is therefore investigating possible ways of strengthening the capacity for long-term self-financing and will return with information on the results of the investigation during the year.

The Riksbank proposes that the Riksdag restore the Riksbank's equity to the base level in 2024

Due to very unusual circumstances, the Riksbank reported a loss in 2022. A rapid rise in interest rates both in Sweden and abroad led to a decline in the value of the Riksbank's bond holdings - holdings that had been expanded to include Swedish bonds following earlier policy measures and which made the result more sensitive to changes in interest rates. The holdings of Swedish bonds have subsequently decreased due to maturities and to the Riksbank having sold bonds, but the holdings are still contributing to a high level of interest-rate risk. This was illustrated in 2023 when the Riksbank's financial position first weakened further as interest rates increased, creating unrealised losses, and then strengthened again in the autumn as interest rates fell. Together with the exchange-rate risk associated with foreign bonds, this means that the Riksbank's financial position is greatly affected by the development of financial prices in the near term.

However, the interest-rate risk will decrease in 2024 as the holdings of Swedish bonds decrease due to sales, maturities and because the remaining maturity of the bonds still held by the Riksbank is shortened by another year. An increase in interest rates of 1 percentage point today would reduce the value of the Swedish assets by approximately SEK 19 billion. One year ahead, the corresponding increase in interest rates would only reduce the value by about SEK 5 billion. The interest-rate sensitivity of the foreign currency reserves is currently in line with the interest-rate sensitivity of the Swedish assets. The extent to which the impairments affect the reported result due to rising interest rates depends on the size of the buffers in the revaluation accounts for price effects at year-end.

The Riksbank has made its considerations in the submission against this background and proposes that the Riksdag transfer SEK 43,724 million from the state budget so that the Riksbank's equity after the allocation of profit for 2023 is restored from SEK -1,991 million to the base level of SEK 41,733 million in 2024.

Unrealised gains in revaluation accounts provide some protection against new losses in the near term

According to the Riksbank Act, the Riksbank needs to assess whether it has unrealised gains on the balance sheet that justify a restoration to a lower level than the base level or not at all. Unrealised gains provide some protection against new losses but the protection is limited because unrealised gains can only absorb unrealised losses associated with the same asset. Since the turn of the year, the krona has depreciated and Swedish and foreign interest rates have risen. As a result, the amounts in the revaluation accounts for exchange-rate effects have increased, while the amounts in the revaluation accounts for price effects have decreased and become negative. This illustrates the continuing

sensitivity of the Riksbank's financial position to fluctuations in financial prices and the importance of the revaluation accounts as a capital buffer.

The buffers that now exist in the Riksbank's revaluation accounts provide some protection against a reduction in equity in the near future. This is because the risks going forward are expected to be mainly linked to a stronger krona, as the risks associated with the Riksbank's holdings of Swedish bonds are declining rapidly. The buffers can absorb some new losses but do not provide sufficient protection to justify restoring the Riksbank's equity to a lower level than the base level. Restoration to the base level reduces the likelihood of the Riksbank having to make a new submission to restore equity. Repeated restorations would be problematic, as a situation where the Riksbank regularly needs to request capital injections from the government in submissions may be considered to be in conflict with independence.³¹

At present, the Riksbank's assessment is that a restoration of equity to the base level is sufficient

According to the Riksbank Act, the Riksbank can propose a restoration of equity to a level higher than the base level. If required to secure the Riksbank's ability to be self-financing in the long term, the submission may correspond, at most, to an amount that restores equity to the target level. The Riksbank has considered this but the overall judgement is that a restoration of equity to the base level is sufficient at present.

The Riksbank's result remains sensitive to near-term fluctuations in financial prices. However, as described above, the Riksbank has unrealised gains in revaluation accounts that provide some protection against new losses in the near term due to a stronger krona or higher interest rates. These buffers are large enough to not justify restoring equity to the target level. In addition, the Riksbank has taken measures to reduce the sensitivity of its result to fluctuations in financial prices, including through the hedging of the foreign currency reserves and the sale of government bonds. The interest-rate risk for the Riksbank's holdings of Swedish bonds will also decrease over the coming year.

The Riksbank's assessment is that its financial position will improve going forward, but at a very slow pace. During the time it takes to build up equity from the base level to the target level, there is a risk of unfavourable scenarios causing losses that reduce equity again. This creates some uncertainty about the conditions for self-financing. In many scenarios, self-financing is limited and the Riksbank is currently analysing the legal, operational and economic aspects of changes to the Riksbank's operations that would entail more efficient management of central government resources while at the same time strengthening the Riksbank's capacity for self-financing. Stronger self-financing also reduces the risk of the Riksbank having to make a new submission to restore equity in the future. The Riksbank will return with information on

³¹ See Government Bill 2021/22:41, pp 76–77 and the Riksbank Committee's final report (SOU 2019:46), pp 1235–1244.

how self-financing can be strengthened as the results of the analysis are finalised during the year.

A two-step restoration of the Riksbank's equity capital would mitigate the risks of unfavourable developments in 2024

The Sveriges Riksbank Act does not specify when a capital injection is to be made and therefore not when the Riksbank's equity is to be restored either. As mentioned, the Riksbank's result in the near term is still heavily influenced by the development in financial prices. Even if the Riksbank's equity is now restored to the base level, the result in 2024 could be such that equity falls far below the base level after year-end closure and allocation of profit for the 2024 financial year.

Against this background, the Riksbank sees that an alternative to restoring equity in 2024 is for the Riksdag to decide that the restoration will take place in two steps, the first in 2024 and the second in 2025. If the Riksdag takes such a decision, the first capital injection needs to be large enough to create positive equity after year-end closure for 2024 and improve the Riksbank's earnings in the near future. Given that the Riksbank's equity is currently SEK –1,991 billion, a capital injection of at least SEK 25 billion in 2024 should be sufficient to achieve this. The decision should also state that the second injection, in 2025, shall be based on the allocation of profit for 2024 and be for an amount that restores equity to the base level that applies at that time. This mitigates the risk of an unfavourable development in 2024 reducing the Riksbank's equity. This would result in better conditions for the Riksbank to build up equity to the target level in the long term.

However, such an option carries the risk that the total capital injection will be higher than if the full restoration to the base level takes place in 2024. This is mainly due to the asymmetric use of revaluation accounts in line with the Riksbank's accounting policy. Under this policy, unrealised losses at year-end are taken to the profit and loss account, while the corresponding unrealised gains remain in revaluation accounts. Thus, unfavourable developments in financial prices in 2024 could lead to losses, while favourable developments would not improve performance to the same extent.

Annex A. The Riksbank's revaluation accounts

Summary

The Riksbank marks its assets to market and uses revaluation accounts to report the difference between the current market value of the assets and their acquisition cost. These accounts record, during the course of each financial year, the unrealised gains and losses on various bonds and currencies arising from changes in their market values as a result of fluctuations in financial prices. At year-end, unrealised losses are charged to the Riksbank's reported result, while unrealised gains remain in the respective revaluation account. This asymmetric accounting is an expression of a principle of prudence and means that the Riksbank's reported result, equity and ability to pay dividends are not affected by unrealised gains.

Each individual bond issue and each individual currency has its own revaluation account. In the Riksbank's annual report, the individual balances are aggregated under *revaluation accounts for price effects* and *revaluation accounts for exchange-rate effects*. For the Riksbank's holdings of gold, the entire difference between the market value of the gold and the acquisition cost is recorded in a *revaluation account for gold-value effects*.

Unrealised gains in revaluation accounts act as a buffer if the value of the corresponding assets were to fall in the future. As long as the unrealised gains are sufficient, unrealised losses are absorbed and do not affect the Riksbank's reported result. In this way, the revaluation accounts provide protection against falling market values for equity as well. However, positive balances on the revaluation accounts for an individual asset cannot be used to cover impairments on other assets.

The revaluation accounts need to be taken into account in connection with the Riksbank's current submission for the restoration of equity. According to the Riksbank Act, the submission must be for an amount that restores equity to the Act's base level, unless unrealised gains on the balance sheet justify a lower level or no restoration at all. At present, the buffers for price effects on bonds are very small, while they are larger for exchange-rate effects.

The Riksbank's overall assessment is that the unrealised gains in the revaluation accounts do not justify restoring the Riksbank's equity to a lower level than the base level. The Riksbank's gold reserve contains large unrealised gains but, according to the preparatory works to the Riksbank Act, these should not affect the restoration of the Riksbank's equity.³²

³² See Government Bill 2021/22:41, p. 149. The government made a corresponding statement in the draft proposal it submitted to the Council on Legislation following the Flam Inquiry (see Draft legislative proposal for the Riksbank's financial independence and balance sheet, p. 22). The Riksbank Committee also points out that the funds in the revaluation accounts

Guidelines on mark-to-market valuation and revaluation accounts

The Riksbank shall prepare its annual accounts in accordance with the Riksbank Act and generally accepted accounting principles, including the guidelines of the European Central Bank where applicable.³³ According to the ECB Accounting Guideline³⁴, assets held by a central bank for monetary policy purposes should be valued either at market price or at so-called amortised cost³⁵. The ECB Guideline further stipulates that securities classified as “held-to-maturity” shall be valued at amortised cost.³⁶

The ECB has chosen to value its monetary policy-motivated bond holdings at amortised cost. As the Riksbank did not wish to be bound to retain assets purchased for monetary policy purposes until their maturity, the Executive Board of the Riksbank decided in 2015 that such assets should be marked to market in the same way as the assets in the gold and foreign currency reserves.³⁷

Mark-to-market valuation means that the value of the Riksbank's assets, expressed in Swedish kronor, changes when market rates and exchange rates change. Unrealised gains or losses occur in relation to the acquisition costs of the assets.

As changes in asset prices that occur today express expectations of the future return on the assets, the mark-to-market valuation of the assets provides an indication of how the Riksbank's future result will develop. Like the Riksbank is doing, allowing the mark-to-market valuation to then affect earnings and equity already at this stage provides a more accurate and transparent picture of the financial position than using amortised cost as an accounting policy. Mark-to-market valuation improves insight into the Riksbank's financial circumstances, which is a prerequisite for the democratic scrutiny prescribed by the Riksbank Act.

How revaluation accounts work

Changes in market values are recognised on the asset side of the balance sheet and reflected in revaluation accounts on the liability side.

The balance on a revaluation account records the difference between the market value of an asset and its acquisition cost. A positive balance means that the market value of the asset exceeds its acquisition cost, in other words there is

relating to the increase in value of the gold reserve are by definition locked to the gold reserve, unless the gold is sold (see the Riksbank Committee's final report, p. 1231)

³³ Chapter 8, Section 2, Sveriges Riksbank Act

³⁴ Article 9(5) of the European Central Bank Guideline (EU) 2016/2249 of 3 November 2016 on the legal framework for accounting and financial reporting in the European System of Central Banks (ECB/2016/34) (reworked) (ECB Accounting Guideline)

³⁵ Amortised cost means that the asset is measured at cost, adjusted for the premium or discount in relation to the nominal value at which the asset was acquired.

³⁶ Article 9(6) of the ECB Accounting Guideline.

³⁷ Decision on additional monetary policy measures, 18 March 2015, Annex F to the minutes, see Executive Board meeting 18 March 2015 | Sveriges Riksbank.

an unrealised gain. A negative balance means the opposite, i.e. an unrealised loss.

A positive balance arises because the price of an asset has increased after the date of acquisition so that the current market value exceeds the cost of the asset. For a bond, this happens if the market rate has fallen, and for a foreign currency it happens if the exchange rate has appreciated against the Swedish krona. For negative balances, the reverse is true.

Each individual bond and each individual currency has its own revaluation account. In the Riksbank's annual report, the individual balances are aggregated under *revaluation accounts for price effects* and *revaluation accounts for exchange-rate effects*.

For the Riksbank's holdings of gold, the entire difference between the market value of the gold and the acquisition cost is recorded in a *revaluation account for gold-value effects*. This account thus includes both unrealised gains from developments in the gold price, expressed in US dollars, and unrealised gains from developments in the US dollar/Swedish krona exchange rate.

When the Riksbank buys more of a bond that it already holds, the reported acquisition cost of the bond is adjusted. If part of the holding of the bond is sold, both the acquisition cost and the balance on the revaluation account are adjusted. The acquisition exchange rate for a particular currency is adjusted every time the Riksbank buys or sells the currency in question. The Riksbank currently has no corresponding active management of its gold holdings and thus no corresponding adjustments are made for gold.

How do unrealised gains affect the reported result?

Over the course of a financial year, balances on revaluation accounts can be either positive or negative, depending on whether unrealised gains or losses predominate. In contrast, for annual accounts, the ECB Accounting Guideline stipulates that unrealised losses on revaluation accounts should be taken to the profit and loss account, but not unrealised gains.³⁸ This means that the accounting on revaluation accounts works asymmetrically; negative balances are charged to the Riksbank's reported result while positive balances do not affect the result. After allocation of profit, the reported result affects equity.

When a negative balance is transferred from a revaluation account to the reported result, the balance on that revaluation account is reset to zero. At the same time, the corresponding cost of the assets in question is written down to their current market value.³⁹ For a bond, the entire write-down is then reversed over the remaining life of the bond as a gradual upward adjustment of the value to the nominal amount received when the bond is redeemed at maturity. This reversal is reflected as higher recognised interest income over the remaining

³⁸ Articles 3(2) and 15(1)(b) and (c) of the ECB Accounting Guideline. See also Government Bill 2021/22:41, p. 148–149.

³⁹ In accounting, a write-down is the same as the Riksbank selling the asset at market price and thereby realising the loss and then immediately buying it back at the same price.

life of the bond. This is not the case for currencies as they do not generate any interest income and have no maturity date when a certain amount is repaid.

Reported result differs from the cash flows of the assets

The application of mark-to market valuation and revaluation accounts means that the Riksbank's reported result differs from the cash flow generated by the assets in question. The difference is partly due to the fact that unrealised losses affect the reported result at year-end even though the write-down is not associated with any cash flow. The above-described upward adjustment of reported interest income as a consequence of the reversal of write-downs also does not lead to any cash flow.

An example is the Riksbank's reported interest income from 2023 onwards. It will partly consist of a cash flow from interest payments from nominal yields received on the bonds the Riksbank owns. However, a much larger part will consist of reversals of write-downs from the 2022 annual accounts, which have no impact on cash flow. This part is much larger because the fixed-rate bonds that the Riksbank owns and wrote down the value of were acquired during a period of much lower rates.

If written-down assets are sold before maturity, a result is realised which is calculated as the difference between the sales value and the written-down acquisition cost. In this case, the remaining part of the write-downs is returned to the profit and loss account and balance sheet at once.

The asymmetric treatment of revaluation accounts is based on a principle of prudence

The different treatment of unrealised gains and losses means that the Riksbank's equity does not increase when unrealised gains arise. Instead, such gains remain in revaluation accounts where they provide a buffer against possible future losses due to falling market prices of the asset in question.

This means that the Riksbank's reported result does not change to the same extent as financial prices fluctuate. It also means that equity will be more stable over time and that the Riksbank's profit distribution to government will have a more stable basis, as unrealised gains will not be eligible for dividends. Since there is a risk that increased asset values can be quickly reversed if prices develop unfavourably, it would be risky to distribute unrealised gains resulting from the increase in value. The asymmetric treatment of unrealised gains and losses in revaluation accounts reflects a principle of prudence.

Revaluation accounts constitute a capital buffer

The revaluation accounts fulfil a purpose as a buffer against future impairment of the Riksbank's assets, but not in the same general way as equity. According to the ECB Accounting Guideline, unrealised gains in a particular type of asset

(bond, currency or gold) may not be netted against an unrealised loss in another asset.⁴⁰ This means that a positive balance on a revaluation account cannot be used to prevent a negative balance on another revaluation account being transferred to and burdening the reported result at year-end.

Revaluation accounts for gold-value effects are treated separately

Gold is a financial asset that, like the foreign currency reserves, aims to ensure that the Riksbank can carry out its tasks. For example, gold can be used as collateral for foreign currency loans and thereby fulfil a contingency function.

The gold assets do not generate any nominal yield or other regular return. For any profit to be realised from the gold assets, there must be a sale of some part of the gold holdings. The preparatory works to the Sveriges Riksbank Act states that unrealised gains in the gold reserve should not affect the restoration of equity.

Current balances on the revaluation accounts

Table A1 shows that the total balance on the Riksbank's revaluation accounts at year-end 2023 was SEK 111 billion, of which gold accounted for SEK 72 billion. The balances for price effects and exchange-rate effects totalled around SEK 39 billion.⁴¹

In terms of the value of the Riksbank's assets, the balance on the revaluation accounts for price effects was small, which in itself is not surprising as we have an unusually large balance sheet, but it is also small from a historical perspective. The balance for price effects for bonds denominated in Swedish kronor represented approximately 1.6 per cent of the value of these bonds. For foreign bonds, the balance corresponded to approximately 0.8 per cent of the value of the foreign currency reserves. The balance on the revaluation accounts for exchange-rate effects amounted to around 6 per cent of the value of the foreign currency reserves.

⁴⁰ Article 15(1)(e) of the ECB Accounting Guideline.

⁴¹ Submission to the Riksdag 2023/24:RB1 Annual report for Sveriges Riksbank for 2023.

Table A1. Balances on the Riksbank's revaluation accounts at year-end 2023 and at the end of February 2024.*SEK million*

	31 December 2023	29 February 2024
<i>Price effect</i>	13,578	-2,702
Bonds in foreign currency	10,160	-3,396
Bonds denominated in Swedish kronor	3,418	694
<i>Exchange rate effect</i>	25,695	30,401
USD	15,363	19,717
EUR	2,093	2,296
Other currencies (incl. SDR)	8,239	8,388
Total unrealised price and exchange rate effects	39,273	27,699

Note: Unrealised gold-value gains shall not be taken into account in the restoration of equity. Therefore, the value of unrealised gold-value effects is not included in the table.

Buffers for rising interest rates shrank in early 2024

In the first two months of 2024, Swedish and foreign interest rates have risen again. The unrealised gains at the turn of the year have disappeared and the revaluation accounts now indicate write-downs. At the end of February 2024, the balances for price effects totalled SEK -2.7 billion. This illustrates how sensitive the Riksbank's balance sheet remains to fluctuations in financial prices and that the revaluation accounts fulfil an important function as a capital buffer.

In 2024, however, the risks will decrease further as the Swedish bond portfolio shrinks by about SEK 200 billion more, while the average maturity of the remaining assets will also decrease. This means that the interest-rate risk for Swedish bond holdings will decrease. An interest-rate increase of 1 percentage point today would reduce the value of Swedish bonds by approximately SEK 19 billion, while the corresponding interest-rate increase one year ahead would only reduce the value by approximately SEK 5 billion. The extent to which this will affect the reported result depends on the size of the buffers in the revaluation accounts for price effects at year-end 2024. The interest-rate risk in the foreign currency reserves is in line with the current interest-rate sensitivity of the Swedish assets.⁴² The scenarios in Annex B. The Riksbank's capital illustrate the effects of higher and lower interest rates on the Riksbank's result, equity and revaluation account balances.

⁴² At year-end 2023, the duration of the Riksbank's Swedish securities portfolio and the foreign currency reserves was 3 and about 4 years respectively. At the end of 2024, the duration of the Swedish portfolio is expected to have decreased to just over 1 year, while the duration of the foreign currency reserves is expected to be roughly unchanged.

Buffer for stronger krona remains relatively large

The krona appreciated in 2023, contributing to a decrease in the revaluation accounts for exchange-rate effects of SEK 23 billion. The currency hedging carried out by the Riksbank in the autumn also contributed to the decrease by realising some unrealised gains. In the first two months of 2024, the krona depreciated slightly again and the unrealised gains on the revaluation accounts for exchange-rate effects increased to SEK 30.4 billion.

The large fluctuations in 2023 and early 2024 demonstrate the volatility of exchange rates and the difficulty of assessing the sustainability of the risk buffers in the revaluation accounts. The Riksbank and many others believe that the krona may appreciate in the coming years.⁴³

It is possible to estimate how much krona appreciation against individual currencies the current positive balances in the various currencies' revaluation accounts can absorb before the Riksbank's result is negatively affected. Given the current exchange rate, size of the foreign currency reserves and degree of hedging, the positive balance on the revaluation account for exchange-rate effects in US dollars would, for example, be zero if the krona appreciates to SEK 9.3 per US dollar.⁴⁴ Should the krona appreciate more than this, unrealised losses arise that have a negative impact on the reported result at year-end. By way of comparison, the krona's exchange rate against the US dollar over the past three years has varied between approximately SEK 8.2 and 11.4 per US dollar (Chart A1). Annex B. The Riksbank's capital illustrates the effects of stronger and weaker krona respectively on the Riksbank's result, equity and revaluation account balances.

Chart A1. Nominal exchange rate against the dollar



Note: Daily values. A higher value corresponds to a weaker exchange rate.

Source: The Riksbank.

⁴³ In the National Institute of Economic Research's forecast from December 2023, the krona appreciates by 6–9 per cent against the euro and the US dollar, roughly in line with the Riksbank's latest forecast from March 2024.

⁴⁴ Based on the current average acquisition price.

What would the Riksbank's result have been without mark-to-market valuation?

The accounting policy applied by the Riksbank means that unrealised losses via write-downs of bond values affect the reported result for the year, and thus also equity in the subsequent allocation of profit. If the Riksbank had not applied mark-to-market valuation to its monetary policy-motivated bond holdings, the large reported loss in 2022, which was largely due specifically to write-downs of the bonds in kronor, would have been considerably smaller.⁴⁵ But then, the loss reported for 2022 would instead have been spread out and charged to the result over several years starting in 2023. In this case, interest income would have been significantly lower than it is now, as the reported interest income is continuously adjusted upwards by reversing write-downs until the bonds mature.

Already at the end of 2023, the Riksbank had reversed just over half of the unrealised losses charged to the result for 2022. These reversals can in some sense be seen as a measure of the proportion of unrealised losses that have been "realised". For 2024, further relatively large unrealised losses are expected to be reversed, after which the effects will diminish in importance as the holdings of krona-denominated bonds decrease due to maturities and sales.

⁴⁵ The loss was SEK 86.0 billion. Write-downs in Swedish bonds amounted to SEK 59.1 billion, while write-downs in foreign bonds corresponded to SEK 36.7 billion. Reversed financial risk provisions improved the reported result by SEK 5 billion to SEK 80.7 billion (Submission to the Riksdag 2022/23:RB1 Annual Report for Sveriges Riksbank 2022).

Annex B. The Riksbank's capital

Summary

The Riksbank has assets that generate interest income and liabilities on which it pays interest. The difference between interest income and interest expenses constitutes net interest income. Some of the Riksbank's assets are financed interest-free, which means that net interest income is usually positive. Equity is part of the interest-free financing and thus affects net interest income. Net interest income needs to cover the costs incurred by the Riksbank to conduct its operations, build up its equity in line with inflation and also cover temporary losses.

Net interest income is affected by developments in both interest rates and exchange rates. As these vary greatly, losses sometimes occur. The Riksbank can build up different types of buffers to absorb these losses. The aim is to reduce the likelihood of a need arising for capital injections from the state. The need for buffers depends on how large the Riksbank's balance sheet is and how much risk it contains. The need has been very large in recent years, but is now shrinking, partly as a result of measures taken by the Riksbank.

Scenario analysis can, given a set of assumptions, provide an indication of how the Riksbank's result and capital may develop in the future. In a baseline scenario, the Riksbank makes profits that cause equity to grow towards the target level in the coming years, but at a slow pace.

The assumptions underlying the baseline scenario are associated with considerable uncertainty. Sensitivity analysis shows that a different development of financial prices in the near term could give rise to both better and worse developments in the coming years. Depending on the development of interest rates and the krona exchange rate, the Riksbank could in the near future distribute profits to the government or have to make a new submission for the restoration of equity.

A simple approach to understanding the Riksbank's earnings

The basis for the Riksbank's earnings is the relationship between the Riksbank's assets and liabilities. This relationship determines the net interest income, i.e. the difference between the Riksbank's interest income and interest expenses, which in part shall be used to cover the Riksbank's administrative costs. This annex starts by describing key factors affecting net interest income and then presents scenarios for the Riksbank's financial position - result, equity and revaluation account balances - five years ahead.

The Riksbank's net interest income is determined by the size of its assets, the interest received on these assets and the size of and interest incurred on the

interest-bearing debt that the Riksbank has had to raise to finance the assets. Given these quantities, net interest income is determined by interest income from the assets and the interest expense the Riksbank pays on its interest-bearing debt. The interest-bearing debt consists of the so-called monetary policy deposits and carries interest paid at the Riksbank's policy rate or slightly below it depending on the type of debt.

The Riksbank's interest-bearing assets are bonds

The Riksbank's assets consist, somewhat simplified, of gold and foreign currency reserves with bonds in foreign currency, and a monetary-policy-motivated portfolio of bonds in Swedish kronor. The gold reserve is currently not actively managed and does not generate any current income in the form of dividends or interest.⁴⁶

Most of the Riksbank's assets consist of bonds that generate income in the form of annual nominal yield. If the bonds have been purchased at a price that is lower or higher than the nominal amount of the bond, an income or expense equal to the difference between the price and the nominal amount repaid at maturity is added over the life of the bond.

For the part of the interest-bearing assets financed by interest-free debt, the Riksbank can utilise the entire interest income without deducting any interest expense. Net interest income can thus be divided into two parts; one part is interest income from assets financed with interest-free debt while the other part is interest income minus interest expense from assets financed with interest-bearing monetary policy deposits. The interest-free debt thus generates "safe" earnings, while the assets financed with interest-bearing debt generate "risky" earnings that are positive only if the interest rate on the assets is higher than the policy rate.

Capital and earnings are linked

When the Riksbank makes a profit and equity therefore increases, the Riksbank can either use the profit to buy more interest-bearing assets or reduce the monetary policy deposits that finances parts of the existing assets. Both options have a positive effect on net interest income and earnings. Conversely, if the Riksbank makes a loss, net interest income and earnings are negatively affected.

An example of this effect is the loss incurred in the financial year 2022 as a result of the fall in the market values of the Riksbank's assets as a

⁴⁶ The Riksbank could actively manage the gold and thus receive current income, but this may limit the possibilities to freely dispose of the gold, which may have negative effects on the preparedness objective. If the Riksbank were to reduce its gold holdings through sales, the funds released could be used to reduce the interest-bearing debt or to buy yielding assets, which would improve earnings. Again, this would be at the expense of the preparedness objective.

consequence of rising market rates. The Riksbank's accounting follows a principle of prudence which means that if the market value of the assets falls, the acquisition cost of the bonds is written down and the unrealised loss is charged to the reported result. (Read more about the Riksbank's accounting policies in Appendix A. The Riksbank's revaluation accounts.)

Net interest income has to cover three needs

The Riksbank has ongoing administrative costs in order to carry out its operations. Some of the costs are covered by income that the Riksbank receives from parts of its operations, such as fees from banks and other financial companies that participate in the RIX system. It is therefore most correct to speak of net administrative costs (see Annex C. The Riksbank's costs and the Riksbank's net administrative costs in the Riksbank's Annual Report for 2023). What remains of net interest income after deducting net administrative costs is a profit, or loss if it is negative.

The Riksbank Act defines a target level for equity and stipulates that it should be adjusted upwards in line with inflation each year. Therefore, to grow at the same rate as the target level, equity needs to be built up annually using profits. The target level was SEK 60 billion at the end of 2022. Assuming average inflation of 2 per cent, i.e. the same as the Riksbank's inflation target, the Riksbank needs to make an average profit of $60 * 2$ per cent = SEK 1.2 billion per year to keep the real value of equity unchanged.

The Riksbank also needs to make a profit for a third reason. The Riksbank's balance sheet and profit and loss account are affected by fluctuations in financial prices such as interest rates and exchange rates, which means that the Riksbank will make losses in some years. With the accounting policy applied by the Riksbank, i.e. the assets are marked to market and unrealised losses affect the result, the loss for individual years can be significant (see Annex A. The Riksbank's revaluation accounts). If such losses arise, equity needs to be built up again to the target level to safeguard the Riksbank's long-term earnings. In other words, equity must grow faster than the upward adjustment of the target level, which is only possible if the Riksbank's profit is large enough to cover any losses and the hedging in real terms.⁴⁷

Fluctuations in financial prices have consequences

Both market and policy rates vary considerably over time. For example, the Riksbank and other central banks raised their policy rates rapidly in 2022 and 2023. Over roughly the same period, long market rates rose by 2-3 percentage points globally.

⁴⁷ Alternatively, the Riksbank can build up ex ante buffers against the risk of losses by making provisions for financial risks. These provisions are charged to the profit and loss account when made and require that the profit before provisions is sufficiently large.

When the policy rate rises, it has an immediate negative effect on the Riksbank's net interest income through increased interest expenses for the monetary policy deposits. Conversely, a reduction in the policy rate has a directly positive effect on net interest income. Changes in market rates have no direct effect on the Riksbank's net interest income. But with the accounting policy applied by the Riksbank, the market values of the assets are affected by changes in market rates. This may result in unrealised losses affecting the Riksbank's reported result (see Annex A. The Riksbank's revaluation accounts). Regardless of the accounting policy, net interest income is gradually affected by changes in market rates when the bonds are sold, which occurs, for example, when the Riksbank trades in the foreign currency reserves and when the holding of bonds in Swedish kronor is now being wound down. Fluctuations in interest rates thus lead to periods of better or worse net interest income for the Riksbank. The magnitude of this interest-rate risk depends on the size and structure of the balance sheet.

The Riksbank's balance sheet total grew gradually from the global financial crisis in 2008 onwards, peaking in 2021 and 2022. In 2023, the balance sheet total has shrunk again, slightly reducing the interest-rate risk. As the bonds in Swedish kronor are now partly sold and otherwise approach their maturity dates, the interest-rate risk and balance sheet total will decrease significantly. However, the Riksbank will continue to have significant interest-rate risk in the foreign currency reserves.

The Riksbank's financial accounts are expressed in kronor and its costs are also expressed in kronor. Therefore, it is the income expressed in kronor that determines the development of the result. As the assets in the foreign currency reserves generate returns in foreign currency, the krona exchange rate affects the Riksbank's net interest income. This gives rise to a currency risk whereby a weaker krona increases the value in Swedish kronor of both interest income and the market value of bond assets in foreign currency. Conversely, net interest income is weakened by a stronger krona. Since autumn 2023, the Riksbank has hedged parts of the foreign currency reserves, reducing the foreign-exchange risk. However, a significant foreign-exchange risk remains.

Buffers can absorb temporary losses

The interest-rate and foreign-exchange risks on the Riksbank's balance sheet, combined with the application of mark-to-market valuation of the assets, mean that significant losses can arise and be charged to the reported result. These losses may cause equity to fall to a level that creates a need for capital injections. At the same time, however, there are buffers that mitigate or prevent losses in certain situations.

The change in the value of the Riksbank's assets when interest rates and exchange rates fluctuate does not immediately affect the reported result and equity. Instead, the change in value is first recorded as an unrealised gain in a so-called revaluation account on the liability side of the balance sheet. A

change in the value of a specific asset resulting in an unrealised gain acts as a direct buffer against a possible subsequent impairment in the value of that particular asset (see Annex A. The Riksbank's revaluation accounts).

One type of buffer that is more useful than balances on revaluation accounts is funds set aside for financial risk. The principle is that if the Riksbank reports a sufficiently large profit, the bank can make a provision that acts as a buffer against financial risks on the balance sheet. When the Riksbank sets aside funds for financial risks, it is assumed to be justified based on the risks on the balance sheet (see Fluctuations in financial prices have consequences). The risk provision is charged to the result at the time it is made and thus affects the ability to pay dividends to the government. The assigned funds act as a buffer that can be utilised later to cover losses that arise.⁴⁸

The need for buffers depends on the level of risk on the Riksbank's balance sheet. A reasonable starting point for the dimensioning of the need for capital and buffers, which is also supported by the preparatory works to the Sveriges Riksbank Act, is that there should be a low probability of the Riksbank having to make recurring submissions for capital injections.⁴⁹ However, estimating this probability is difficult; see Quantitative analysis with a model.⁵⁰

The conditions for the Riksbank's capital and earnings have changed

A very important change in the conditions for the Riksbank's earnings, from a risk point of view, is that the balance sheet total has grown and that a much larger proportion of the Riksbank's debt is now interest-bearing than was the case during the 2010s. This means that net interest income is much more sensitive to changes in interest rates now than before (see the section Net interest income has to cover three needs). For example, the effect on net interest income of a temporary change in the difference between the income interest rate on the assets and the policy rate is several times greater now than it was ten years ago.

In the short term, the level of interest rates is mainly determined by the economic cycle, but the longer-term average level is determined by structural factors. This is usually referred to as a neutral real interest rate.⁵¹ The neutral interest rate affects both the income interest rate and the cost interest rate that forms the basis for the Riksbank's net interest income, but as long as there is interest-free financing, the total effect is that a lower neutral interest rate gives

⁴⁸ At present, the Riksbank has no funds set aside for financial risks, although the risks on the balance sheet are relatively large. This is because the funds previously set aside were reversed in connection with the loss in 2022 and the profit for 2023 was taken directly to equity. See Decision to reverse previous financial risk provisions, DNR 2023-00059 and Financial provisions (risk provisions) for the financial year 2023, DNR 2024-00064.

⁴⁹ SOU 2019:46 p. 1235).

⁵⁰ The Riksbank Committee writes that "The risk of the Riksbank incurring large-scale losses is impossible to quantify more closely." (SOU 2019:46 p. 1247).

⁵¹ See Lundvall (2023), Drivkrafter bakom globala trender i den neutrala räntan (Driving forces behind global trends in the neutral interest rate), Annex 2, Långtidsutredningen 2023 (SOU 2023:87).

lower net interest income and vice versa. In recent years, however, real interest rates globally have been lower, than the historical average prior to the 2010s and it is very difficult to determine what a likely average level is in the long run.

The volume of banknotes and coins depends on public demand, which is now at a low level after a long declining trend. When the demand for banknotes and coins decreases, the Riksbank's interest-free financing falls and the Riksbank needs to increase its interest-bearing debt to finance its assets. An increase in interest-bearing debt results in higher interest expenses and reduces net interest income.

The Riksbank's administrative costs have increased relatively quickly since 2018 but are expected to increase in line with inflation in the future (see Annex C. The Riksbank's costs). In a few years, administrative costs are expected to stabilise at around SEK 1.3 billion per year at 2023 prices. Administrative costs are one of the needs net interest income has to cover in order for the Riksbank to have a result that safeguards its financial independence (Net interest income has to cover three needs). Higher administrative costs therefore require better net interest income.

As a large proportion of the assets are financed by interest-bearing debt, the difference between interest income and the policy rate plays a crucial role for the net interest income. A large share of the foreign currency reserves, more than 60 per cent, is invested in US government bonds.⁵² Over the last ten years, US government bond yields have been higher than both Swedish government bond yields and the Swedish policy rate. Thus, the interest income on the Riksbank's assets has generally exceeded the cost of the interest-bearing debt, which has contributed to a strong net interest income and a high average profit, until 2022. In addition, the Swedish krona has steadily depreciated against the US dollar (and most other currencies in which the foreign currency reserves are invested), which has raised the value in kronor of interest income in foreign currency and helped to increase the Riksbank's net interest income, expressed in kronor.

Under these conditions, it was favourable for the Riksbank to finance its assets with monetary policy deposits. If the situation were to change in the future and, for example, US government bond yields were to fall below the Swedish policy rate, this would lead to weak or negative net interest income. It is difficult to make a reasonable assumption about the future relative development of US and Swedish yields, which means that the assessment of future net interest income is uncertain.

⁵² Submission to the Riksdag 2023/24:RB1 Annual report for Sveriges Riksbank 2023 note 3.

Quantitative analysis with a model

This section presents results from a quantitative analysis of the effects on the Riksbank's financial position under different assumptions.

Scenario analysis

Here, results are presented from a baseline scenario with a probable development of the Riksbank's financial result and capital in the future, given certain numerical assumptions. The Riksbank does not have an official assessment of all the assumptions included, which is why the baseline scenario is not to be seen as an result forecast but rather as a probable development based on assumptions that are considered reasonable.

In addition, a sensitivity analysis is presented that shows how robust the baseline scenario is against reasonable fluctuations in financial prices. The sensitivity analysis illustrates that there is considerable uncertainty surrounding the development of the Riksbank's financial position in the future, with a focus on the next few years.

In the scenario analysis, a "model" called Balance Sheet Analysis (BSA) is used. The BSA model has been developed by staff at the Riksbank and is adapted to the items on the Riksbank's balance sheet and the accounting policies the Riksbank applies.⁵³ BRA takes in assumptions about financial prices, administrative costs, currency in circulation, etc. as time series, and generates time series for the development of the Riksbank's profit and loss account and balance sheet.⁵⁴

Baseline scenario

The scenario extends to 2030 and is based on the following assumptions:

- **Net administrative costs** remain at the current level in real terms, i.e. they grow in line with inflation, 2 per cent per year (Annex C. The Riksbank's costs for a discussion on history, future and uncertainty).
- **Banknotes and coins** in circulation remain at the level at the end of 2023 in nominal terms, i.e. do not grow with inflation.
 - Given the downward trend in the volume of banknotes and coins for more than a decade, this may seem like a strong assumption. It is uncertain whether this trend will continue in the longer term or whether it will be broken or even reversed.

⁵³ The Riksbank's Annual Report for 2023 describes the Riksbank's accounting policies.

⁵⁴ The BRA model has, among other things, been used as a basis for decisions on provisions for financial risks; see, for example, Financial provisions (risk provisions) for the financial year 2022, DNR 2023-00059.

- **The policy rate** follows the latest National Institute of Economic Research forecast and falls to 2.5 per cent in the second half of 2025.⁵⁵
 - The longer-term assumption of 2.5 per cent corresponds to a neutral real interest rate of 0.5 per cent.
- **Market rates** are calculated as the expected average policy rate over the life of the bond, plus a term premium.
 - The initial level of term premiums is consistent with the scenario's policy rate expectations in Sweden and abroad. In the longer term, they move towards 38 basis points for a 5-year fixation period, which is in line with historical averages. However, estimated term premiums have varied greatly over time and the choice of time period plays an important role for the average.
- The krona **exchange rate** follows the latest forecast by the National Institute of Economic Research, which implies an appreciation of 6-9 per cent against USD and EUR by 2030.
 - The krona has been steadily depreciating against most currencies since the 2010s. In the longer term, however, this trend is assumed to be broken and the krona remains at the level reached in 2028.
- The Riksbank equity is restored to the base level, SEK 41.7 billion, in 2024.

These assumptions are more or less important for the result in the scenario analysis. The impact of alternative short-term interest rate and exchange rate developments on the result is illustrated in the sensitivity analysis below. The long-term assumptions are also important, but have the greatest impact on the result in the longer term.

Chart B1 shows the development of the Riksbank's reported result, equity and revaluation accounts in the baseline scenario. Despite a capital injection that increases equity to the base level, the Riksbank makes a loss for 2024 of SEK 3.7 billion. In the baseline scenario, the policy rate does not start to fall until the second half of the year and amounts to 3.8 per cent on average in 2024. As a result, the interest expenses on the monetary policy deposits exceed the interest income on the bond assets - net interest income is negative and contributes to the full-year loss. By the end of 2024, the policy rate has been cut to 3.25 per cent in the baseline scenario, and it continues to be lowered in 2025 (see Chart B2), paving the way for much better net interest income going forward.

The loss for 2024 results in equity, after a capital injection to the base level being just below SEK 40 billion at year-end. From 2025, the Riksbank makes a profit of around SEK 3 billion per year (see Chart B1). This is a relatively high profit, which is mainly explained by the fact that the yields on US go-

⁵⁵ See Swedish Economy Report, December 2023, which was the latest available forecast at the time of the analysis. From August 2025, the policy rate forecast has been revised upwards from 2.25 to 2.50 per cent. This interest-rate assumption is well in line with the Riksbank's interest rate forecast in the Monetary Policy Report from 27 March 2024.

vernment bonds, where a large part of the Riksbank's foreign currency reserves is invested, are significantly higher than the Swedish policy rate for a long time.

Overall, equity grows slightly faster than the target level, which is adjusted upwards during the period in line with the inflation rate in accordance with the Riksbank Act.⁵⁶ Until 2030, the Riksbank's equity gradually approaches the target level, but at the end of the baseline scenario, it is still SEK 15 billion short. Thus, in the baseline scenario, there is no scope for either dividends to the government or provisions for financial risks for a long time to come.

The starting-point for the baseline scenario is that, at the end of 2023, there are significant unrealised gains in the revaluation accounts for currency effects as a result of the trend depreciation of the krona over a longer period of time. However, the krona appreciates in the scenario in accordance with the National Institute of Economic Research forecast, which leads to a reduction in the unrealised gains in the revaluation accounts for currency effects. In 2027, only SEK 5 billion of the accumulated currency gains remain. From this reduced buffer level, only a marginal further appreciation of the krona is required to have a negative effect on the reported result; see more in the sensitivity analysis below.

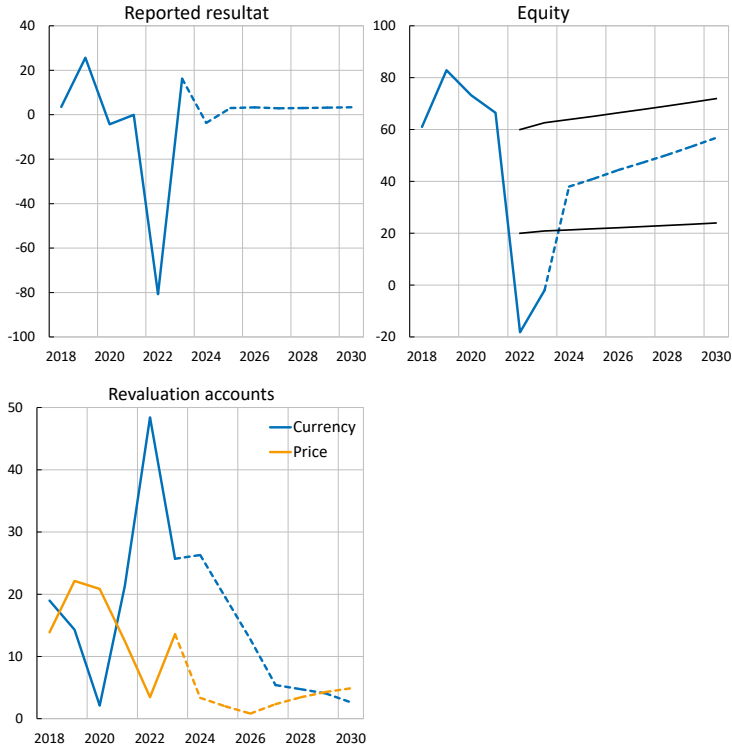
Initially, there are also some positive balances on the revaluation accounts for price effects consisting of unrealised gains on Swedish and foreign bonds, which mainly arose as a result of the fall in interest rates at the end of 2023. However, these accrued gains largely disappear from the balance sheet as the Swedish bonds are sold and mature. Some unrealised gains on foreign bonds remain in the foreign currency reserves throughout the baseline scenario due to falling market rates abroad.

In the baseline scenario, the Riksbank's net interest income exceeds administrative costs and the resulting profit leads to an increase in equity towards the target level, albeit at a very slow pace. There is no or very little margin to make risk provisions or to cover temporary losses that could arise from unfavourable developments in financial prices.

⁵⁶ Chapter 8, Section 8 of the Sveriges Riksbank Act

Chart B1. Development of the Riksbank's reported result, equity and revaluation accounts in the baseline scenario

SEK billion



Note: Solid lines indicate outcomes and dashed lines the baseline scenario. Black dashed lines indicate target level and minimum level target equity respectively. Equity here also includes the profit for the year, which formally affects the balance sheet item equity with a one-year lag.

Source: The Riksbank

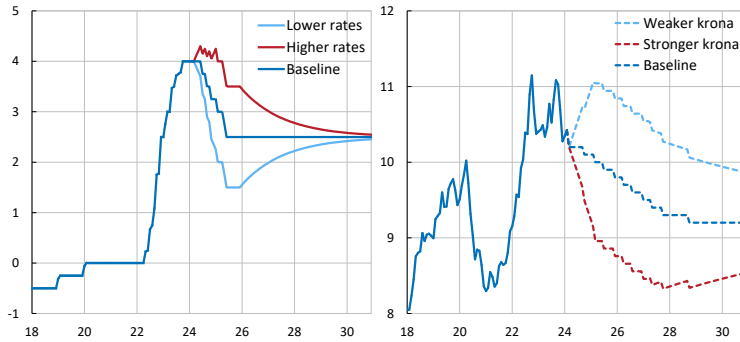
Sensitivity analysis

As described above, the assumptions on which the baseline scenario is based are associated with considerable uncertainty. This section analyses the effects of variations in the most important assumptions focusing on the near term. The variations are perceived to be within the limits of reasonableness and thus fully conceivable. More extreme variation could also be assumed, so the aim is not to include the full range of possible outcomes.

Chart B2 shows the assumptions for the Swedish policy rate and the krona exchange rate against the US dollar in the baseline scenario and in the sensitivity analysis presented below.

Chart B2. Assumptions in the sensitivity analysis

Policy rate in per cent (left) and exchange rate SEK per USD (right).



Note: Solid lines indicate outcomes and dashed lines assumptions in the sensitivity analysis. The chart shows monthly observations.

Sources: National Institute of Economic Research, Macrobond Financial AB and the Riksbank

Temporary interest-rate fluctuations

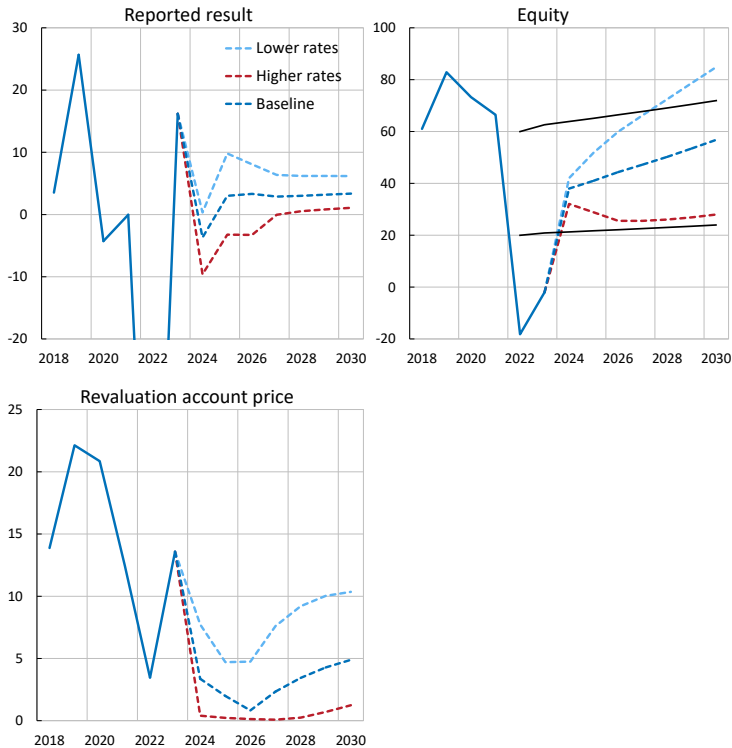
Both central bank policy rates and market rates can change significantly in a short period of time. As described above, this has potentially large effects on the Riksbank's net interest income and reported result. In the sensitivity analysis presented in Chart B3, policy rates in Sweden, the United States and the euro area are instead assumed to be temporarily 1 percentage point higher or lower than in the baseline scenario and market rates are adjusted in accordance with this. Other assumptions are unchanged from the baseline scenario.

Lower policy rates affect the Riksbank's net interest income through several mechanisms. A direct effect of a lower policy rate is that interest expenses on the monetary policy deposits decrease, which improves net interest income. The lower policy rate is also reflected in lower market rates, which in turn increases the market value of the Riksbank's bond holdings. Chart B3 shows that if interest rates are lower than in the base scenario, the Riksbank reports profits that are SEK 2–6 billion higher per year until 2030. Profits build up equity to the target level much faster than in the baseline scenario, and in 2028 equity exceeds the target level. By 2030, equity is SEK 13 billion higher than the target level.⁵⁷

⁵⁷ According to the Riksbank Act, excess profits shall be distributed to the government if equity, including retained earnings, exceeds the target level of equity. However, this scenario analysis ignores this.

Chart B3. Development of the Riksbank's reported result, equity and revaluation accounts in sensitivity analysis with temporary interest-rate fluctuations

SEK billion



Note: Solid lines indicate outcomes and dashed lines scenarios for sensitivity analysis. Black dashed lines indicate target level and minimum level target equity respectively. Equity here also includes the profit for the year, which formally affects the balance sheet item equity with a one-year lag.

Source: The Riksbank

In the reverse scenario with higher interest rates, the Riksbank initially makes greater losses, and from 2028 onwards makes marginal profits. Equity is just above the inflation-adjusted minimum level of equity. The scenario is thus very close to resulting in the Riksbank needing to make a new submission to the Riksdag to restore equity.

The lower panel of Chart B3 shows that the revaluation accounts for price effects are also affected to some extent in the sensitivity analysis. However, the effect on revaluation account balances is smaller than the effect on equity. This means that it is not primarily market value changes that drive the development of the result in this analysis. Instead, it is mainly driven by differences between the income interest rate and the policy rate.

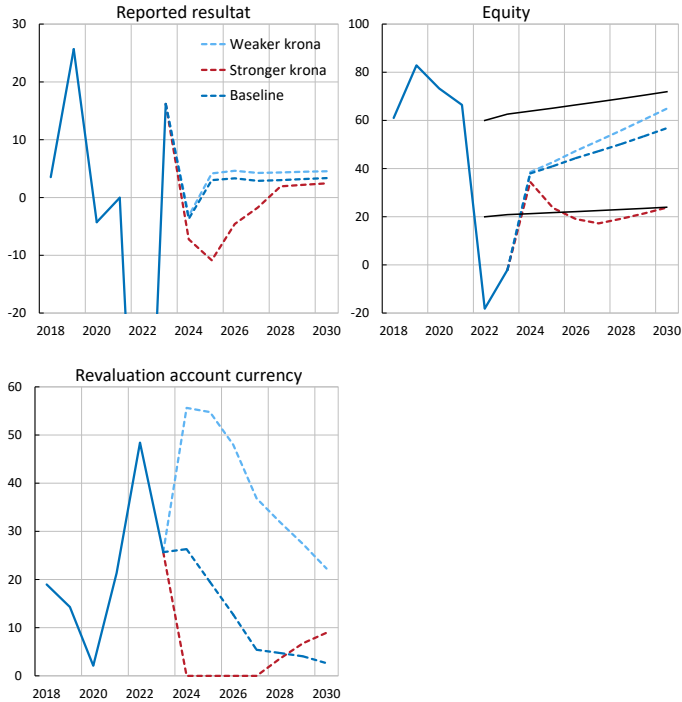
Development of the Swedish krona

The krona exchange rate is also volatile and changes considerably over time. The development in the baseline scenario is based on the National Institute of

Economic Research's assessment in December 2023 and entails an appreciation of the krona, which is also roughly in line with the Riksbank's assessment of the krona's medium-term development. The development of the krona affects both the market value of the Riksbank's assets in foreign bonds measured in kronor and the interest income from these foreign bonds, expressed in kronor.

Chart B4. Development of the Riksbank's reported result, equity and revaluation accounts in sensitivity analysis with a different development of the Swedish krona

SEK billion



Note: Solid lines indicate outcomes and dashed lines are forecasts. Black dashed lines indicate target level and minimum level target equity respectively. Equity here also includes the profit for the year, which formally affects the balance sheet item equity with a one-year lag.

Source: The Riksbank

In the sensitivity analysis presented in Chart B4, the krona exchange rate is assumed to be 10 per cent stronger and 10 per cent weaker than in the baseline scenario, but not compared with the current level (see Chart B2).

Chart B4 shows that if the krona is weaker than in the base scenario, the Riksbank's reported profit is just over SEK 1 billion higher per year than in the baseline scenario. At the same time, the lower panel in Chart B4 shows that the weaker krona gives rise to significant unrealised increases in value that lead to an increase in revaluation accounts for currency effects by around SEK 30 billion. However, this does not affect the reported results or equity.

In the reverse scenario with a stronger krona, the losses are initially covered by the funds currently in the revaluation accounts for currency. However, this buffer soon runs out and from 2025 the krona appreciation will fully impact the reported result, which will be negative for several years. As a result, equity falls to less than one third of the target level in 2026, prompting the Riksbank to make a new submission to the Riksdag to restore equity. The scenario calculation ignores further submissions and thus equity is not expected to be restored again after 2024. From 2028, the krona stops appreciating in the scenario, leaving room for small profits for the Riksbank. Equity can then gradually start to rise again.

Considerable uncertainty about the result for 2024

In the baseline scenario, the result for the financial year 2024 is SEK –3.7 billion. The short-term sensitivity analysis shows that the result can be both better and worse than in the baseline scenario, varying between SEK –9.6 and 0.3 billion in the scenarios. This can be seen as an indication of how equity might evolve in 2024. However, the reported result may also fall outside the range defined by the sensitivity analysis.

The difference compared to the baseline scenario is greater in the bad scenarios than in the good ones. This is explained by the asymmetric use of revaluation accounts in the Riksbank's accounting policy (see Annex A. The Riksbank's revaluation accounts). Higher interest rates or a stronger krona lead to unrealised losses that reduce the balances on the corresponding revaluation account. At the end of the year, negative balances on these revaluation accounts lead to write-downs, and the unrealised losses are charged to the reported result.

In corresponding favourable scenarios, lower interest rates and a weaker krona, positive balances are built up in the revaluation accounts by the unrealised gains that arise. But the positive balances on the revaluation accounts are not taken to the profit and loss account, which is therefore less affected than in the unfavourable scenarios.

As a consequence of the developments in the sensitivity scenarios described above, equity could, albeit unlikely, be significantly lower than in the baseline scenario after the allocation of the 2024 profit. However, the reverse is not true. As unrealised gains are recorded in revaluation accounts, in principle even a very favourable development would not result in equity being more than marginally higher than in the baseline scenario after the allocation of the 2024 profit.

Annex C. The Riksbank's costs

Summary

This annex presents the development of the Riksbank's net administrative costs, i.e. administrative costs less administrative income, and adjusted net administrative costs (administrative costs less normal administrative income) at constant prices. The calculations show that adjusted net administrative costs at constant prices increased by SEK 191 million, or 24 per cent, between 2018 and 2023.

During the 1990s, the Riksbank invested in enhancing its expertise, particularly in the areas of monetary policy and financial stability. This was followed by a period of consolidation in which further development of operations was managed by reallocating priorities. Over time, however, it became necessary to expand the workforce to meet new demands and new challenges, not least due to the pandemic.

The main explanations for the cost development are IT and other costs to ensure stronger preparedness and initiatives to future-proof the Swedish payment infrastructure (RIX infrastructure, cash infrastructure/deposits and the e-krona). These initiatives and the subsequent need for new resources were part of the strategic plan that guided the development work in 2019-2023, which also aimed to prepare the bank for the new Riksbank Act, with an increased focus on preparedness.

The cost level in the longer term will depend on the level of ambition for the continued development of the payment infrastructure and the rest of the IT environment, as well as the choice of continuity solutions for the bank's operational activities, primarily linked to security and preparedness. The best assessment that can be made now is that net administrative costs at constant prices will stabilise at the current level.

Despite the cost increases of recent years, available resource comparisons show that the Riksbank is still a small central bank in an international comparison.

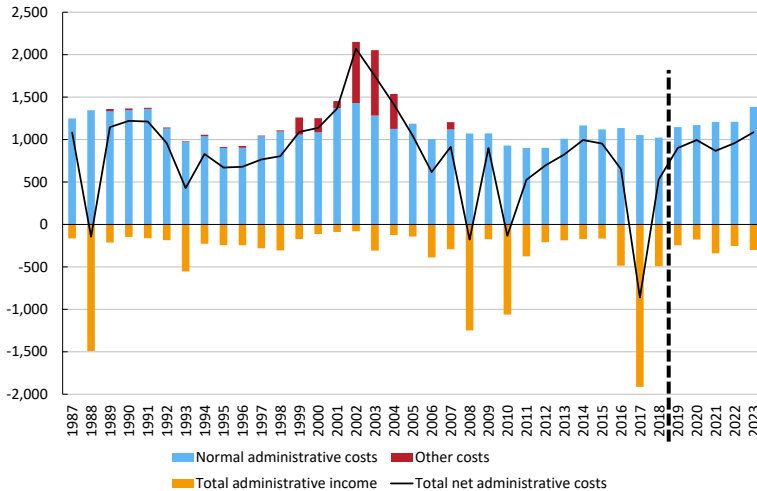
Development of the Riksbank's costs up to 2023

The Riksbank, as an independent authority under the Riksdag, decides on its own budget and is thus not financed by appropriations in the central government budget. Every year, before the end of December, the Executive Board shall draw up a budget for the next calendar year (financial year). The budget sets out the resources the Riksbank needs to fulfil its tasks. The Executive Board also allocates the funds needed by the General Council. The Riksbank's high degree of independence also entails a responsibility to manage resources efficiently.

Chart C1 shows the evolution of costs at constant prices from 1987 to 2023.⁵⁸ This shows administrative costs, administrative income and net administrative costs. The large items under management income that sometimes arise are due to older banknote types being written off from the banknote liability, which generates management income. The 'Other costs' item, represents costs incurred due to the corporatisation of cash management services. See Chart C1.

Chart C1. The Riksbank's net administrative costs 1987–2023, at constant prices

SEK million

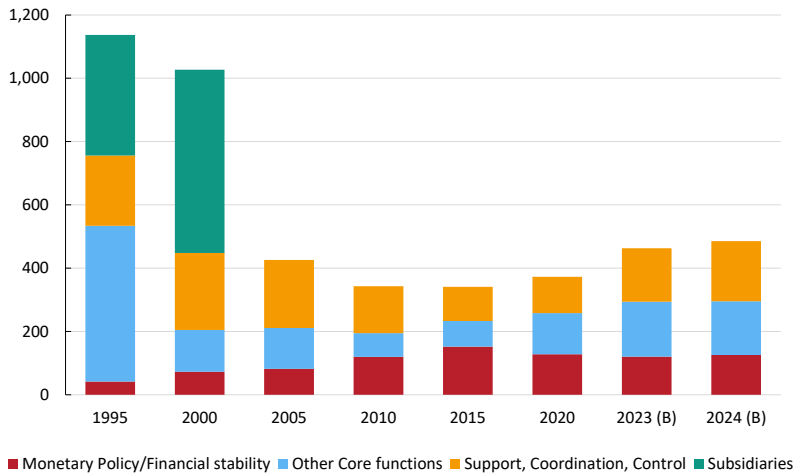


Source: The Riksbank.

As the chart shows, cost development has largely remained stable since 2000. Major fluctuations in the cost level have mainly been linked to banknote and coin purchases, which vary greatly over time.

From the early 2000s, the number of staff at the Riksbank decreased and reached a lowest point in 2018, with around 320 full-time employees (FTEs). As shown in Chart C2 below, the Riksbank has been building up expertise in monetary policy and financial stability since the mid-1990s, when inflation targeting was introduced, while other operations over the same period have been rationalised or outsourced.

⁵⁸ Recalculated with the CPIF 2023 at 2023 prices.

Chart C2. Development of the Riksbank's workforce by operational area*SEK million*

Source: The Riksbank.

In 2018, when a new strategic plan was developed, it was noted that the bank was in a new period of transition with new areas of responsibility and a need for modernisation, which meant that the Riksbank needed to be allowed to grow. It was also concluded that resources needed to be increased as it was no longer possible to meet these new challenges merely by reallocating priorities.

The requirement for increased resources stemmed mainly from the need to strengthen preparedness, future-proof the payment infrastructure and strengthen cyber-security. This involved extensive development of the Riksbank's IT structure.

The Riksbank is adding resources to meet new challenges

From 2019 onwards, the Riksbank's costs have therefore increased to implement the operational shifts deemed necessary in the 2019-2023 strategic plan, but also to make use of lessons learnt from the pandemic and to prepare for a new Riksbank Act. The preparations for responding to a new Riksbank Act were partly already incorporated in the strategy, not least through a clear increased focus on preparedness. However, the scope increased as future legal requirements were clarified, for example, with requirements for cash depots and the task of enabling the public to make payments in peacetime crisis situations and states of heightened alert.

This is how the resource needs were formulated in the strategic plan adopted and communicated in December 2018.⁵⁹

⁵⁹ Strategic plan, Riksbank 2019-2022, DNR 2018-00381.

The strategic priorities we now need to implement are resource-intensive. Cost increases as a result of strengthened preparedness – upgrading to a more secure IT infrastructure, new continuity solutions, initiatives to meet the requirements of a strengthened total defence, etc. – cannot be financed simply by down-prioritising existing operations. In addition, there are major initiatives for a reformed payment market (such as the e-krona pilot and infrastructure initiatives) that are necessary to invest in to enable the Riksbank to fulfil its tasks of maintaining price stability and promoting a safe and efficient payments system. We are partly financing these initiatives by reallocating priorities in our normal operations, in line with how the Riksbank has managed other needs for change in recent decades, but in addition, we need to add new resources during the lifetime of the strategic plan to meet the unusually large challenges we face in terms of our major operational shifts: strengthened preparedness and our role in the payment market of the future.

Since then, in its annual operational plans and annual budgets, the Riksbank has described the background to the annual resource increases required to fulfil the strategic plan and the security and preparedness requirements it entailed.

Actual cost development

The Riksbank's total administrative costs increased in nominal terms from SEK 856 million in 2018 to SEK 1,386 million in 2023. However, to make a more correct comparison between the years, the increase needs to be adjusted for

- (1) price developments (at constant prices),
- (2) the costs of banknote/coin purchases, which vary widely between the years and were over SEK 100 million more expensive in 2023,
- (3) administrative income, at least in terms of normal administrative income that occurs annually - for example, the increased costs of the RIX system are financed by fees from participants.⁶⁰

In this way, the comparison between 2018 and 2023 provides more relevant adjusted net administrative costs.

During this period, the Riksbank's adjusted net administrative costs at constant prices have increased by approximately SEK 191 million, from SEK 803 to 994 million, see Table C1 below.

⁶⁰ In addition, as previously mentioned, the Riksbank has some major administrative income items that fluctuate, for example, larger income in 2018 due to scrap sales of old coins, and interest cost compensation in 2023. These items are included in net administrative costs. In the comparison between 2018 and 2023 in this annex, we exclude these items for the sake of comparability, which is referred to in the annex as adjusted net administrative costs.

Table C1. The Riksbank's adjusted net administrative costs in 2018 compared to 2023*SEK million*

	2018	2023	+/- mSEK
Administrative costs, nominal	856	1,386	530
Administrative costs weighted with the CPIF	1,024	1,386	362
<i>Of which banknote/coin purchases</i>	<i>-16</i>	<i>-113</i>	<i>-97</i>
RIX fee income	-103	-170	-67
Normal administrative income CPIF weighted	-102	-109	-7
Net administrative costs at fixed prices	803	994	191

Source: The Riksbank.

The cost increase, what is what?

Adjusted net administrative costs at constant prices increased by SEK 191 million, corresponding to 24 per cent over the past five years. To sort out and show what is behind this increase, total costs can be broken down, by operational area, by department and by cost type.

Costs broken down by operational area

The Riksbank reports costs by cost category, cost centre and project and also allocates costs to operational areas according to a model developed by the Eurosystem's central banks.

The breakdown of all costs by operational area is presented in the annual report. Comparing 2018 and 2023 shows that almost 80 per cent of the total cost increase is linked to the area of payments. Deducting the fees charged to RIX participants in 2018 and 2023 – and excluding banknote and coin purchases – the payments area accounts for around 60 per cent of the increased adjusted net administrative costs of SEK 191 million, with the remainder relating to asset management, the operational implementation of monetary policy, and statistics activities.

In the area of payments, the cost increase is primarily explained by the work on the e-krona and more resources for developing and analysing payments. Asset management costs are increasing mainly due to the modernisation and increased security of existing systems and the development of a new system to manage the SWESTR reference rate^{61, 62}. The cost increase in the area of asset management is also explained by new monetary policy measures

⁶¹ SWESTR (SWEdish krona Short Term Rate) is a reference rate calculated and published by the Riksbank.

⁶² Asset management refers to the Riksbank's work on capital management, the operational implementation of monetary policy, the management of the gold and foreign currency reserves, the provision and oversight of the SWESTR reference rate, and ongoing market surveillance. It includes several operational systems for, inter alia, the settlement of transactions, collateral management, data collection, calculation and publication of SWESTR.

and enhanced analysis. Statistics costs are increasing as a result of expanded collection of statistics, mainly regarding databases for securities and loans.

Costs reported by department and by type of cost

The cost allocation model above is presented in the annual report and provides a taxpayer perspective on the Riksbank's cost development. It shows the total cost per area of operation but does not provide much information on the factors driving the cost development. What is the proportion of costs for upgrading the Riksbank's IT environment from different perspectives, for strengthened preparedness, for enhanced internal control, etc.? There are factors affecting several or even all areas.

Another model is to describe how different factors explain the increase in costs by department rather than by operational area. Table C2 shows the cost development at constant prices and is based on the current organisation. A further explanatory model for the cost development is based solely on the individual factors that have been driving costs and is presented in Table C3.

The costs that are most difficult to categorise by area or department are the costs that relate to the Riksbank's entire operations. A further complicating factor is when these are partly funded by fees. This applies above all to cost increases for IT infrastructure, including conditions for the RIX infrastructure, which relate both to development of the service and increased continuity and security. The factors that have been the most important drivers of the cost development between 2018 and 2023 are most clearly illustrated in Table C3 but are not broken down by department or operational area.

Both models confirm the picture that the major cost drivers under the previous strategic plan have been the upgrading of Swedish payment infrastructure (both the cash and the RIX infrastructure), the e-krona and strengthened preparedness otherwise. The type of cost that has increased the most to achieve this is IT costs, but other costs have also increased – such as the cost of new depots and the BIS Innovation Hub.⁶³ In addition, staff costs for increased internal control and strengthened operational expertise for the implementation of monetary policy have contributed to the increase in costs during the period.

The RIX systems must be financed on the basis of an at-cost principle.⁶⁴ In 2021-2022, RIX was over-financed, which resulted in the need for fees to be lower than costs in 2023. This explains why the increase in income in these comparisons is lower than the increase in costs.

⁶³ The Bank for International Settlements, BIS, in cooperation with the Riksbank and the central banks of Denmark, Iceland and Norway, has established a centre for innovation in Stockholm - the BIS Innovation Hub Nordic Centre.

⁶⁴ Fees should cover costs. To ensure this, the systems are evaluated annually, where RIX-RTGS shall stay within the +/-10 per cent range over a three-year period and RIX-INST shall stay within the +/- 10 per cent range over a seven-year period. Each year an assessment is made of whether prices need to be adjusted.

Table C2. The Riksbank's cost development at constant prices by department in 2018 compared with 2023*SEK million*

Department	Cost 2018	Cost 2023	+/-	Comment
General Council	3	4	0	
Executive Board	26	33	7	Qualification period salaries
General Secretariat	78	82	4	Preparedness*, Economics Prize
Internal Control and Operational Support Department	186	210	25	Preparedness* new preparedness division, expansion of risk division staff, cash depots. Temporary premises
IT and Digitalisation Department	205	307	102	Preparedness* New Security Protection Act with increased security requirements, Investment in increased and improved cyber-security and information security, Innovation and modernisation of workplaces, Digitalisation, development and modernisation of technical solutions, New applications, e.g. RIX-INST and SWESTR.
Monetary Policy Department	163	162	-1	
Research Division	27	23	-4	
Markets Department	59	67	8	Preparedness* Staff increase due to new monetary policy measures and enhanced analysis
Financial Stability Department	70	68	-2	
Payments Department excluding banknotes and coins	94	154	60	Preparedness* Development and analysis, E-krona, RIX-RTGS, RIX-INST, cash depots, BIS Innovation Hub
Internal Audit	7	6	0	
Bank-wide operations	89	157	66	Including pensions as an effect of staff increase
RIX fee income	-103	-170	-67	RIX-RTGS and RIX-INST
Normal fee income	-102	-109	-7	
Net administrative costs at fixed prices	803	994	191	

Source: The Riksbank.

*Preparedness in its broad sense includes: Elevated level of information security/cyber security, internal crisis preparedness/peacetime continuity, total defence and operational and financial preparedness.

Table C3. The Riksbank's cost increase at constant prices reported by underlying factor in 2018 compared to 2023*SEK million*

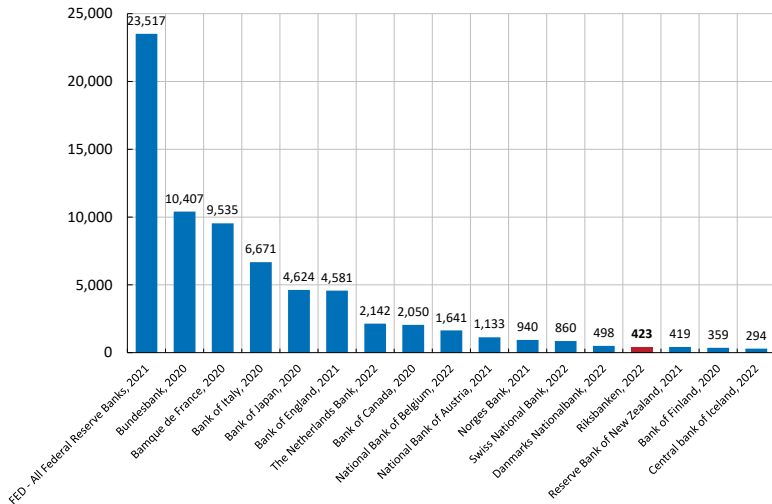
Cost item	Increase, SEK million
Development and increased security of the RIX infrastructure – IT	58
Development and increased security RIX infrastructure – operations	26
Development and increased continuity/security other – IT	55
E-krona	31
Preparedness, depots (3)	22
Preparedness, financial. Pandemic measures and enhanced operational competence	8
Preparedness, coordinating unit	7
BIS Innovation Hub	17
Increased efforts in risk management	7
HK-Klara, dual headquarters during renovation period	4
Pensions	62
To be deducted, increased RIX fees	-67
Net, other changes (lower depreciation, redemption, etc.)	-32
Normal fee income	-7
Total at fixed prices	191

Source: The Riksbank.

The size of the Riksbank compared to other central banks

All available comparisons indicate that the Riksbank is a small central bank in an international context. Unfortunately, not all these comparisons are publicly available, including the resource comparisons conducted by the Bank for International Settlement (BIS). However, one publicly available data source is the total number of employees at different central banks, according to the Central Banking Directory, as shown in Chart C3 below. The chart gives an indication of how the Riksbank compares with other central banks in terms of operating costs. However, the mandates and conditions differ for the central banks included in the comparison below in Chart C3. Another comparison is between the Nordic countries.⁶⁵

⁶⁵ Includes Denmark, Finland, Norway and Sweden. Iceland has not yet joined the comparison.

Chart C3. Full-time employees at different central banks

Source: Central Banking.

Nordic comparison

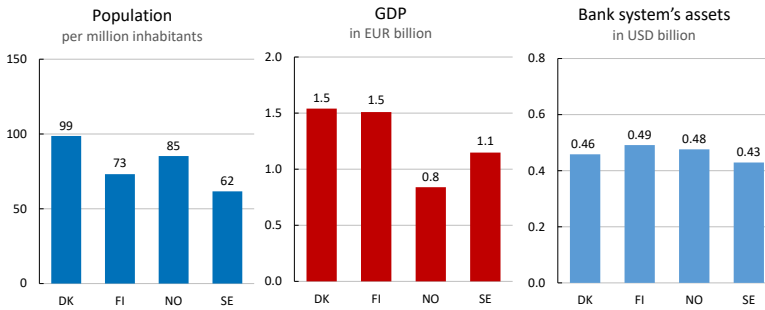
In order to compare how the Riksbank stands in relation to its Nordic colleagues, the main features of the Nordic comparison, which is carried out every two years (the last comparison was made in 2022), are presented here. However, it should be emphasised that all Nordic central banks are relatively small by international standards. The Nordic benchmark is primarily aimed at comparing human resources, including corresponding human resources for purchased services – to give an overall picture of the resource consumption of each central bank and to reduce the effect of different sourcing strategies. Thus, in Chart C3 below, an estimate of contracted services is also included in the calculation of total full-time equivalents (FTEs).⁶⁶

The Nordic benchmark also analyses the total administrative costs based on the items reported in each central bank's annual reports. Chart C4 presents this cost picture for 2022 in euro and current prices.

The Riksbank's cost level has increased but is relatively low in comparison with our Nordic neighbours, especially if the costs are related to population, GDP or the size of the banking system, as in a previous chart. In the comparison, it can be noted that Finland, which is part of the Eurosystem and thus does not conduct its own monetary policy and uses the ECB's payment infrastructure, has a higher cost level than Sweden in relation to GDP, population and the size of the banking system.

⁶⁶ For Norway, staffing (and support to) the oil fund has been excluded. For Finland, support to the Finnish Financial Supervisory Authority has been excluded.

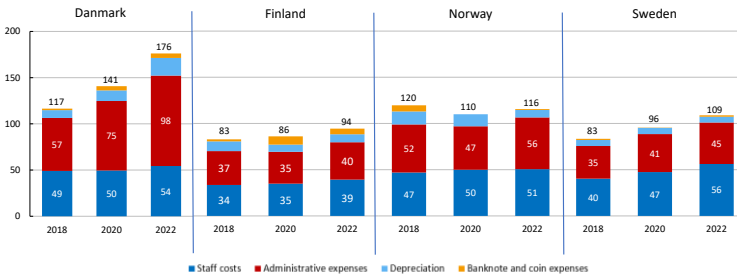
Chart C4: Nordic comparison, total staffing including estimation of purchased services in relation to the size of population, GDP and banking system assets.



Source: The Riksbank.

Other differences to consider are, for example, that Norges Bank, in contrast to the Riksbank, has a certain mandate in macroprudential policy, but has no costs for official financial statistics (the cost of, for example, balance of payments statistics and financial market statistics is a major cost item for the Riksbank). The latter is the responsibility of the Norwegian equivalent of Statistics Sweden. Danmarks Nationalbank currently has large temporary costs for renovating its headquarters, a couple of years ahead of the Riksbank, which is also facing major renovations in the coming years.

Chart C5: Nordic comparison, cost comparison of Nordic central banks, years 2018, 2020, 2022 in EUR million.



Source: The Riksbank.

Note: Cost items from annual reports at current prices converted to euro (exchange rate, daily average for each year). For Norway excluding the Oil Fund, for Finland excluding the costs of the Finnish Financial Supervisory Authority.

Future development of net administrative costs

The Riksbank's cost increase largely relates to costs for strengthening preparedness and future-proofing the Swedish payment infrastructure. This corresponds to the areas that the Riksbank has identified as priority areas in the strategic plan for 2019-2023. Future forecasts of the Riksbank's administrative costs indicate that resources for the work on the e-krona will continue to decrease. Instead, property costs will increase significantly over a number of years, as major maintenance and refurbishment work will be carried out on the

Riksbank building and replacement premises will be rented in central Stockholm during the refurbishment period. In addition, depreciation due to investments will increase in the coming years.

Otherwise, the level of costs will of course depend on key strategic choices going forward. This applies not least to IT costs and different types of continuity solutions, decisions to be taken on potentially joining Eurosystem platforms (and possible national back-up systems) for the settlement of payments. It will also depend on how much of the transition can be financed by fees. In addition to the impact of decisions already taken and continued preparedness measures, the Riksbank expects a period of consolidation in resource terms.

The best assessment that can be made now is that net administrative costs at constant prices will stabilise at the current level. However, given the need for preparedness and demands for security and other challenges that the Riksbank may face, it is difficult to assess the development of costs in the future.