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# Consultation response on the memorandum New conditions for the Riksbank's financing

18 September 2024

#### Summary

Swedish Ministry of Finance Financial Market Department

SE 103 33 Stockholm

The Riksbank has no objections to the Riksbank having the possibility, instead of an obligation, to submit a proposal to the Riksdag on the restoration of equity. Nor does the Riksbank have any objections to making it clear that unrealised gains should be taken into account when calculating the amount to which a submission for restoration of equity should relate. However, the Riksbank proposes certain amendments to the bill with the aim of ensuring that the Riksbank has a sufficient buffer against the financial risks to which the Riksbank is exposed. The Riksbank view is that unrealised gains should not be taken into account in the initial assessment of whether the Riksbank may make a request for restoration of equity. If unrealised gains were to be taken into account, this would mean that equity could be very low or even negative, as long as the unrealised gains exceed one third of the target level of equity.

The Riksbank also proposes that it should be possible to restore equity to the target level to ensure the Riksbank's ability to bear risks and thereby absorb losses. Finally, the Riksbank also requests clarification that the proposed amendments to the Sveriges Riksbank Act do not entail any restriction on the Riksbank's right to make submissions under the Riksdag Act.

The requirement for interest-free deposits provides the Riksbank conditions for higher earnings. It therefore strengthens the Riksbank's capacity for long-term self-financing. The Riksbank's assessment is that the requirement for interest-free deposits does not have any significant negative effects, either for financial stability or for the implementation of monetary policy. The Riksbank therefore supports the proposal regarding the requirement for interest-free deposits. However, the Riksbank proposes certain adjustments to the draft bill so that the interest-free deposits will strengthen the Riksbank's capacity for long-term self-financing in all situations, even if some of the current conditions are changed, including the direction of monetary policy. Firstly, the Riksbank proposes that the interest rate on the deposit requirement may not be more than 1 percentage point below the policy rate, when the policy rate is zero or negative. Secondly, the Riksbank proposes that any interest-bearing reserve requirements should not be taken into account when calibrating the size of the deposit requirement. The Riksbank also proposes that the Riksbank should be able to exempt



certain smaller credit institutions from the requirement for interest-free deposits, and that it should be possible to fulfil the deposit requirement by investing in debt instruments issued by the Riksbank. Finally, the Riksbank requests some clarifications regarding how the requirement for interest-free deposits should be applied.

The Riksbank essentially supports the Ministry of Finance's proposal for the legislative amendments required to incorporate into Swedish law the amendments to the EU Settlement Finality Directive and the EU Payment Services Directive, which concerns participation in settlement systems. However, the Riksbank has some suggestions regarding the proposal.

## Submission for the restoration of equity – Chapter 8, Section 15

The consultation memorandum *New conditions for the Riksbank's funding* proposes that it should be possible, rather than obligatory, for the Riksbank to make a submission to the Riksdag for the restoration of equity. The draft bill also provides that unrealised gains (excluding increases in the value of the gold reserve)<sup>1</sup> shall be fully taken into account when assessing whether a submission may be made, as well as when calculating the amount to which a submission for restoration of equity should relate.

#### Relationship of the provision to the Riksdag Act

The Riksbank has no objections to making it possible, rather than obligatory, to make a submission. The Riksbank also requests clarification that the provision in Chapter 8, Section 15 of the Sveriges Riksbank Act does not entail any restriction on the Riksbank's right to make submissions under the Riksdag Act.

According to the Riksdag Act, the General Council and the Executive Board of the Riksbank may make submissions to the Riksdag within their respective areas of responsibility (Supplementary Provision 9.17.4). As stated in the consultation memorandum, such a submission may also concern the restoration of equity. According to the proposal, the Sveriges Riksbank Act will now provide an option rather than an obligation to submit a submission for the restoration of equity.

The Riksbank has no objection to making it possible, rather than obligatory, to submit such a petition. This means that the Riksbank can assess whether it is necessary to make a submission to restore equity. At present, the Riksbank is obliged to make a submission when equity falls below one third of the target level for equity. The proposal gives the Riksbank more flexibility in a situation where the Riksbank assesses that the decline in equity is only temporary, and that equity can be restored with own means within a reasonable time.

The Riksbank requests clarification as to whether the proposed provision in Chapter 8, Section 15 of the Sveriges Riksbank Act entails a restriction to the Riksbank's unrestricted right to make submissions under the Riksdag Act. The consultation memorandum states that the starting point should continue to be that a submission should be made if the conditions in the provision are met. The Riksbank understands this statement to mean that the Sveriges Riksbank Act provides guidance on when a submission to restore equity should be made,

2 [24]

<sup>&</sup>lt;sup>1</sup> Henceforth, when unrealised gains are mentioned in the consultation response, they will always refer to unrealised gains excluding increases in the value of the gold reserve.



even though it is no longer an obligation. The Riksbank also understands that this should mean that in such situations the Riksdag intends to allocate the funds referred to in the submission. In the Riksbank's view, it should be made clear in the preparatory legislative work that, even in situations other than those specified in the Sveriges Riksbank Act, there may be grounds for the Riksbank to make a submission to the Riksdag for the restoration of equity. This could be the case, for example, if the decline in equity is permanent and the Riksbank by its own means is unable to restore equity to a sufficient level within a reasonable time-period. It could also be that the Riksbank's risk-bearing capacity simply needs to be increased. It is therefore important that the new provision in Chapter 8, Section 15 of the Sveriges Riksbank Act does not entail any restriction on when submission may be made under the Riksdag Act, and this should be clarified in the continued legislative work.

As the Riksbank would no longer be obliged to make a submission, the Riksbank also considers that the wording of the act should be amended so it does not state that a submission *shall* refer to a specific amount. Instead, the submission *should* refer to an amount that restores the sum of the equity, and unrealised gains, to the basic level of equity.

#### How unrealised gains are taken into account in a submission to restore equity

The Riksbank view is that unrealised gains should not be taken into account in the initial assessment of whether the Riksbank may make a submission for restoration of equity pursuant to Chapter 8, Section 15, first paragraph. The Riksbank has no objection to unrealised gains being taken into account when calculating the amount to which a submission for restoration of equity shall relate in accordance with Chapter 8, Section 15, paragraphs 2 and 3.

Profit and losses are treated asymmetrically in the financial reporting in accordance with the ECB's accounting principles.<sup>2</sup> The unrealised losses affect the Riksbank's reported result and equity at the end of the financial year, unlike unrealised gains, which are instead, reported in revaluation accounts. Unrealised gains on revaluation accounts act as a buffer against future losses, but their function as a buffer is limited. This is because unrealised gains on one asset can only cover unrealised losses from the same asset. One purpose of the draft bill is to clarify how the asymmetry in the accounting principles for unrealised gains and losses is to be handled when the Riksbank's equity is restored.

The Riksbank has no objection to unrealised gains being taken into account when calculating the amount a submission for restoration of equity should refer to in accordance with Chapter 8, Section 15, paragraphs 2 and 3. According to the Riksbank, this is sufficient to eliminate the asymmetry in the treatment of unrealised gains and losses when the Riksbank's equity is restored. The Riksbank therefore is of the view that unrealised gains shall not be taken into account when assessing whether a submission may be made under Chapter 8, Article 15, first paragraph. The reason for this is that even if the assessment of whether the Riksbank may make a submission is only based on the size of equity, the size of the unrealised gains will still affect how large an injection of equity the Riksbank can request in accordance with Chapter 8, Article 15, paragraphs 2 and 3.

If unrealised gains are to be fully taken into account in the initial assessment of whether the Riksbank is allowed to make a submission, equity may be very low and even negative as long

<sup>&</sup>lt;sup>2</sup> According to the principles, the valuation of assets and liabilities, like income recognition, shall be characterised by caution.



as the level of unrealised gains exceeds one third of the target level of equity. As an example, assume that the Riksbank's equity at the end of the year were to amount to minus SEK 10 billion. If, at the same time, unrealised gains amount to SEK 40 billion, the sum of equity and unrealised gains would amount to SEK 30 billion. Based on the proposal in the memorandum, the Riksbank may then not make a submission, even though equity is negative. This is because the sum of equity and unrealised gains exceeds one third of the target equity level. A central bank, unlike a commercial bank, cannot go bankrupt if its own capital falls too low. However, a central bank needs to have sufficient capacity to bear the financial risks arising from the fulfilment of its mandate. The central bank therefore needs to have sufficient financial buffers to absorb losses that may arise if these risks materialise. Therefore, a prerequisite for the Riksbank's financial independence is that the Riksbank's equity does not remain low or negative for a prolonged period of time. The Riksbank's proposed amendment to Chapter 8, Article 15, first paragraph maintains flexibility in the assessment of when a submission to restore equity may be made if equity is less than one-third of the target level, at the same time as unrealised profits will be taken into account when the Riksbank assesses the amount the submission should refer to.

#### Submission for the restoration of equity to the target level

The Riksbank is of the view that it should be possible to restore equity to the target level for equity also to ensure the Riksbank's risk-bearing capacity, in accordance with Chapter 8, Article 15, third paragraph.

A prerequisite of the Riksbank's financial independence is that the Riksbank can finance its own operating costs. It also presupposes that the Riksbank has its own capital. The capital must be sufficiently large and, in combination with unrealised profits, be able to constitute a sufficient buffer for the financial risks to which the Riksbank is exposed. If the Riksbank can require interest-free deposits from credit institutions up to the target level for equity, the Riksbank's ability to fund itself in the long term will be improved. Both equity and interest-free deposits from credit institutions provide the Riksbank with interest-free funding. However, unlike interest-free deposits, equity can bear losses arising in the Riksbank's operations.<sup>3</sup> Situations may arise in which the Riksbank needs more equity to ensure that the bank has sufficient capacity to bear the risk of loss. The Riksbank therefore advocates to expand the third paragraph of Chapter 8, Article 15 so that a submission for a capital injection may relate to an amount up to the target level for equity not only to ensure the Riksbank's capacity for long-term self-financing, but also to ensure the Riksbank's risk-bearing capacity.

#### Application of the provision

The statutory commentary states that the assessment of the value of unrealised gains should be made at the end of the year, i.e. on 31<sup>st</sup> of December. The Riksbank agrees that 31<sup>st</sup> of December is a reasonable date for the assessment.

Under the current system, the equity according to the annual report is to form the basis for an assessment of whether a petition needs to be made (see Bill 2021/22:41, p. 245). Equity,

<sup>&</sup>lt;sup>3</sup> The Riksbank can also make national financial provisions to strengthen the risk-absorbing buffer. The provisions can thus be a complement to the equity and revaluation accounts. For the Riksbank to be able to make financial risk provisions, it is necessary for the Riksbank's primary capital to amount to the basic level for equity, and for the Riksbank to make a profit (see Chapter 8, Section 12 of the Sveriges Riksbank Act).



as proposed in the consultation memorandum, means the equity according to the annual report. This takes into account the decision of the General Council on the appropriation of profit for the year. In the Riksbank's opinion, the Riksbank can thus make a submission to restore equity before the Riksdag adopts the Executive Board's balance sheet and profit and loss account and approves the General Council's decision on the appropriation of the year's profit. However, this should be clarified in the preparatory legislative work.

Proposal for an adjusted legal text

Ministry of Finance proposal

Riksbank proposal

#### Chapter 8,

Section 15

If the sum of equity and unrealised gains on the balance sheet, except for gold, is less than one-third of the target level, the Riksbank may make a submission to the Riksdag for the restoration of equity.

The submission *shall be* for an amount which restores the sum of equity and unrealised gains on the balance sheet, except in the case of gold, to a level corresponding to the basic equity level.

If necessary to ensure the Riksbank's long-term self-financing capacity, the submission may be for an amount such that the sum of equity and unrealised gains on the balance sheet, except in the case of gold, is equal to the target level.

If the equity is less than one third of the target level, the Riksbank may make a submission to the Riksdag to restore equity.

The submission **should** refer to an amount that means the sum of the equity, and unrealised gains, on the balance sheet, with the exception of gold, is restored to a level corresponding to the basic level of equity.

If necessary to ensure the Riksbank's *risk-bearing capacity or* long-term self-financing capacity, the submission may be for an amount such that the sum of equity and unrealised gains on the balance sheet, except in the case of gold, is equal to the target level.

# Interest-free deposits - Chapter 8, Sections 16 and 17

If the Riksbank's equity falls below the target level, the draft bill allows the Riksbank to require credit institutions to hold interest-free deposits in the Riksbank. The Riksbank is in favour of the proposal regarding the requirement for interest-free deposits, which strengthens the Riksbank's ability to fund itself. According to the Riksbank, the aim of strengthening the Riksbank's capacity for self-financing can be better achieved if certain amendments are made to the draft bill. The Riksbank therefore proposes the following.

- The interest rate on the deposit requirement shall not be allowed to fall below the policy rate by more than one percentage point if the policy rate is zero or negative.
- Interest-bearing reserve requirements shall not be taken into account when assessing the size of the deposit requirement.
- The Riksbank shall be able to exempt certain credit institutions or branches if there are *special reasons*.



• It should be possible to fulfil the deposit requirement by investing in debt instruments issued by the Riksbank.

Finally, the Riksbank requests some clarifications regarding how the requirement for interest-free deposits should be applied.

If the Riksbank is given the opportunity to require credit institutions to hold interest-free deposits at the Riksbank, this will lead to an improvement in the Riksbank's net interest income, all else being equal. The requirement for interest-free deposits therefore strengthens the Riksbank's self-financing capacity. It also improves the Riksbank's conditions for building up equity in the longer term, as equity can be expected to grow at a slightly faster pace than without the requirement for interest-free deposits. The analysis in the annex to this statement shows that interest-free deposits in a baseline scenario can improve the Riksbank's reported results by an average of around SEK 0.7 billion per year (see Annex A).

The proposal on the requirement for interest-free deposits is not considered to be of such significance for the credit institutions that it would have any significant impact on financial stability. Likewise is the introduction of the requirement for interest-free deposits not expected to have any significant impact on monetary policy. The effective implementation of monetary policy is not restricted by a requirement for interest-free deposits. Although the transmission from the policy rate to bank deposit and lending rates could be affected to some extent, these effects are judged to be small.

However, the Riksbank proposes some adjustments to the design of the requirement for interest-free deposits. This is so that the requirement will contribute to strengthening the Riksbank's capacity for self-financing even if some of the current conditions, including the direction of monetary policy, change.

#### Negative interest rate on deposits

According to the proposal in the memorandum, the interest rate on the deposit requirement may only be set at a negative amount if the applicable policy rate is negative, and then it may not be lower than the policy rate. The latter specification risks counteracting the earnings purpose of the deposit requirement. When the policy rate is zero or negative, the interest rate on the proposed deposit requirement will be equal to or higher than the Riksbank's standard deposit rate<sup>4</sup>. Such a restriction means that the requirement for interest-free deposits only improves the Riksbank's earning capacity as long as the policy rate is positive. To improve earnings, as envisaged in the draft bill, even in situations where the policy rate is zero or negative, it must be possible to set the interest rate on the deposit requirement at a lower level than the policy rate. To avoid uncertainty about how negative the interest rate on the proposed deposit requirement may be, the Riksbank proposes to amend the bill so that the interest rate may not be more than 1 percentage point below the policy rate. This means that the Riksbank is given the possibility to charge a lower interest margin if necessary to avoid undesirable side effects.

It is worth noting that both Swedish and international experience shows that monetary policy transmission has functioned largely normally when central bank policy rates have been

<sup>&</sup>lt;sup>4</sup> This refers to the interest rate on the Riksbank's standing deposit facility in accordance with Chapter 2, Section 4, paragraph 1 of the Sveriges Riksbank Act.



negative.<sup>5</sup> Households also did not experience negative interest rates on their bank deposits. The fact that the interest rate on the proposed deposit requirement can be 1 percentage point below the policy rate, when the policy rate is zero or negative, is not expected to complicate monetary policy or generate any other major side effects.

An interest-bearing reserve requirement for monetary policy purposes should not affect the conditions for interest-free deposits

Under the proposal, the maximum amount of interest-free deposits is limited to the difference between the target level of equity and the equity capital. In addition, any reserve requirements for monetary policy purposes should be deducted from the amount. Reserve requirements for monetary policy purposes can be either interest-free or interest-bearing, depending on what the Riksbank considers best promotes liquidity and interest rate management. An interest-bearing reserve requirement makes no, or a smaller, contribution to the Riksbank's earnings compared with interest-free deposits. The Riksbank considers that interest-bearing reserve requirements should not affect the conditions for the requirement for interest-free deposits. This is to ensure that the Riksbank's self-financing capacity is not adversely affected if the Riksbank needs to use interest-bearing reserve requirements for monetary policy purposes. The Riksbank therefore proposes that only interest-free reserve requirements should be deducted when assessing the size of the deposit requirement.

#### Possibility for the Riksbank to exempt credit institutions

It is important that the Riksbank is given flexibility in the concrete design of the deposit, and can change the requirement over time when conditions change. The proposal limits the scope of companies subject to the deposit requirement to credit institutions. The proposal also assumes that all institutions should be treated equally. They must hold the same proportion of their liabilities as deposits with the Riksbank. Liabilities consist of deposits and debt instruments issued. However, credit institutions do not form a homogeneous group, and the liabilities side of their respective balance sheets varies according to their activities. Hence, some institutions may have very small deposits at the Riksbank, which would not contribute to strengthening the Riksbank's self-financing capacity. This is because the administrative cost of managing these small deposits would exceed the positive earnings effect from them. Against this background, the Riksbank should be able to grant exemptions from the deposit requirement if there are *special reasons* for doing so.

It should be possible to fulfil the requirement by investing in debt instruments issued by the Riksbank.

According to the proposal, a certain proportion of the credit institution's liabilities shall be matched by the deposits at the Riksbank. The reasons for the proposal discuss that a starting point should be that the accounts into which the credit institutions deposit the funds will be interest-free. Instead of deposits in accounts the same intended earnings effect could be achieved by credit institutions investing in debt instruments issued by the Riksbank. These

<sup>&</sup>lt;sup>5</sup> See Erikson, H. and D. Vestin, *Pass-through at mildly negative policy rates: The Swedish case*, VoxEU Columns, 22 Jan 2019, and The impact of negative policy rates (riksbank.se), Staff memo, Sveriges Riksbank, May, 2021.

<sup>&</sup>lt;sup>6</sup> Based on the current balance sheets of credit institutions, the requirement for interest-free deposits could amount to a few thousand kronor per year for some credit institutions. With a policy rate of 3 per cent, the Riksbank would earn an extra few hundred kronor a year.



debt instruments would bear no interest, or negative interest, if the policy rate is zero or negative. Debt instruments can provide a more efficient implementation of the deposit requirement. The Riksbank therefore wishes it to be possible to fulfil the requirement on credit institutions by giving the Riksbank the right to issue debt instruments for this purpose.

#### The wording of the provision

The second sentence of the first paragraph of Chapter 8, Section 16 provides as follows: "The share may at most correspond to an amount that means that the sum of the Riksbank's equity and the institutions' total shares in accordance with this provision and Chapter 2, Section 6 corresponds to the target level." The purpose of this sentence is to regulate how large the total deposits required by the Riksbank may be. According to the Riksbank, the sentence should be reworded. This is because it is the total volume of deposits that can be summed up to an amount, and not the total shares. The Riksbank therefore proposes that the sentence be worded as follows: "The institutions' total deposits or investments in debt instruments may not exceed an amount that means that the sum of these, the Riksbank's equity and interest-free reserve requirements in accordance with Chapter 2, Section 6 corresponds to the target level."

#### Application of the interest-free deposits

The statutory commentary states that the conditions for requesting interest-free deposits are to be assessed annually at the end of the financial year, i.e. on 31<sup>st</sup> of December each year. The Riksbank agrees that the size of the Riksbank's equity and the target level for equity should be assessed annually, and be based on the conditions at the end of the year. In practice, this means that annual decisions on the interest-free deposit requirement will be taken at the end of February or beginning of March each year at the earliest. This is because the Executive Board of the Riksbank and the General Council of the Riksbank respective decisions on the annual report and the allocation of profits are made in mid-February, and because the annual report must be submitted to the Riksdag, the Swedish National Audit Office and the General Council by latest 21<sup>st</sup> of February each year.

When the size of the equity is determined according to the annual report, the statutory commentary states that the decision by the General Council on the appropriation of the year's profit must also be taken into account. According to the Riksbank, this means that the Riksbank can decide on interest-free deposits without waiting for the Riksdag to adopt the balance sheet and profit and loss account and to approve the General Council's decision on the appropriation of the year's profit. However, this should be clarified in the preparatory legislative work.

The statutory commentary states that if the Riksbank decides to introduce reserve requirements, or if equity changes, the Riksbank shall repay the interest-free deposits accordingly. A decision on reserve requirements can be taken at any time during the year, and reserve requirements can also vary in size over time. Equity can also change over time, e.g. capital injections can be made during the year. According to the Riksbank, it should therefore be clarified in the preparatory legislative works at what point any reserve requirement, and any capital injection, should be included when the size of the interest-free deposit is assessed.



The proposal does not specify when the assessment of credit institutions' share of deposits and debt securities issued should take place. The Riksbank therefore interprets the proposal as meaning that the Riksbank itself can choose when and how often these reconciliations will take place.

The consultation memorandum states that the liabilities covered by the proposed deposit requirement should correspond to the basic principles for the calculation of the reserve base under ECB Regulation (EU) 2021/378. Applying these principles to the deposit requirement means that liabilities raised by a Swedish credit institution's branch abroad shall not be subject to the deposit requirement. At the same time, the statutory commentary states that, in the case of Swedish credit institutions, it is liabilities attributable to the legal entity's activities that are covered, including liabilities attributable to the activities of branches abroad. It is not entirely clear how these texts relate to one another. The Riksbank therefore requests a clarification on this point.

When applying the requirement for interest-free deposits, the Riksbank needs access to financial market statistics, which report the credit institutions' balance sheets to calculate the amount on which the requirement will be based. At present, the Riksbank has access to these statistics via the joint statistical database for financial market statistics collected by Statistics Sweden, but the Riksbank may only use the data for activities relating to the financial system (Section 2 of the Act [2014:484] on a database for the oversight and supervision of the financial markets). To avoid double reporting by the credit institutions, the Riksbank proposes that it should also be possible to use the information in the joint database when assessing the conditions for requiring interest-free deposits. In addition, it is important to note that the statistics on debt instruments issued vis-à-vis other credit institutions are not comprehensive. A standardised deduction similar to the one used by the ECB to calculate the reserve base may need to be applied when calculating the base for the interest-free deposit requirement.

Proposal for an amended legal text

Ministry of Finance proposal

Riksbank proposal

#### Chapter 8,

Section 16

If equity falls below the target level, the Riksbank may require that a proportion of a credit institution's deposits and issued debt instruments (liabilities) shall correspond to the institution's deposits at the Riksbank. The *share* may at most correspond to an amount that means that the sum of the Riksbank's equity and *the institutions' total shares in accordance with this provision* and Chapter 2, Section 6 corresponds to the target level.

If equity falls below the target level, the Riksbank may require that a proportion of a credit institution's deposits and issued debt instruments (liabilities) shall correspond to the institution's deposits in the Riksbank or debt instruments issued by the Riksbank in Swedish kronor. The institutions' total deposits or investments in debt instruments may not exceed an amount that means that the sum of these, the Riksbank's equity and interest-free reserve requirements in accordance with Chapter 2, Section 6 corresponds to the



The first paragraph applies to Swedish credit institutions and branches of foreign credit institutions.

The liabilities referred to in the first paragraph do not include liabilities to

- 1. other institutions or branches covered by the first sub-paragraph, and
  - 2. The Riksbank.

target level. 6 corresponds to the target level.

The first paragraph applies to Swedish credit institutions and branches of foreign credit institutions. The Riksbank may decide to exempt a Swedish credit institution or a branch of a foreign credit institution if special reasons exist.

The liabilities referred to in the first paragraph do not include liabilities to

- 1. other institutions or branches covered by the first subparagraph, and
  - 2. The Riksbank.

#### Section 17

Interest on deposits under section 16, paragraph 1 may be set at a negative amount only if the applicable policy rate is negative. The interest rate on deposits may not be lower than the policy rate.

Interest on deposits *or debt securities* referred to in section 16, first paragraph, may be set at a negative amount only if the applicable policy rate is *zero or* negative. The interest rate on deposits may then not be *more than one percentage point* below the policy rate.

#### Participation in settlement systems

The Riksbank essentially supports the Ministry of Finance's proposal for the legislative amendments required to incorporate the amendments to the EU Settlement Finality Directive and the EU Payment Services Directive into Swedish law. However, the Riksbank has some views regarding the proposal. The Riksbank also notes that the proposed legislative amendments do not fully implement the changes made to the Payment Services Directive, which concern requirements for the protection of funds received.

In the Riksbank's opinion, there are certain risks in not introducing a special procedure for Finansinspektionen, according to which they are to decide whether an existing institution that applies to participate in a settlement system fulfils the new requirements. In the absence of a specific procedure, the administrator of a settlement system and Finansinspektionen may make different judgements on whether or not an institution complies with the new requirements. In the Riksbank's opinion, it should therefore be made clear that administrators of settlement systems should be able to obtain Finansinspektionen's views on whether an institution fulfils the new requirements for participation. This is before the administrator independently decides whether the requirements for participation in the settlement system are met.

The Riksbank further assesses that the proposed legislative amendments do not fully implement the changes made to Section 10.1.a of the Payment Services Directive, which concern requirements for the protection of funds received. This Section requires that payment service users' funds are protected by, among other things, being deposited in a



separate account. The Section provides for the possibility of also holding such funds in a separate account with a central bank providing such an account. Therefore, the provisions on protection requirements in Chapter 3, Section 7, second paragraph of the Payment Services Act (2010:751), and Chapter 3, Section 7 of the Electronic Money Act (2011:755) should be amended to state that funds may also be deposited in a separate account with a central bank that provides such an account. These amendments should also be reflected in paragraph 8b in the Proposal for an amendment to the Settlement of Obligations in the Financial Market Act (1999:1309). That said, it can be noted that the Riksbank has not taken a position on whether the Riksbank should offer such a special account.

Proposal for an amended legal text

# Proposal for an amendment to the Settlement of Obligations in the Financial Market Act (1999:1309)

Ministry of Finance proposal

Riksbank proposal

#### Section 8b

If funds are segregated in accordance with Chapter 3, Section 7, first paragraph, point 1 of the Payment Services Act (2010:751) or Chapter 3, Section 7, first paragraph, point 1 of the Electronic Money Act (2011:755), the description in accordance with section 8a (1), as applicable, shall include

- 1. information on the persons at the credit institution or foreign credit institution who have access to the special account,
  - 2. information on how it is ensured that funds are invested in low-risk liquid assets,
  - 3. information on the creditor protection of the funds,
- 4. a copy of the agreement with the credit institution or foreign credit institution;
  a copy of the agreement with the credit institution, foreign credit institution or the central bank, and
- 5. a commitment to fulfil the requirements referred to in section 8a(1).
- If funds are covered by an insurance or guarantee under Chapter 3 section 7, first paragraph, point 2 of the Payment Services Act or Chapter 3 7, first paragraph, 2 of the Electronic Money Act, the description referred to in the first paragraph shall include
- 1. a confirmation that the insurance undertaking or credit institution is not part of the same group as the undertaking,
- 2. information on how it is ensured that the insurance or guarantee provides the same protection as if the funds were segregated in accordance with Chapter 3 section 7, first paragraph, point 1 of the Payment Services Act or Chapter 3 section 7, first paragraph, point 1 of the Electronic Money Act,
- 3. information on the contractual terms of the insurance policy in terms of duration and renewal; and
  - 4. a copy of the contract with the insurer or guarantor.



#### Proposal for legislation to amend the Payment Services Act (2010:751)

Ministry of Finance proposal

Riksbank proposal

#### Chapter 3.

Section 7

A payment institution or a registered payment service provider shall take specific measures to safeguard a payment service user's funds received for the execution of payment transactions. Such funds shall be

- 1. kept separate from the payment institution's or registered payment service provider's own assets and funds held on behalf of persons other than payment service users; or
  - 2. covered by an insurance policy or guarantee
- (a) provided by an insurance undertaking or a credit institution that is not part of the same group as the payment institution or the registered payment service provider; and
- (b) which provides the same protection for the payment service user as if the funds were separated under paragraph 1.

Funds for the execution of transactions referred to in the first sub-paragraph 1 that referred to in the first sub-paragraph 1 are still held by the payment institution or the registered payment service provider at the end of the business day following the day on which the funds were received shall be deposited in a separate account with a were received shall be deposited in a credit institution or a foreign credit separate account with a credit institution, institution or invested in low-risk liquid a foreign credit institution or a central assets.

Funds for the execution of transactions that are still held by the payment institution or the registered payment service provider at the end of the business day following the day on which the funds bank, or invested in low-risk liquid assets.

The first and second sub-paragraphs shall also apply where a payment institution or a registered payment service provider receives funds, a proportion of which is to be used for future payment transactions and the remainder for services other than payment services. Where it is not possible to determine the proportion of users' funds that will be used for payment transactions, a payment institution or a registered payment service provider may, if possible on the basis of historical data and after authorisation by Finansinspektionen, estimate that proportion.

#### Proposal for act to amend the Electronic Money Act (2011:755)

Ministry of Finance proposal

Riksbank proposal

#### Chapter 3,

Section 7

An electronic money institution or a registered issuer shall take measures to safeguard the funds received in exchange for electronic money issued. Such funds shall be

- 1. kept separate from the institution's or issuers own assets and funds held on behalf of persons other than the holder of the electronic money; or
  - 2. covered by an insurance policy or guarantee
- (a) provided by an insurance undertaking or a credit institution that is not part of the same group as the electronic money institution or the registered issuer; and



(b) which provides the same protection for holder of the electronic money as if the funds were separate under paragraph 1.

Funds referred to in the first subparagraph 1 that are still held by the electronic money institution or the electronic money institution or the registered issuer at the end of the business day following the day on which the funds were received shall be deposited in a separate account with a Swedish bank, Swedish credit market undertaking or a foreign bank or credit undertaking or invested in low-risk liquid assets.

Funds referred to in the first subparagraph 1 that are still held by the registered issuer at the end of the business day following the day on which the funds were received shall be deposited in a separate account with a Swedish bank or Swedish credit market undertaking, a foreign bank or credit undertaking or a central bank, or invested in low-risk liquid assets.

Funds received in the form of a payment through a payment instrument do not need to be safeguarded until they have been credited to a payment account with the institution or registered issuer or otherwise made available to an electronic money institution or registered issuer. However, the funds shall be safeguarded no later than five banking days after the electronic money to which the payment relates was issued.

Electronic money institutions and registered issuers that provide payment services that are not linked to the issuance of electronic money shall apply the provisions on protection requirements in Chapter 3, Section 7 of the Payment Services Act (2010:751).

On behalf of the Executive Board:

Erik Thedéen

Monika Gustavsson

This decision has been taken by the Executive Board (Governor Erik Thedéen, First Deputy Governor Anna Breman and Deputy Governors Aino Bunge, Per Jansson and Anna Seim) following a presentation by Senior Advisor Albina Soultanaeva. Senior Adviser Anders Kvist and Head of Division Lena Strömberg participated in the final decision process.



# Annex A: Effects of the draft bill on the Riksbank's financial position – a quantitative analysis

This annex presents a quantitative analysis of how the draft bill would affect the Riksbank's financial position under different assumptions. This analysis is similar to the analysis presented in the Riksbank's submission to the Riksdag (the Swedish Parliament) on the restoration of equity<sup>7</sup>. However, the analysis has been adapted to assess the impact of the proposed legislative amendments and the capital injection decided by the Riksdag.

The first section presents a baseline scenario that represents a likely development for the Riksbank's earnings and capital, with and without the proposed legislative amendments.<sup>8</sup> The baseline scenario assumes that the capital injection of SEK 25 billion is paid out in 2024 and that the Riksbank begins to apply the proposed requirement for interest-free deposits from 2026. The baseline scenario shows how the requirement for interest-free deposits contributes to improving earnings and reaching equity statutory base level in 2029. Thereafter, equity will continue to grow, but it will take a long time to reach the Sveriges Riksbank Act's target level for equity, when the Riksbank will once again start to pay dividends to the government.<sup>9</sup>

The baseline scenario is followed by a sensitivity analysis, where developments are assumed to be worse than in the baseline scenario. The purpose of these scenarios is to analyse how robust the Riksbank's balance sheet is to fluctuations in financial prices and to show how the government's proposal for interest-free deposits can contribute to improving the reported results. The analysis shows that there is considerable uncertainty regarding the development of the Riksbank's financial position in the future, and that equity may grow at a much slower pace than the baseline scenario shows. If the krona appreciates more than in the baseline scenario, the sum of equity and unrealised gains on revaluation accounts may become so low that the Riksbank will need to consider a submission to restore equity in the near future.

The annex concludes with a section highlighting the significance of the requirement for interest-free deposits from the credit institutions for the Riksbank's earnings, possibilities for self-financing and build-up of equity. The scenario analysis shows that the interest-free deposits mean that the Riksbank's reported results improve in all scenarios and that the Riksbank can thus build up equity at a slightly faster rate.

# A1. Scenario analysis

The section begins with a baseline scenario with a probable development for the Riksbank's future earnings and capital. This is based on certain numerical assumptions, with and without the proposed legislative amendments. The baseline scenario should not be seen as

 $<sup>^7 \</sup> https://www.riksbank.se/globalassets/media/nyheter--pressmeddelanden/pressmeddelanden/2024/240402/press-release-the-riksbank-proposes-that-equity-be-restored-to-the-statutory-base-level.pdf$ 

<sup>&</sup>lt;sup>8</sup> The legislative change in question is the possibility to hold interest-free deposits from credit institutions. In addition to the capital injection of SEK 25 billion in 2024, the scenarios assume no further capital injections. This means that the proposed legislative change that revaluation accounts are fully taken into account when requesting capital injections does not affect the results of the scenario analysis.

 $<sup>^{\</sup>rm 9}\,\mbox{The}$  baseline scenario assumes no financial risk provisioning over the period.



future outcomes, but rather as a likely development based on assumptions that are deemed reasonable. As the Riksbank's balance sheet is sensitive to developments in financial prices and the assumptions on which the baseline scenario is based are uncertain, a sensitivity analysis that shows how robust the baseline scenario is to reasonable variations in financial prices is also presented.

## **Baseline scenario**

The scenario mainly extends to 2030, but in some cases results beyond that horizon are presented. However, such results are subject to considerable uncertainty and should therefore be interpreted with some caution. The scenario is based on the following assumptions and preconditions regarding capital injections and interest-free deposits under the draft bill.

## Assumptions and preconditions

The following has been assumed with regard to the draft bill and capital restoration in the baseline scenario:

- The Riksbank's equity is restored with a capital injection of SEK 25 billion, in autumn 2024.
- As the Riksbank's equity is below the statutory target level, we assume that the Riksbank will implement the requirement for interest-free deposits from 1 January 2026 (the deposit requirement is assumed to have an implementation period of one year after the law enters into force). The size of the interest-free deposits from credit institutions is calculated by taking the difference between the target level and the Riksbank's actual level of equity each year.<sup>10</sup>
- The scenario assume no further recapitalisations after the capital injection of SEK 25 billion in 2024, and no financial risk provisioning are made.

Otherwise, the baseline scenario is based on the following assumptions:

- Net administrative costs, i.e. administrative expenses less administrative income, remains at the current level in real terms. This means that it grows with inflation, which is assumed to be at 2% per year.
  - Banknotes and coins in circulation remain at the nominal level at the end of July 2024. Hence, the level does not grow with inflation.
- The policy rate follows the latest forecast by the National Institute of Economic Research from June and falls to 2.5 per cent in the second quarter of 2025. A policy rate of 2.5 per cent in the longer term corresponds to a real interest rate of 0.5 per cent.

<sup>&</sup>lt;sup>10</sup> For modelling reasons, the amount in the calculations is updated monthly.

<sup>&</sup>lt;sup>11</sup> See Swedish Economy Report, June 2024, which was the latest available forecast at the time of the analysis. From May 2025, the NIER's forecast for the policy rate has been adjusted upwards from 2.25 to 2.50 per cent. This policy rate assumption is well in line with the Riksbank's interest rate forecast in the June 2024 Monetary Policy Report.



- Market rates are calculated as the expected average policy rate over the maturity of the bond, plus a term premium.<sup>12</sup>
- The krona's exchange rate against the US dollar and the euro is also in line with the National Institute of Economic Research's latest forecast from June. This means an overall appreciation of the krona of around 10 per cent by 2030. In the longer term, the krona is assumed to remain at the exchange rate level reached in 2028.<sup>13</sup>

These assumptions are associated with uncertainty and at the same time are of great significance for the Riksbank's results and the development of equity. Not least the long-term assumptions are important, but they have the greatest impact on the result in the longer term.

#### Results

Chart A1 shows the development of the Riksbank's reported result, equity and revaluation accounts in the baseline scenario. This is *with* and *without* the requirement for interest-free deposits under the new draft bill. In the baseline scenario *without* the interest-free deposit requirement:

- the Riksbank makes a small profit for 2024 of just under SEK 1 billion,
- unrealised gains on revaluation accounts for foreign exchange are reduced by around SEK 11 billion and unrealised gains on revaluation accounts for price effects by around SEK 5 billion,
- equity at the end of the year is around SEK 24 billion. This is after a capital injection of SEK 25 billion.

Equity thus exceeds one third of the target level of equity under current law. The sum of equity and unrealised gains on revaluation accounts for price and exchange rate effects exceeds the statutory base level of equity (see Chart A1, top right and bottom right panels respectively). This means that in the baseline scenario, the Riksbank does not need to consider making a request to restore equity in 2025. This is regardless of whether the current law remains in force or whether the new draft law has entered into force.

In the baseline scenario, the policy rate is gradually lowered, in accordance with the National Institute of Economic Research's forecast, and amounts to 3.0 per cent at the end of 2024. The policy rate continues to be lowered during 2025 (see Chart A2). From 2025, the Riksbank makes a profit of just over SEK 4 billion per year in the baseline scenario without the requirement for interest-free deposits (see Chart A1. The profit is primarily explained by the fact that US government bonds are assumed to have a much higher interest rate than the Swedish policy rate for a long time, and a large part of the Riksbank's foreign exchange reserve is invested in US government bonds.

The starting-point for the baseline scenario is that, in July 2024, there were significant unrealised gains in the revaluation accounts for currency effects as a result of the trend

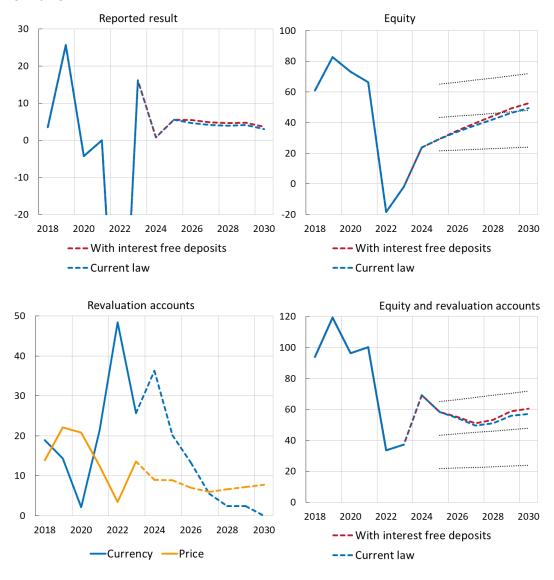
<sup>&</sup>lt;sup>12</sup> The initial level of term premiums is consistent with the scenario's policy rate expectations in Sweden and abroad. In the longer term, they move towards 38 basis points for a 5-year fixation period, which is in line with historical averages. However, estimated term premiums have varied greatly over time and the choice of time period plays an important role for the average.

<sup>&</sup>lt;sup>13</sup> The forecast is based on the krona's exchange rate in August, with an adjustment to the NIER's forecast from June (when the krona was about 5 per cent stronger) over the next 12 months.



depreciation of the krona over a longer period of time (see Chart A1). However, the krona appreciates in the scenario, which leads to a reduction of the unrealised gains in the revaluation accounts for currency effects. At the end of the baseline scenario, in 2030, no unrealised gains remain in the revaluation accounts for foreign exchange. However, falling market rates abroad give rise to some unrealised price gains on foreign bonds in the foreign currency reserves. These unrealised gains remain throughout the baseline scenario.

Chart A1. Development of the Riksbank's reported profit, equity and revaluation accounts and the effect of the requirement for interest-free deposits in the baseline scenario SEK billion



Note. Solid coloured lines indicate outcomes and dashed lines are forecasts. Black dashed lines show the target level, base level (two-thirds of the target) and minimum level (one-third of the target) for equity. Equity here also includes the profit for the year, which formally affects the balance sheet item equity with a one-year lag. Valuation accounts include unrealized gains for price and currency, excluding gold, unless otherwise stated.

In the baseline scenario *without* the requirement for interest-free deposits, the Riksbank's net interest income exceeds the management costs. The resulting profit leads to equity growing at a slightly faster rate than the target level, which over the period, is adjusted



upwards by the rate of inflation. This means that by 2030, equity will have reached the base level.

With the maximum amount for interest-free deposits from the credit institutions, the Riksbank's reported profit will be on average SEK 0.7 billion higher, and with the requirement for interest-free deposits, equity will reach the base level somewhat faster. However, it will take until 2037 before it reaches the target level for equity and the Riksbank can start to pay dividends to the government.<sup>14</sup>

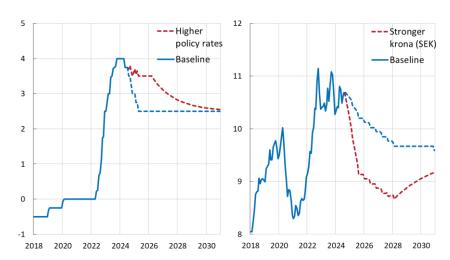
To summarise, the baseline scenario shows that the requirement for interest-free deposits helps to improve earnings. However, it will take a long time for the Riksbank to build up equity to the base and then the target level. This is mainly due to the fact that the Riksbank's equity initially only amounts to around one third of the target level for equity. This is despite a capital injection of SEK 25 billion.

# Sensitivity analysis

As described above, the assumptions on which the baseline scenario is based are associated with considerable uncertainty. The aim of the sensitivity analysis is to analyse how resilient the Riksbank's balance sheet is to a worse development in financial prices than that on which the baseline scenario is based, and how the requirement for interest-free deposits can contribute to improving the Riksbank's results. Chart A2 shows the assumptions for the Swedish policy rate and the krona exchange rate against the US dollar<sup>15</sup> in the baseline scenario and in the sensitivity analysis presented below.

#### Chart A2. Assumptions in the sensitivity analysis

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



<sup>&</sup>lt;sup>14</sup>The baseline scenario assumes no financial risk provisioning over the period.

<sup>&</sup>lt;sup>15</sup> The exchange rate change is based on weighted dollar/euro exchange rate changes against the Swedish krona. The weighting is 80/20 to reflect the assumption of a simplified currency distribution in the foreign exchange reserves under the modelling assumption.



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

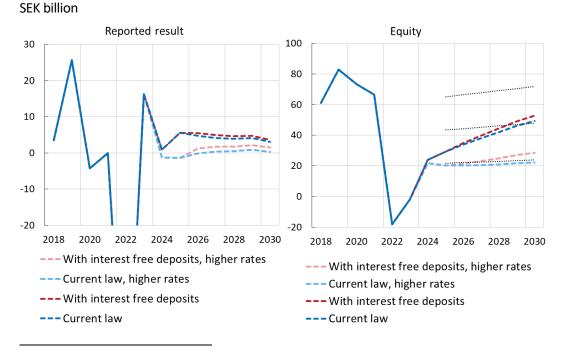
Sources: National Institute of Economic Research, Macrobond Financial AB and the Riksbank

This section begins with an analysis of how sensitive the Riksbank's results are to developments in policy rates and the significance of the deposit requirement when policy rates become higher. Higher policy rates primarily mean a higher cost for the Riksbank's interest-bearing debt. As the cost of the interest-bearing debt increases, the possibility of demanding interest-free deposits from credit institutions becomes more important for the Riksbank's net interest income. The krona exchange rate is another important component that can have a major effect on the Riksbank's balance sheet and results. Therefore, the sensitivity analysis in this section also includes a scenario in which the krona appreciates more than in the baseline scenario. When the krona appreciates, the value of the assets in the Riksbank's foreign exchange reserve measured in Swedish kronor falls. As a result, unrealised gains on revaluation accounts for foreign exchange are reduced. In such circumstances, the possibility of withdrawing interest-free deposits from credit institutions also becomes important.

#### Higher policy rates

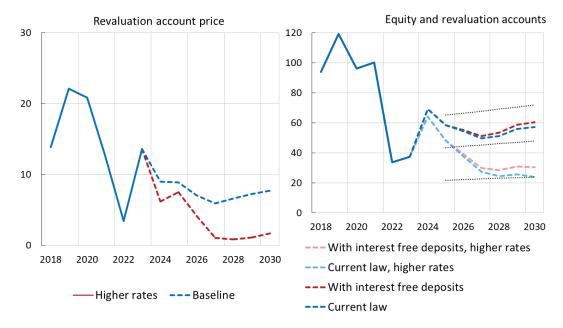
Both the central banks' policy rates and market rates can change a lot in a short time, which can have major effects on the Riksbank's net interest income and reported results. In the sensitivity analysis presented in Chart A3, policy rates in Sweden and abroad are assumed to be temporarily 1 percentage point higher than in the baseline scenario. Other assumptions are unchanged from the baseline scenario<sup>16</sup>.

Chart A3. Development of the Riksbank's reported result, equity and revaluation accounts in scenario with higher policy rates



<sup>&</sup>lt;sup>16</sup> Longer-run interest rates are not affected initially but slowly adjust to the projected policy rates and the long-run term premium.





Note. Solid coloured lines indicate outcomes and dashed lines are forecasts. Black dashed lines show the target level, base level (two-thirds of the target) and minimum level (one-third of the target) for equity. Equity here also includes the profit for the year, which formally affects the balance sheet item equity with a one-year lag. Valuation accounts include unrealized gains for price and currency, excluding gold, unless otherwise stated.

However, with the initial losses, it takes considerably longer to build up equity to the base level than in the baseline scenario. *With* the maximum amount of interest-free deposits, it takes 16 years for equity to reach the base level.

A direct effect of a higher policy rate is that interest costs on the monetary policy debt increase, which has a negative impact on net interest income. Chart A3 shows that if policy rates are higher than in the baseline scenario, the Riksbank will report profits that are on average SEK 3–4 billion lower per year until 2030. The Riksbank initially makes losses and, without the proposed requirement for interest-free deposits, equity in this scenario falls at its lowest to SEK 20 billion.

With the interest-free deposit requirement maximised, the initial losses turns into profits more quickly and the result will be positive already at the implementation of the interest-free deposit from 2026 onwards. Interest-free deposits lead to increased profits on average with SEK 1.3 billion per year in the scenario with higher policy rates. In this scenario, there remains a small margin down to the minimum level of equity when unrealised gains are included. In accordance to the draft bill there would therefore be no submission for the restoration of capital.

#### Stronger krona

The development in the baseline scenario is based on the National Institute of Economic Research's assessment in June 2024 and entails an appreciation of the krona, which is in line with the Riksbank's own assessment of the krona's development. The krona exchange rate 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. In the sensitivity analysis presented in Chart A4, the krona exchange rate is assumed to be a



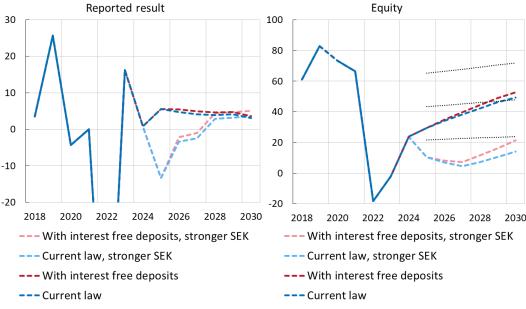
further 10 per cent stronger than in the baseline scenario (see Chart A1) and then slowly move towards the same long-term level as in the baseline scenario.

In the scenario with a stronger krona, the losses are initially covered by the unrealised gains currently in the revaluation accounts for currency. But as early as 2025, the appreciation of the krona will have an impact on the reported result, which becomes negative for several years. In this scenario, the krona stops appreciating from 2028 onwards and then slowly depreciates towards a long-term level. This leads to the reaccumulation of unrealised gains in the revaluation accounts for foreign exchange. When the result is no longer burdened by unrealised foreign exchange losses, the positive net interest income means that the Riksbank starts to make profits again. Thanks to the resulting profits, equity then gradually starts to rise again.

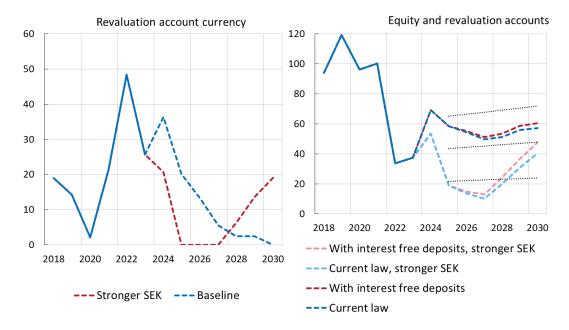
Thus, in this scenario, equity initially falls towards zero, which means that the maximum amount of interest-free deposits is initially considerably larger than in the baseline scenario, at most about SEK 33 billion larger. Before equity starts to rise again, the maximum amount of interest-free deposits increases to at most around SEK 60 billion. The deposit requirement thus becomes more important in this scenario and allows the Riksbank to show positive results earlier and thus build up equity at a faster pace. With the requirement for interest-free deposits, equity reaches the base level 4 years earlier than without a deposit requirement. However, it will take until 2036 to reach the base level and until 2042 to reach the target level where dividend payments will once again become relevant.

Chart A4. Development of the Riksbank's reported result, equity and revaluation accounts in scenario with stronger krona









Note. Solid coloured lines indicate outcomes and dashed lines are forecasts. Black dashed lines show the target level, base level (two-thirds of the target) and minimum level (one-third of the target) for equity. Equity here also includes the profit for the year, which formally affects the balance sheet item equity with a one-year lag Valuation accounts include unrealized gains for price and currency, excluding gold, unless otherwise stated.

In both the case *with* and *without* the interest-free deposit requirement, the losses initially incurred in this scenario lead to equity falling below one third of the target level. Under the current law, the Riksbank would then have to make a submission to restore equity.

As the appreciation of the krona in this scenario erodes unrealised gains on foreign exchange revaluation accounts, the sum of equity and unrealised gains on revaluation accounts will also decline, falling below one-third of the target level by 2025. Thus, even under the draft bill, the Riksbank would have to consider making a new submission to the Riksdag for the restoration of equity.<sup>17</sup>

# A2. Interest-free deposits and the Riksbank's earnings

The scenarios in the section above illustrate the effect on the Riksbank's earnings and equity of the capital injection of SEK 25 billion combined with the proposal for interest-free deposits.

As mentioned above, the baseline scenario assumes that the Riksbank implements the requirement for interest-free deposits as of 1 January 2026 and makes use of the possibility to request a maximum amount for the deposits each year. Initially, this means around SEK 36 billion in interest-free deposits from credit institutions for 2026 (see Chart A5). As equity rises, the maximum size of the deposit requirement falls by the same amount. The deposit requirement amounts to about SEK 19 billion in 2030.

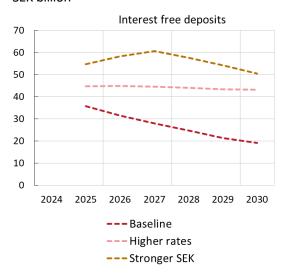
 $<sup>^{17}</sup>$  The scenario calculation disregards further submissions and thus equity is not expected to be restored again after 2024.



However, the sensitivity analysis in section A1 shows that the requirement for interest-free deposits may be significantly higher than in the baseline scenario. This is because the scenarios with a higher policy rate or a significant appreciation of the krona result in losses that reduce equity, which can be offset by a higher amount of non-interest-bearing deposits.

In the scenario with higher policy rates, the amount of interest-free deposits is initially around SEK 45 billion. This is due to the fact that the deterioration in net interest income gives rise to losses, which reduce equity. The larger volume of non-interest-bearing deposits helps to improve net interest income, and the Riksbank starts to make profits that lead to an increase in equity. This means that interest-free deposits gradually decrease. However, this happens slowly, as the maximum volume of non-interest-bearing deposits also depends on the target level of equity, which is revalued in line with inflation.

Chart A5. Development of the size of the requirement for interest-free deposits in the baseline scenario and the scenarios with a higher policy rate and a stronger krona SEK billion



Note. The chart shows the interest-free amount based on the balance sheet at the end of each year

The losses in the scenario with a stronger krona are greater than in the scenario with a higher policy rate and therefore mean that equity is lower and the maximum amount of interest-free deposits is correspondingly greater. At most, the requirement for interest-free deposits amounts to around SEK 60 billion in this scenario and it takes until 2042 before equity reaches the target level and the requirement for interest-free deposits becomes zero.<sup>18</sup>

In all scenarios, the requirement for interest-free deposits eventually contributes to a positive net interest income and an increase in equity, which means that the deposit requirement can be reduced. All in all, the conclusion of the analysis is that the requirement for interest-free deposits, together with a capital injection of SEK 25 billion, can create earnings that are sufficient to finance the Riksbank's current operations and

23 [24]

 $<sup>^{\</sup>mbox{\scriptsize 18}}$  Note that in this scenario we assume that there is no further recapitalisation.



build up equity. However, even with the possibility of interest-free deposits, the Riksbank may need further capital injections in the future under unfavourable conditions.

The requirement for interest-free deposits means that the cost-free capital (equity and the requirement for interest-free deposits) can always be kept at the target level and thus reduce the Riksbank's funding costs. However, the cost saving will vary with the level of the policy rate. As long as the policy rate is positive, the requirement for interest-free deposits contributes to improving the Riksbank's earnings and thereby its ability to build equity. A precondition for the interest-free deposits to be able to replace equity as interest-free financing is that the Riksbank assesses it is appropriate and possible to accept the maximum amount of interest-free deposits from credit institutions, as we assume in this analysis.