

#### ANNEX TO THE DECISION

DATE: 19 February 2025

DEPARTMENT: Markets Department

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# Foreign exchange hedging and the strategic allocation of the gold and foreign exchange reserves in 2025

### 1 Background

#### 1.1 Introduction

The Riksbank's estimated contingency need for foreign currency provides the starting point for the design and management of the gold and foreign exchange reserves (GFXR). It forms the basis for the assessment of the size of the reserves and for the selection of currencies and assets included. The currencies included in the contingency requirement are called contingency currencies.

The Executive Board decides on the strategic allocation of the gold and foreign exchange reserves, which is to say how the gold and foreign exchange reserves are composed. This proposal is based on a three-step analysis described in section 3.2 below.

# 2 Summary of hedging and strategic allocation for 2025

#### **Currency hedging**

The current currency hedging is being maintained. This means that *USD 8 billion* and *EUR 2 billion* are being hedged. This corresponds to about one-quarter of the foreign exchange reserves.

#### Strategic allocation

The composition of currencies and assets in the strategic allocation and the duration per currency are summarised in Table 1 below. The strategic allocation has an expected gross return of 3.36 per cent (SEK 19.3 billion) and an expected net return of 1.75 per cent (SEK 10.1 billion) over a 12-month horizon.<sup>1</sup>

Table B3 also sets out the strategic allocation and two alternatives to the strategic allocation. One option has a higher and the other has a lower risk and return than the strategic allocation.

Table 1. Currency and asset allocation and duration for strategic allocation (SA)

Currency	USD	EUR	GBP	NOK DKK	AUD	CAD	Total
Share of SA	70,0%	17,5%	5,0%	2,5%	5,0%		100%
Modified duration	4,0	4,0	4,0	4,0	4,0		4,0
Asset	Gov SSA	Gov Gov Gov Gov GER FRA SPA ITA	Gov SSA	Gov Gov	Gov State SSA	Gov Province SSA	Total
Share of SA	68,0% 2,0%	10,0% 5,0% 2,0% 0,5%	4,0% 1,0%	2,5%	2,0% 3,0%		100%

**Note 1**: SSA means Sovereign, Supranational and Agency, i.e. bonds issued by national, supranational or regional authorities and US agencies. BIS refers to the Bank for International Settlements.

Note 2: All proportions are expressed in relation to the size of the foreign exchange reserves, i.e. excluding the gold reserve.

Note 3: Government bonds are equal to bank account balances and claims on the BIS.

#### 3 Considerations

#### 3.1 Contingency requirement

In the autumn of 2024, the Riksbank estimated the contingency need in foreign currency at USD 40 billion, divided into 70 per cent USD and 30 per cent EUR. This is a change from 2023, when the contingency requirement was USD 48 billion and consisted of 75 per cent USD, 20 per cent EUR, 3 per cent GBP, 1 per cent NOK and 1 per cent DKK.

The volume of gold remains unchanged at 125.7 tonnes.

#### 3.2 Process for the preparation of strategic allocation

The Executive Board decides on strategic allocation after a three-step analysis. The starting point is the Riksbank's latest assessment of the contingency requirement.

• In **step one**, the main and alternative asset price scenarios to be used in the analysis are analysed and determined. Based on the main scenarios,

<sup>&</sup>lt;sup>1</sup> This should not be confused with gross and net total returns as defined in the *Investment policy for the gold and foreign exchange reserves*.

an overview is presented of the expected development of the Riksbank's total balance sheet, earnings requirement and build-up of equity.

- In step two, an initial allocation of currencies and assets for the gold and foreign exchange reserves is analysed and determined. The allocation only takes into account government bonds in contingency currencies (United States and Germany) to find the composition that is expected to provide the best conditions for achieving the desired long-term (5-10 years) earnings, risk and equity performance, given the different scenarios from step one.
- In **step three**, a more detailed analysis of the asset allocation of the gold and foreign exchange reserves is made with a focus on return given the earnings and risk considered appropriate in step 2. The analysis in step 3 includes more currencies and more asset classes (increased credit and liquidity risk), so as to achieve a better risk and return profile for the foreign exchange reserves when compared to step 2. In step 3, greater emphasis is placed on market-based scenarios. The time horizon is shorter than in step 2, up to one year. Step 3 gives the strategic allocation as well as two alternatives to the strategic allocation, one with lower and one with higher risk and return.

## 3.3 Hedging, currency allocation and interest rate risk from a balance sheet perspective (steps 1-2)

Based on the conclusions of the analysis in steps 1 and 2, the following starting points are provided for the strategic allocation in step 3:

- USD 8 billion and EUR 2 billion are hedged.
- The currency distribution of the assets shall be 70 per cent USD and 30 per cent EUR.
- The interest rate risk shall be 4.0 (modified duration).
- The internal return target shall be 1.6 per cent on average over five years for the foreign exchange reserves<sup>2</sup>.

The analysis in step 2 is based on National Institute of Economic Research (NIER) forecasts of interest rates and currencies from December 2024 (the main scenario) and the Riksbank's long-term assumptions of neutral interest rates.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Calculated on the gross assets including hedging of the foreign exchange reserves.

<sup>&</sup>lt;sup>3</sup> In addition to assumptions about how interest rates and exchange rates develop over time, the analysis is also based on assumptions about the Riksbank's balance sheet and income statement. Among other things, it is assumed that the deposit requirement will be fully implemented from October 2025, that the Swedish

#### 3.3.1 Currency hedging

USD 8 billion and EUR 2 billion will be hedged.

In the main scenario, the krona appreciates, mostly against USD but also against EUR. In total, this is just over 10 per cent from the current level. This is in line with the Riksbank's forecasts, although the Riksbank is forecasting a faster appreciation of the krona than the NIER. Today's currency hedging provides some protection against a stronger krona. Increasing hedging further would indeed reduce financial risk further but at the expense of preparedness. In addition, a higher hedge would have a negative impact on earnings if the krona exchange rate remained unchanged or weakened. Hedging is also a measure that involves the exchange of Swedish kronor, which can have effects on monetary policy and this aspect needs to be taken into account when deciding on hedging. In light of the contingency need and the total risks on the Riksbank's balance sheet, the overall assessment is that the current currency hedging offers a well-balanced financial risk reduction and that there are not sufficient reasons to justify a change in the current level.<sup>4</sup> Specific counterparty and settlement limits need to be applied to those holdings and transactions in foreign exchange that aim to hedge parts of the foreign exchange reserves. The limits for individual counterparties shall also apply to parties with close links to them. The limits that apply according to the previously decided Regulation for the gold and FX reserves (ref. no. 2024-00692) are still deemed appropriate. The limits should therefore correspond to the limits in this rule. This rule will be cancelled under a separate decision taken in the context of the strategic allocation decision.

#### 3.3.2 Assets' currency distribution and interest rate risk

The allocation the contingency requirement of 70 per cent USD and 30 per cent EUR is deemed to be the composition of contingency currencies that achieves the best balance between contingency, risk and return in the long term.

US interest rates are higher than European interest rates in both NIER and Riksbank forecasts and in the forecasts based on market pricing. All else being equal, this means, on one hand, that a higher share of USD in the foreign exchange reserves will increase expected earnings. On the other hand, the krona is strengthening more against the USD than against the EUR in the forecasts of the NIER and the Riksbank. Holding USD also has a greater impact on market risk, as the krona exchange rate fluctuates more against the USD than against the EUR. Overall, the currency allocation of the contingency requirement is deemed to

securities holdings will mature as communicated by the Riksbank, excluding a contingency portfolio of SEK 20 billion, that administrative costs will develop in accordance with the Riksbank's forecast and thereafter grow by two per cent a year, and that depreciation of banknotes and coins will take place as forecast.

<sup>&</sup>lt;sup>4</sup> See decision of 18 September 2023 (ref. no. 2023-00863) to hedge part of the foreign exchange reserves.

provide an appropriate risk and return profile and the currency distribution between USD and EUR should therefore be the same as in the contingency requirement.

The modified duration for the foreign exchange reserves in the long term should be 4.0.

The analysis shows that longer durations are expected to yield higher returns in the long term, as policy rates are assumed to fall from their current level to a long-term level of 2.25 per cent, and that term premiums will be positive over the forecast period. The choice of duration is a trade-off between liquidity, risk and return, as well as uncertainty in forecasts.

A duration between 0.0-1.0 implies low interest rate risk, especially in the short term, but also low expected returns and thus a risk to equity in the long term. Moreover, liquidity, and hence contingency, is often poorer for bonds with durations below 2.0. A duration higher than 2.0 thus strengthens preparedness and earnings.

The higher the duration, the higher the risk, especially in the short term. A duration of 5.0 or 6.0 implies an increased interest rate risk in the foreign exchange reserves compared with today, while the interest rate risk in the Swedish securities holdings is still considerable.

Comparable central banks often have a modified duration lower than 4<sup>5</sup> but include other risky assets such as corporate bonds or equities. Given the Riksbank's task, which is to ensure preparedness as well as risk and earnings, the overall assessment is that 4 is a well-balanced level for modified duration.

#### 3.3.3 Internal return target

The internal management and monitoring of the management of the gold and foreign exchange reserves includes the use of targets for return. The starting point for the return target is the contingency portfolio<sup>6</sup> developed in step 2. It is expected to yield an average annual return of 1.6 per cent in the main scenario over 2025-2029. Of this, 3.2 per cent comes from interest rate returns and -1.6 per cent from currency returns.

The contingency portfolio has an allocation with low risk and high contingency. The return on the contingency portfolio thus constitutes an appropriate internal

<sup>&</sup>lt;sup>5</sup> BIS Peer review 2024: out of 110 central banks, over 70 per cent have a duration below 3. 45 per cent of more comparable central banks (15 central banks) have a duration between 3-5 and only about 5 per cent greater than 5. Over 50 per cent of comparable central banks have equities and corporate bonds in their GFXR.

<sup>&</sup>lt;sup>6</sup> Including currency hedging.

target for the return on the foreign exchange reserves and is therefore set at 1.6 per cent per year on average for the next five years. This corresponds to SEK 7.5 billion per year. The Riksbank's total profit, including administrative costs, would then amount to half a billion kronor a year and equity would grow to around SEK 64 billion at the end of 2029. In the long term, this development is judged to be compatible with earnings that build equity in line with the upward adjustment of the target level for equity and that strengthen the Riksbank's financial independence.

The target is to be monitored and reported to the Executive Board every four months, along with other asset management reporting.

#### 3.4 Detailed allocation over 1 year horizon (step 3)

The starting point for the analysis in step 3 is the contingency portfolio developed in step 2. The result in step 3 is a strategic allocation that provides a better risk and return profile than the contingency portfolio from the previous steps. This means either lower risk for the same expected return or higher expected return for the same risk or a combination of both. The analysis in step 2 is based on the NIER and Riksbank forecasts. The analysis in step 3 is mainly based on the market-based scenarios described in section 3.3 below.

#### 3.4.1 Scenarios in step 3

- Market forward pricing for short-term interest rates in the fixed income markets analysed by the Riksbank<sup>7</sup>, supplemented with market-implied term premiums<sup>8</sup>.
- A sensitivity scenario where short-term interest rates are higher than in the forward scenario.<sup>59</sup>
- A sensitivity scenario where short-term interest rates are lower than in the forward scenario.<sup>56</sup>
- Constant curve means that the yield curves have the same appearance at the end of the forecast horizon as they do at the beginning.

<sup>&</sup>lt;sup>7</sup> US, Germany, France, Spain, Italy, UK, Denmark, Norway, Australia and Canada

<sup>&</sup>lt;sup>8</sup> The difference between government bond curves and OIS curves is assumed to be term premiums. Term premiums are then held constant in the simulations, with short-term interest rates following the OIS curves. The Nelson-Siegel method is used to estimate the curves.

<sup>&</sup>lt;sup>9</sup> Higher or lower interest rate development against the forward scenario in line with 80 per cent marketspecific confidence intervals over 2 years. After 2 years, the short-term interest rate gradually converges towards the long-term level of the forward scenario.

Scenarios are created for all currencies and assets included in the analysis. These scenarios may thus differ in the short term (one year) from the scenarios used in the previous steps of the investment process (step 1 and step 2).

#### 3.4.2 Other countries compared to the contingency portfolio

Compared with US and German government bonds, fixed income assets in Norway, Australia and the United Kingdom offer opportunities to simultaneously increase expected returns and lower expected risk. The analysis shows that they offer significantly higher expected returns than Germany and significantly lower market risk than the US. But poorer liquidity and low outstanding volume for Norwegian government bonds restrict holdings to a maximum of 2.5 per cent.

Within EUR, the expected return can be increased by increasing credit risk and diversifying into French, Spanish and Italian bonds. However, as German government bonds are among the most liquid in the world, diversification into other countries has a negative impact on contingency. France is the second most liquid market in Europe. Like the UK, the country has suffered from increasing fiscal problems and French government bonds have increased their spread against Germany and other European countries. Italian government bonds have historically spread widely against Germany in times of crisis but Italy is a large bond market with relatively good liquidity. Liquidity in Spain is worse than in France and Italy. From a historical perspective, both Spanish and Italian government bonds are at tight levels against Germany, while French government bonds are the opposite (see Table B1).

#### 3.4.3 Portfolio optimisation

By introducing more countries and assets than in step 2, the expected risk and return profile of the portfolio can be improved. This is done mainly by increasing the credit risk of the assets and capitalising on the fact that different assets interact in different ways. For a given expected level of risk, it is possible to find a combination of assets with the best expected return. In this sense, this combination of assets is an optimal portfolio given the expected risk.

#### 3.4.4 Effective fronts

By optimising portfolios based on given restrictions for different expected risk levels, it is possible to create a so-called effective front. The effective front thus consists of the portfolios that provide the highest expected return given the expected risk and given restrictions. Figure 1 illustrates the effective fronts for three different restrictions on the choice of currencies and assets.

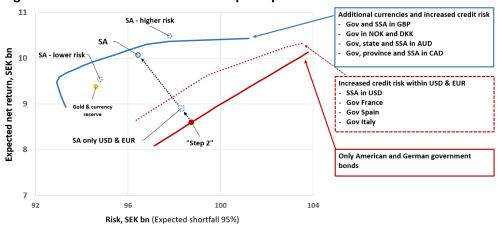


Figure 1. Effective fronts and selected point portfolios

**Note 1:** The figure shows the average expected return and risk for the four scenarios over a 12-month horizon. Gold is included in all portfolios, but the expected return is zero and only affects total market risk.

**Note 2:** The blue line (effective front) is optimised with a restriction of at least 10 per cent German government bonds. The "Higher Risk" option has only 7 per cent German government bonds and can thus exceed the front.

The solid red line shows the effective front for different combinations of US and German government bonds with a duration of 4.0. The dot on the solid red line shows the portfolio that was deemed most appropriate based on the analysis in step 2, the *contingency portfolio*. In other words, 70 per cent US and 30 per cent German government bonds with duration 4.0.

On average across the four scenarios, the *contingency portfolio* is estimated to have an expected gross return of 3.1 per cent (SEK 17.8 billion) over 12 months, and a risk<sup>10</sup> of 17.2 per cent (SEK 98.7 billion). Taking into account the funding cost of SEK 9.2 billion<sup>11</sup>, this gives a net return of SEK 8.6 billion. The net return does not include exchange rate effects.

According to the main scenario, which is based on the NIER's December forecast, the krona strengthens in 2025, which, if the forecast is realised, would have a negative impact of 1.4 per cent (-SEK 8.1 billion) on the gold and foreign exchange reserves.<sup>12</sup> As the foreign exchange reserves are hedged to some extent, this counteracts the negative effect of the krona appreciation by 0.3 percentage points (SEK 1.6 billion). This results in a net return after exchange rate effects (including currency hedging) for the *contingency portfolio* of SEK 2.1 billion.

 $<sup>^{10}</sup>$  Expected shortfall at the 95 per cent confidence level measures the average of the losses calculated for the last 5 per cent of the 1-year loss distribution. Use of this risk measure is more natural in the balancing/optimisation of portfolios when the investment horizon is restricted.

 $<sup>^{11}</sup>$  Based on the NIER's December forecast and assumptions that the foreign exchange reserves are 74 per cent financed by monetary policy debt and that the gold reserve is entirely financed by interest-free capital. The estimated cost of currency hedging is also included.

<sup>&</sup>lt;sup>12</sup> Assuming that the FX impact for the gold and foreign exchange reserves in the main proposal is the same as in the contingency portfolio according to NIER's December 2025 forecast, i.e. a 70/30 split between USD and EUR. Note: In the calculations, gold is also affected by the exchange rate change; excluding gold, the effect is SEK -6.5 billion.

The dashed red line shows the effective front when certain restrictions are removed. In addition to US and German government bonds, French, Italian and Spanish government bonds, including SSA (Sovereign, Supranational and Agency), are also included. The dot between the two red lines has 70 per cent in USD and 30 per cent in EUR but with the same allocation to Italy, France, Spain and SSAs in USD as in the strategic allocation.

The solid blue line shows the effective front after the removal of additional restrictions. Unlike the dashed red line, assets in DKK, NOK, GBP, AUD and CAD are now also included.

#### 3.4.5 Overall assessment and proposed strategic allocation

The result in step 3 is a strategic allocation with a better expected risk and return profile than the contingency portfolio over a one-year time horizon. The strategic allocation offers a combination of lower expected risk and higher expected return with restricted impact on contingency. Compared to the portfolio described above, the strategic allocation reallocates 12.5 percentage points from German government bonds to UK government bonds and SSAs (4+1 percentage points), Norwegian government bonds (2.5 percentage points) and Australian government and state bonds (2+3 percentage points). This has a clear impact on the expected return, while the risk is expected to decrease slightly.

The expected gross return on the strategic allocation averages 3.36 per cent (SEK 19.3 billion) across the four scenarios. This is 0.26 percentage points (SEK 1.5 billion) higher than the contingency portfolio over the next 12 months.

As an alternative to the strategic allocation, a portfolio with higher risk and +0.33 percentage points (SEK 1.9 billion) in expected return in addition to the contingency portfolio and a portfolio with lower risk and +0.16 percentage points (SEK 0.9 billion) in expected return in addition to the contingency portfolio are given. The two options are also considered to have a better risk and return profile than the contingency portfolio.

The credit risk for the strategic allocation will be SEK 4 billion, which is SEK 0.1 billion higher than the contingency portfolio.

#### 3.4.6 Expected earnings in 2025

The expected funding cost of the gold and foreign exchange reserves for 2025 is estimated at SEK 9.23 billion. This means that the expected net return is SEK 10.07 billion in the main proposal, which is SEK 1.47 billion above the contingency portfolio.

The net return after currency effects<sup>13</sup> is estimated to be SEK 3.57 billion for 2025 in the strategic allocation. This includes exchange rate effects (SEK -8.12 billion) according to the NIER's December forecast and deductions for the effect of currency hedging (SEK +1.62 billion).

The corresponding net return including exchange rate effects for the alternative portfolio with higher risk is estimated at SEK 3.99 billion and for the portfolio with lower risk at SEK 3.04 billion. Table B3 shows the detailed breakdown of all calculations.

Figure 2 shows what increases and decreases earnings, based on average returns over four scenarios for the strategic allocation, as well as on assumptions regarding funding costs and exchange rate effects. Earnings are reported in SEK billion.

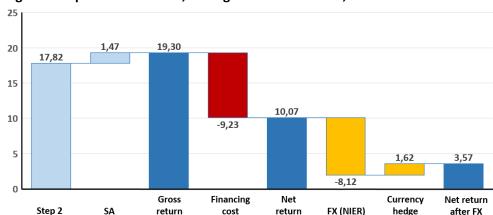


Figure 2. Expected net return, average of four scenarios, SEK billion

**Note**: FX (NIER) refers to the expected effects of changes in exchange rates according to NIER forecasts

#### 4 Risk

#### 4.1 Risk measures, limits and behavioural rules

With the strategic allocation in Table 1, the losses for the Riksbank's assets due to market risk (total market risk limit) are restricted to a total of SEK 73 billion. This corresponds to the losses in a scenario where market interest rates rise by 1 percentage point and the krona appreciates by 10 per cent. The scenario lies

<sup>&</sup>lt;sup>13</sup> The gross returns for 2025 are calculated using different models, different scenarios and different assumptions in steps 2 and 3 respectively. All calculations will therefore differ slightly from the corresponding calculations in step 2.

within what can be expected to happen without there being any need to reconsider the strategic allocation.<sup>14</sup>

With the strategic allocation, losses due to credit risk (total credit risk limit)<sup>15</sup> shall be restricted to SEK 4.7 billion<sup>16</sup>. This is about SEK 100 million higher credit risk than if the foreign exchange reserves consisted of the contingency portfolio. The difference is due to higher allocations to countries rated AA (France, UK, Australian states), A (Spain) and BBB (Italy). The credit risk limit of SEK 4.7 billion includes a buffer of SEK 0.7 billion that can absorb changes in exposure corresponding to the magnitude of a simultaneous downgrade of (for example) the United Kingdom and France in two steps and a weakening of the krona by 15 per cent.

The calculation of these risk limits follows the principles set out in Section 5.2 of the Riksbank's *Financial risk policy*. Risk limits shall be followed up every four months in accordance with the *Investment policy for the gold and foreign currency reserves*. Section 5.2 of the *Financial risk policy* also sets out the procedures to be followed in the event of a limit breach and the risk of a limit breach. New risk limits shall be set in conjunction with decisions on new strategic allocations.

#### 4.2 Tactical mandate

The purpose of the tactical mandate is to create the conditions for increased earnings in addition to the return according to the strategic allocation. The tactical mandate also helps to maintain market knowledge and operational readiness in the organisation. The tactical mandate shall be designed to restrict deviations from the strategic allocation. Deviations are not allowed for currency allocation but only for interest rate risk (modified duration) and asset allocation as described in sections 4.2.1 to 4.2.2 below.

#### 4.2.1 Interest rate risk (Modified duration)

The modified duration of the foreign exchange reserves may deviate by a maximum of +/-0.25 from the target levels for each currency in the strategic allocation.

<sup>&</sup>lt;sup>14</sup> The market risk limit is calculated through a scenario analysis in the preparation of the strategic allocation and follows the guidelines described in the Regulation for measuring market risk. The calculation refers to the portfolio as of 3 February 2025.

<sup>&</sup>lt;sup>15</sup> The credit risk limit is calculated using the methodology described in the Regulation for measurement of credit risk. The calculation is performed so that market risk and credit risk express the same financial risk tolerance.

 $<sup>^{16}</sup>$  Maximum market risk and maximum credit risk are calculated on an annualised basis starting on 1 April 2025.

#### 4.2.2 Asset allocation

Asset allocation by currency in a security class may deviate by a maximum of 10 percentage points<sup>17</sup> from the target levels of the strategic allocation within the same currency. However, the asset allocation per currency of a class of securities may not be less than EUR 50 million in nominal terms.

#### 4.2.3 Analysing the impact on financial risk

Utilisation of the tactical mandate may entail increased financial risk compared to the strategic allocation. In order to estimate the additional financial risk, the following analysis has been made.

- Full utilisation of the mandate to deviate in modified duration would increase the modified duration by 0.25 in all currencies. This would mean an increase in interest rate risk of SEK 1.15 billion from the level of the strategic allocation (SEK 18.4 billion), i.e. an increase of 6.25 per cent. The total market risk<sup>18</sup> for the gold and foreign exchange reserves would increase by SEK 0.4 billion from the level of the strategic allocation (SEK 96.4 billion), i.e. an increase of less than 0.5 per cent.
- Full use of the mandate to deviate in asset allocation would mean reallocating 10 per cent of the allocation within the same currency from one asset class (e.g. a country) to another. The most extreme reallocation (moving 10 per cent of euro-denominated holdings from Germany to Italy) would increase the credit risk<sup>19</sup> by SEK 0.06bn from the level of the strategic allocation (SEK 4 billion), i.e. an increase of 1.5 per cent.
- Full simultaneous use of the tactical mandate for both modified duration and asset allocation would mean an increase in total market risk of SEK 0.2 billion compared to the level of the strategic allocation, i.e. an increase of less than 0.5 per cent.

Overall, the financial risk in the tactical mandate is deemed to be acceptable and the mandate is otherwise deemed to be consistent with the strategic allocation.

<sup>&</sup>lt;sup>17</sup> Example: Assets denominated in EUR under the SA are distributed as 75 per cent German government bonds, 20 per cent French government bonds and 5 per cent SSAs. If managers choose to reallocate EUR assets to 70 per cent German government bonds, 17 per cent French government bonds and 13 per cent SSAs, 8 percentage points (from 5 to 13 per cent) are used to reallocate a maximum of 10 percentage points.

 $<sup>^{18}</sup>$  Expected shortfall at the 95 per cent confidence level measures the average of the losses calculated for the last 5 per cent of the 1-year loss distribution.

 $<sup>^{19}</sup>$  Credit risk is calculated using the methodology described in the Regulation for measurement of credit risk.

## 5 Annexes

Table B1. Government bond yield spreads on 4 February 2025

		Interest rate s	oread vs US Trea	sury Bonds
Country	5-year rate (%)	Spread today (bp)	5 year average spread (bp)	Standard deviation 5 year
USA	4.36	 	I I	I I
Canada	2.74	-163	-31	-8,4
Australia	3.96	-41	-17	-1.5
Germany	2.18	-218	-164	-5.5
		Interest rate spre	ad vs German Tr	easury Bonds
Country	5-year rate (%)	Spread today (bp)	5 year average spread (bp)	Standard deviation 5 year
France	2.64	45.72	27	1.4
Italy	2.83	64.65	107	-1.2
Spain	2.56	37.72	51	-0.8

Table B2. Exchange rates on 4 February 2025

Exchange rates in Swedish Krona	exchange rate	5 year average rate	Standard deviation 5 year
USD	11.06	9.85	1.3
EUR	11.44	10.82	1.0
GBP	13.74	12.54	1.5
AUD	6.86	6.75	0.3
CAD	7.66	7.42	0.5
NOK	0.98	1.00	-0.8

#### Table B3. Detailed table on strategic allocation

The table below shows the currency and asset allocation, duration, expected return and risk of the contingency portfolio, the strategic allocation, a higher-risk alternative portfolio, a lower-risk alternative portfolio and the current foreign exchange reserves (FXR).

Return and market risk calculations are presented as an average over the four scenarios presented in the introduction to Section 3.4.

Currency	Step 2	Duration
USD	70,0%	4,0
of which US government bonds	70,0%	4,0
of which SSA in USD		
EUR	30,0%	4,0
of which German government bonds	30,0%	4,0
of which French government bonds		
of which Spanish government bonds		
of which Italian government bonds		
of which SSA in EUR		
GBP		
of which UK government bonds		
of which SSA in GBP		
NOK		
of which Norwegian government bonds		
DKK		
of which Danish government bonds		
AUD		
of which Australian government bonds		
of which Australian state bonds		
CAD		
of which Canadian government bonds		
of which Canadian provinces		
Portfolio duration	4,0	
Expected gross return excl FX, %	3,10%	
Expected gross return excl FX, SEK bn	17,8	
Financing cost (NIER dec), SEK bn	-9,2	
Expected net return excl FX, SEK bn	8,6	
Currency effect incl currency hedge (NIER dec), SEK bn	-6,5	
Expected net return incl FX (NIER dec), SEK bn	2,1	
Market risk (Expected Shortfall 95%), %	17,2%	
Market risk (Expected Shortfall 95%), SEK bn	98,7	
Market risk restriction, SEK bn	71	,0

SA	Duration	Higher risk	Duration	Lower risk	Duration
70,0%	4,0	74,0%	4,0	65,0%	4,0
68,0%	4,0	72,0%	4,0	65,0%	4,0
2,0%	4,0	2,0%	4,0		
17,5%	4,0	12,5%	4,0	22,5%	4,0
10,0%	4,0	7,0%	4,0	15,0%	4,0
5,0%	4,0	5,0%	4,0	5,0%	4,0
2,0%	4,0			2,0%	4,0
0,5%	4,0	0,5%	4,0	0,5%	4,0
5,0%	4,0	5,0%	4,0	5,0%	4,0
4,0%	4,0	4,0%	4,0	4,0%	4,0
1,0%	4,0	1,0%	4,0	1,0%	4,0
2,5%	4,0	2,5%	4,0	2,5%	4,0
2,5%	4,0	2,5%	4,0	2,5%	4,0
5,0%	4,0	6,0%	4,0	5,0%	4,0
2,0%	4,0	3,0%	4,0	2,0%	4,0
3,0%	4,0	3,0%	4,0	3,0%	4,0
4,	0	4,0		4,0	
3,36%		3,43%		3,26%	
19,3		19,7		18,7	
-9,2		-9,2		-9,2	
10,1		10,5		9,5	
-6,5		-6,5		-6,5	
3,6		4,0		3,0	
16,8%		17,0%		16,5%	
96,4		97,8		94,8	
71,0		71,0		71,0	

GCR	Duration	
63,1%	4,0	
60,9%	4,0	
2,2%	4,0	
20,9%	4,1	
16,3%	4,0	
4,0%	4,5	
0,6%	4,0	
5,4%	4,5	
5,1%	4,0	
0,3%	4,0	
2,5%	4,0	
2,5%	4,0	
1,2%	4,0	
1,2%	4,0	
4,4%	4,0	
2,2%	4,5	
2,2%	4,5	
2,5%	4,5	
	4,5	
2,5%	4,5	
4,1		
3,2	4%	
18,6		
-9,2		
9,4		
-6,5		
2,9		
16,5%		
94,6		
71,0		

Note 1: All portfolio shares are presented excluding gold. Return and risk calculations include gold.

Note 2: See section 4.1 Risk measures, limits and behavioural rules for an explanation of the market risk restriction item in the table.

**Note 3:** Expected shortfall at the 95 per cent confidence level measures the average of the losses calculated for the last 5 per cent of the 1-year loss distribution.

Note 4: All calculations are based on data as of 31 December 2024