A checklist for well-balanced monetary policy – a proposal and an illustration

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Central banks with inflation targets often face complex trade-offs. In this article, we present a checklist that can support navigating these. The checklist consists of seven general principles. These state, for instance, that monetary policy should stabilise inflation at the target while remaining flexible, robust and predictable. Each principle is supported by more specific checkpoints.

The checklist helps ensure that trade-offs are made in a systematic and transparent way, based on careful analysis. It sets clear requirements for logic and consistency and helps ensure that critical aspects are not overlooked. We demonstrate the practical application of the checklist by presenting an example of its use in a recent policy round at the Riksbank.

1 Introduction

Inflation-targeting central banks face complex trade-offs. While price stability remains their primary objective, they also have to balance additional considerations, such as the impact of policy on economic activity and risks. These challenges are compounded by intertemporal trade-offs, where meeting targets in one period may conflict with target attainment in another. Given these complexities, there is a need for tools that help policymakers navigate the trade-offs in a structured and transparent manner.

This article presents such a tool: a checklist designed to support central bank staff and policymakers in managing trade-offs and arriving at a well-balanced monetary policy. Beyond helping navigate trade-offs, the checklist also serves as a safeguard that supports transparent and systematic policymaking grounded in rigorous analysis. It places demands on logic and consistency and helps ensure that critical aspects are not overlooked.

The checklist consists of seven general principles with broad support in economic research, hereafter referred to as criteria. Essentially, they state that monetary policy should aim to stabilise inflation at its target while remaining efficient, flexible, robust,

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predictable and proportional. In addition, policy should be based on realistic forecasts. Each criterion is supported by one or more checkpoints.

The purpose of the checklist is to provide structure and promote transparency to the analysis, not to impose inflexible rules. In many cases, it will neither be possible nor desirable to meet all checkpoints. The important thing is that the checklist helps to highlight and address potential weaknesses in a monetary policy proposal.

In terms of previous work, this article expands on Norges Bank's criteria for an appropriate future interest rate path (Norges Bank, 2005, 2010, 2012; Qvigstad, 2006) by providing new criteria and more detailed checkpoints. We also illustrate how the criteria and the checklist can be applied in practice. For example, we extend Barnichon and Mester's (2023) framework to evaluate technical efficiency and to infer policymakers' preferences from past policy decisions. The latter makes it possible to check whether the preferences implicit in the decisions are stable over time.

The structure of the article is as follows. In Section 2 we outline the approach to monetary policy that underpins the checklist and introduces key terminology. In Section 3 we present the checklist itself. In Section 4 we describe how the checklist has been adapted and is applied at the Riksbank. Finally, we offer concluding remarks in Section 5.

Throughout the article, terms are highlighted in italics when defined.

2 Underlying approach and useful terms

2.1 Mature inflation targeting

The approach to inflation targeting that underlies the checklist is what we call ''mature inflation targeting''.

In theoretical models, identifying a well-balanced monetary policy is a well-defined optimisation problem. Given a known transmission mechanism (the ''model''), a projection for exogenous variables and specified preferences (the ''loss function''), well-balanced policy (''optimal policy'') can be derived by minimising the expected loss, see, for example, Woodford (2003) and Svensson (2011).

However, this kind of optimisation is not directly applicable in practical monetary policy. One reason is that it is impossible to specify a model and a loss function that fully capture the preferences, judgements and considerations that form actual decisions. A related reason is that decision-makers employ different heuristics. For example, they may use models and reasoning that resemble theoretical optimisation to varying degrees.

In practical inflation targeting, central banks rely on forecasts. This forecast-based approach has evolved over time. In the past, central banks would typically make inflation forecasts based on the assumption that the policy rate would remain unchanged over the forecast period and set policy according to a simple rule: if

forecasted inflation was sufficiently below the inflation target over a given horizon, monetary policy would be relaxed, and vice versa. Over time, it became clear that this method is flawed, (see, for example, Sveriges Riksbank, 2017, for a discussion and references). In more recent approaches, the forecasts are based on increasingly realistic monetary policy assumptions.

Our checklist builds on an approach where policy alternatives are evaluated based on the forecasts they give rise to, often referred to as forecast targeting (see Svensson 2005a and 2011). Below, we briefly outline this approach and explain where the checklist enters this process. We also define some terminology.

In a stylised and idealised rendering with only one decision-maker (the policymaker), mature inflation targeting can be described as a stepwise process: In the first step, the policymaker makes a judgement on everything relevant for the forecasts that monetary policy cannot affect. For a small open economy, this includes the current situation (nowcast), fiscal and macroprudential policy, and international economic developments. It may also include taking a stance on the transmission mechanism (‘‘the model’’).

In the second step, the policymaker takes this as given and looks for a policy alternative that gives forecasts for the target variables that balance the different considerations appropriately, that is, a well-balanced monetary policy. In a theoretical model, this would correspond to optimisation.

In the third step, the policymaker sets policy accordingly and communicates the explanation behind it. The explanation consists of the forecasts associated with the decision and the judgements and assessments that led to the choice of this policy alternative.

In practice, identifying a policy that produces forecasts which appropriately balance trade-offs is challenging. Furthermore, the process can become cumbersome, unsystematic and difficult for outsiders to understand. This is where the checklist comes in. It simplifies and structures the second step. It helps ensure that important considerations are not overlooked and makes the decisions more transparent and easier to explain.

In reality, the forecasting and decision-making process may not follow such a strict stepwise structure as outlined above. Furthermore, decisions are typically made by a group of policymakers and involve input from central bank staff. This does not, however, diminish the relevance of the checklist, a point we return to in our concluding remarks.

2.2 Key terms

Exogenous variables are variables that domestic monetary policy cannot influence. In a small open economy like Sweden, these typically include variables describing the current economic situation, the outlook for domestic fiscal and macroprudential

policy, as well as international developments, including international interest rates and commodity prices.[1]

The numerical values assigned to the exogenous variables are called *exogenous conditions*. They are taken as given when the scenarios are prepared. *Nowcasts* are the numerical values assigned to the subgroup of variables describing the current economic situation.

Target variables are the variables that the central bank wants to influence with its monetary policy. For inflation-targeting central banks, these include inflation and any other variable that the central bank has targets for.

A *policy path* is a forecast for the central bank's monetary policy instruments, typically the policy rate.

A *scenario* consists of: (i) exogenous conditions and (ii) projections for the policy instruments (that is, the policy path), (iii) projections for the target variables, and (iv) projections for other endogenous variables. The *main scenario* is the scenario that forms the basis for the policymakers' decision. *Alternative scenarios* are scenarios that differ in one or more of the four dimensions. *Monetary policy scenarios* are scenarios where everything exogenous to monetary policy is kept unchanged from the main scenario, but where the monetary policy paths and the resulting projections for endogenous variables are different. *Risk scenarios* are scenarios where exogenous conditions, or the transmission mechanism (the ''model''), are altered relative to the main scenario. Risk scenarios may also include a monetary policy response.

We will also use the term *draft main scenario*, which is the draft main scenario crafted by the staff and submitted to the policymakers before they have given their inputs.

3 The checklist

In this section, we describe and discuss the checklist. The checklist comprises seven criteria, each with associated checkpoints. As mentioned earlier, not all criteria and checkpoints need to be fulfilled, but if there are deviations, they should be explainable. The complete list is presented in Table 1 at the end of this section.

Criterion 1. The main scenario is realistic

If policy is to be based on the main scenario, the main scenario must be realistic, where "realistic" refers to whether the scenario is consistent with observable facts, feasible policy actions, and credible economic behaviour.[2]

[1] While fiscal policy is not fully exogenous, it is often treated as such by central banks.

[2] An example of a scenario that is not realistic is a scenario where an unchanged policy rate over the whole scenario is assumed *ex ante*, as was the case at the Riksbank before November 2005 (see Sveriges Riksbank 2017).

For a scenario to be realistic, it must fulfil at least three requirements, outlined in Checkpoints 1.1–1.3.

First, exogenous conditions must be realistic. This is because the projections for the target variables depend on the exogenous conditions.

- **Checkpoint 1.1: The exogenous conditions are realistic**

Second, the policy path must be realistic.

- **Checkpoint 1.2: The policy path is realistic**

For the policy path to be realistic, it must be both ‘‘implementable’’ and ‘‘time-consistent’’.

A policy path is *implementable* if it is legal, assumes policy rates above the effective lower bound, and can be implemented with the central bank’s available capacity. An example of an illegal policy would be one where the central bank purchases assets that it is legally prohibited from purchasing. An example of a policy beyond the central bank's capacity would be one requiring expertise or resources that the central bank does not have.

A policy path is *time-consistent* if the central bank would follow through and implement it in the future should the economy evolve as in the associated scenario. This checkpoint would not be satisfied, for example, under Odyssean forward guidance (see Campbell et al. 2012).[3]

Third, the scenario should be *internally consistent*; the forecasted macroeconomic variables should be mutually coherent and reflect plausible economic interactions.

- **Checkpoint 1.3: The forecasts are internally consistent**

This checkpoint is automatically fulfilled if the scenario is generated by a plausible general equilibrium model. However, (main) scenarios rarely originate directly from a model. Instead, they are typically a blend of model outputs and judgement.

Criterion 2. Inflation is stabilised at target

Successful inflation targeting should stabilise inflation at target. This should be reflected in the scenario. Therefore, the policy path should produce inflation forecasts that return to and remain at target within a reasonable timespan.

Typically, there are multiple policy paths that produce inflation forecasts that return to and remain at target. Some may return inflation to target more quickly, while others take longer. The appropriate choice among these alternatives will depend on one’s preferences (“loss function”).

[3] This also applies if the central bank implements optimal policy under commitment, which, by definition, is time-inconsistent.

However, a more specific maximum horizon for returning inflation to target is useful as a first checkpoint. It should be long enough to allow for gradual adjustment and short enough to preserve the credibility of the target. A natural requirement is therefore that forecasted inflation should converge to and stabilise at the target within the forecast period. Thus, Checkpoint 2.1.

- **Checkpoint 2.1: Inflation stabilises at target within the forecast period**

A relevant objection is that, in the presence of unusually large shocks, optimal policy involves lengthening the targeting horizon to smooth the adjustment of inflation and the real economy. In practice, however, extending the horizon risks de-anchoring expectations if households and firms interpret the delay as a weakened commitment to the inflation target. The recent period of surging inflation illustrates this tension: while some central banks allowed for a longer horizon to return inflation to target, others maintained a stricter monetary policy out of concern that a prolonged deviation could erode credibility.

Criterion 3. The main scenario is technically efficient

The motivation behind this criterion is to avoid unnecessary deviations from the targets.

Using the terminology from Section 2, we can define technical efficiency as follows: A technically efficient scenario is one in which no alternative monetary policy forecast can improve target attainment for one target variable without simultaneously worsening it for another.

Monetary policy scenarios derived from model-based policy optimisation will satisfy this criterion within the model's context. However, as noted above, central banks' main scenarios are rarely the result of such optimisation, making it necessary to find alternative ways to evaluate technical efficiency.

One way to evaluate technical efficiency without model optimisation is to start from the forecasts for the target variables. Inflation-targeting central banks will typically seek to stabilise inflation and the real economy, and in that case, we can formulate a first checkpoint based on the following logic: Tighter monetary policy will dampen both inflation and resource utilisation, while looser policy stimulates both. If, for example, projected inflation is above the target (positive *inflation gap*) and resource utilisation is tighter than the level consistent with stable inflation (positive *real gap*), the scenario cannot be considered technically efficient as both gaps can be reduced by adjusting the policy path (more restrictive monetary policy).

- **Checkpoint 3.1: Beyond the near term, the inflation gap and the real gap are either closed or have opposite signs**

Since monetary policy affects the economy with a lag, the checkpoint concentrates on the later part of the forecast period. Exactly where the boundary lies between the ''near term'' and the ''later part'' of the forecast period depends on the characteristics of the economy and the length of its policy transmission lags.

To draw firmer conclusions on technical efficiency, we need to be more specific about preferences, for example by introducing a standard loss function. In Section 4.3, we show an example of how this has been done at the Riksbank.

Criterion 4. Monetary policy is flexible

This criterion concerns how to choose among technically efficient alternatives.

Central bank mandates and economic theory often suggest that monetary policy should stabilise both inflation and the real economy, that is, it should be flexible.[4] This motivates a the following for the preferences that guide policy: Monetary policy should be flexible in the sense that it normally fulfils the following checkpoints, which rule out strict inflation targeting – that is, policies that stabilise inflation at the expense of large and persistent real gaps.

- **Checkpoint 4.1: Monetary policy stabilises inflation and the real economy**
- **Checkpoint 4.2: Neither the inflation gap nor the real gap is substantially larger than the other when aggregated over the forecast period**

Criterion 5. Monetary policy is robust

Well-balanced policy goes beyond stabilising inflation and real activity. It is also about robustness.

Here, we think of monetary policy as robust when (a) it can be adjusted to achieve acceptable outcomes if certain risks materialise, and (b) current policy choices do not unduly increase risks or make the economy excessively vulnerable to future shocks.[5] Examples of risks that fall under (a) are adverse shocks and unanticipated changes to the transmission mechanism. Examples of risks that fall under (b) are policy actions that increase the risk of unanchored inflation expectations or increase the likelihood that monetary policy becomes constrained at a later stage, for example by the effective lower bound or by financial stability concerns.

Risk scenarios are useful for evaluating robustness. A natural first check can be to examine if risk scenarios where monetary policy is adjusted in response to the materialised risk result in acceptable outcomes.

- **Checkpoint 5.1: Plausible risk scenarios give acceptable target attainment**

But formulating relevant risk scenarios for Checkpoint 5.1. is not straightforward. Relevant risks may be overlooked, and constructing risk scenarios is time-consuming and labour-intensive. It is therefore important to also include checkpoints that do not rely on risk scenarios.

[4] For example, the Sveriges Riksbank Act states: "Without prejudice to the price stability objective, the Riksbank shall also contribute to a balanced development of output and employment." This is reflected in the Riksbank's own communication, where it refers to its policy as flexible inflation targeting (see also the Riksbank's Monetary Policy Report, p. 3).

[5] Note that this way of defining robust policy differs from another commonly used definition, where the robust policy is the one that minimises the loss in the worst possible scenario.

One possibility is to compare the policy path with that derived from so-called simple monetary policy rules.[6] Research surveyed by Taylor and Williams (2011) shows that simple policy rules often lead to more robust monetary policy when there is uncertainty about how the economy works, that is, when there is model uncertainty.

Similarly, the policy path can be compared to the expectations of external forecasters. Substantial deviations may indicate that the main scenario is based on misjudgements or unrealistic assumptions.

While divergence from simple rules or other forecasters is not inherently problematic, it should always be investigated and justified. Note also that the focus for the simple rules should be on the short term, because over the longer term the inputs to the monetary policy rules will themselves depend on monetary policy and can no longer be considered exogenous.

- **Checkpoint 5.2: The policy path in the near term is reasonably close to the policy path implied by simple monetary policy rules**

- **Checkpoint 5.3: The policy path is reasonably close to external forecasters' expectations**

Finally, we introduce a fourth checkpoint based on the principle that gradualism can enhance robustness. By adjusting the policy rate in small steps, the central bank can learn about the effects of its actions and reduce the risk of large policy errors.[7] A checkpoint about gradualism also connects back to criterion 1 (Realism), as forecasts assuming large rate changes beyond the near term are often unrealistic. Historically, large rate changes have typically only occurred in response to significant and unexpected developments.

- **Checkpoint 5.4: Policy rate changes are made in small steps (for example, 0.25 percentage points)**

Criterion 6. Monetary policy is predictable

Predictable monetary policy enhances the effectiveness of policy. If market participants understand how the central bank responds to new information, they can adjust market interest rates even before the central bank acts. This accelerates the transmission of monetary policy. It also reduces uncertainty in the economy and thereby contributes to a better allocation of resources.

A central bank that always sets policy according to an explicit policy rule or reaction function would be highly predictable. However, no inflation-targeting central bank

[6] Simple monetary policy rules state a relationship between the policy rate and a few indicators of inflation and resource utilisation (some rules include the lagged policy rate).

[7] Brainard (1967) shows that policy responses should be more cautious when there is uncertainty about the transmission mechanism. While the Brainard principle refers to the size of the policy response rather than the pace, gradualism may serve a similar purpose. Research by Sack (1998), Goodfriend (1991) and Woodford (2003) also supports the idea that gradual adjustments help maintain control over long-term interest rates and reduce the risk of market disruptions.

does that, and it would not be in line with the mature approach to inflation targeting (described in Section 2.1).[8]

Under the mature approach to inflation targeting, policy is designed to resemble theoretical optimisation. In such a framework, predictability requires that the preferences (''the loss function'') remain stable.

- **Checkpoint 6.1: Preferences are stable over time**

Another way of assessing predictability is to compare the policy path with an estimated reaction function. Although mature inflation targeting cannot be fully captured by a reaction function, such rules can still be useful for assessing predictability. One reason is that external observers sometimes estimate reaction functions and use them to forecast policy.

- **Checkpoint 6.2: The policy path in the near term is broadly consistent with estimated reaction functions**

In a similar vein, while it is not a goal for the central bank to align monetary policy with others' expectations, it is useful to compare the policy path with external forecasters' projections and market expectations to assess predictability.

- **Checkpoint 6.3: The policy path in the near term is broadly in line with that of external forecasters and with market expectations**

Criterion 7. Monetary policy is proportionate

The principle of proportionality should always apply in public policy: the benefits of any measure must justify its costs. This principle is built into flexible inflation targeting and reflected in Criteria 4 and 5. However, some costs of monetary policy measures fall outside these criteria, and it might not be straightforward to say whether and to what extent they should be considered.

Higher policy rates can raise the cost of servicing public debt and lead to financial losses for a central bank with large asset holdings. We nevertheless find it highly unlikely that such costs would outweigh the benefits of hiking the policy rate, as the central bank, by refraining from hiking rates, would risk undermining trust in the inflation target.[9]

Unconventional monetary policy, such as large-scale asset purchases, foreign exchange interventions or credit support programmes, expose the central bank, and by extension the public sector, to financial and reputational risks. These risks should

[8] This relates to the discussion about targeting vs instrument rules in the academic literature, see, for example, Svensson (2005b, 2011) and the references therein.

[9] Assessing these costs is, however, in line with the Sveriges Riksbank Act which states that the intended result of a monetary policy measure "shall be in reasonable proportion to the costs and risks that the measure entails for the Riksbank's and the central government's finances." (Chapter 1, Section 8)

be considered when the central bank assesses such monetary policy alternatives. This motivates the following checkpoint.

- **Checkpoint 7.1: Unconventional monetary policy measures do not create unacceptably high financial risk for the central bank**

In some circumstances, the very purpose of unconventional measures is precisely to absorb risks that private markets cannot or will not bear. Even such cases, potential financial losses should be weighed against the broader benefits for the economy as a whole.

Table 1. The checklist

Criterion	Checkpoint
1. The main scenario is realistic	1.1) The exogenous conditions are realistic
	1.2) The policy path is realistic
	1.3) The forecasts are internally consistent
2. Inflation is stabilised at target	2.1) Inflation stabilises at target within the forecast period
3. The main scenario is technically efficient	3.1) Beyond the near term, the inflation gap and the real gap are either closed or have opposite signs
4. Monetary policy is flexible	4.1) Monetary policy stabilises inflation and the real economy
	4.2) Neither the inflation gap nor the real gap is substantially larger than the other when aggregated over the forecast period
5. Monetary policy is robust	5.1) Plausible risk scenarios give acceptable target attainment
	5.2) The policy path in the near term is reasonably close to the policy path implied by simple monetary policy rules
	5.3) The policy path is reasonably close to external forecasters' expectations
	5.4) Policy rate changes are made in small steps (e.g. 0.25 p.p.)
6. Monetary policy is predictable	6.1) Preferences are stable over time
	6.2) The policy path in the near term is broadly consistent with estimated reaction functions
	6.3) The policy path in the near term is broadly in line with that of external forecasters and with market expectations
7. Monetary policy is proportionate	7.1) Unconventional monetary policy measures do not create unacceptably high financial risk for the central bank

4 Application

In this section, we illustrate the practical application of the checklist by providing an example of how it has been used at the Riksbank.

The example is from the initial phase of the monetary policy round in December 2025, leading up to the publication of the December Monetary Policy Report (MPR). During this phase, staff prepare the draft main scenario before the Executive Board (hereinafter referred to as the Board) provides its views.[10] Sjödin (2026) offers additional details about the process and the institutional setting at the Riksbank.[11]

4.1 Is the main scenario realistic?

Checkpoint 1.1. (exogenous conditions)

At the Riksbank, the process is designed so that exogenous conditions are as realistic as possible. Nowcasts are derived from estimated models with well-documented forecasting properties and complemented by the judgement of sectoral experts. Forecasts of the foreign economy and fiscal policy are based on both internal models and external sources – such as central banks and other government authorities, the IMF, the OECD, and consensus forecasts – and refined with additional judgement when needed. Moreover, exogenous conditions are generally established before the rest of the analysis begins, helping prevent reverse engineering, where exogenous conditions are adjusted to fit forecasts for the target variables derived by some other method. However, exogenous conditions are revised if new information that warrants such revisions emerges during the process.

Checkpoint 1.2. (Policy path)

For the path to be realistic, it must be both implementable and time-consistent.

We verify implementability by ensuring that the path complies with legal requirements, assumes rates above the effective lower bound, and can be executed with available resources and expertise.

To evaluate time consistency, we review the forecast and ask whether, at any point in the future, the policy implied by the path still represents a well-balanced policy.

The assessment in December 2025 was that the draft scenario was both implementable and time-consistent, and therefore realistic.

[10] As discussed in the December 2025 MPR, during the autumn of 2025 the Swedish government proposed a change in the VAT on food. This proposed change had a substantial direct effect on the inflation forecast. The assumption in the main scenario from December 2025 was that the VAT change will mainly have a direct and transitory effect on inflation. Therefore, all figures including inflation forecasts show inflation excluding the VAT change.

[11] The charts presented in this section have been produced using a toolbox developed to evaluate the checklist. The toolbox consists of a set of Python-based tools in the form of computations and illustrations used to assess and evaluate the checkpoints. A dashboard visualising the output is used for the internal analysis.

Checkpoint 1.3. (Internal consistency)

At the Riksbank, scenarios are typically a blend of model outputs and judgement. To assess whether the variables in the main scenario are internally consistent, that is, mutually coherent and reflect plausible economic interactions, we can use the Riksbank's workhorse DSGE model, MAJA.[12] Specifically, we can analyse which shocks are required to align the model's projections with the draft main scenario and then examine whether these shocks have a plausible economic interpretation and are statistically reasonable in both magnitude and persistence.

We carried out some of these checks in December 2025 and the results did not indicate any serious inconsistencies. However, at that time, the tools and methods used for conducting such checks were not fully developed, which limited the rigour of this checkpoint.

4.2 Does inflation stabilise on target?

This criterion is verified by examining whether the CPIF-inflation forecast reaches the inflation target of 2 per cent and remains there.

To gain stronger assurance that inflation will remain on target beyond the forecast horizon, the staff examine forecasts for other inflation measures, real gaps, and the neutral real rate. The following conditions should normally be met within the forecast period:

- Core inflation measures (for example CPIF excluding energy) reach 2 per cent
- Real gaps are close to zero
- The real interest rate is at, or approaching, its long-run neutral level

The assessment in December 2025 was that the criterion was fulfilled.

4.3 Is the main scenario technically efficient?

Checkpoint 3.1. (Opposite signs)

The checkpoint under this criterion states that the projected inflation gap and projected resource utilisation should either be zero or have opposite signs. To assess whether this criterion is met, we first review the initial draft of the main scenario. This review involves examining the projected gaps for CPIF inflation and CPIF inflation excluding energy, along with projected trajectories for resource utilisation – typically the output gap and the unemployment gap.

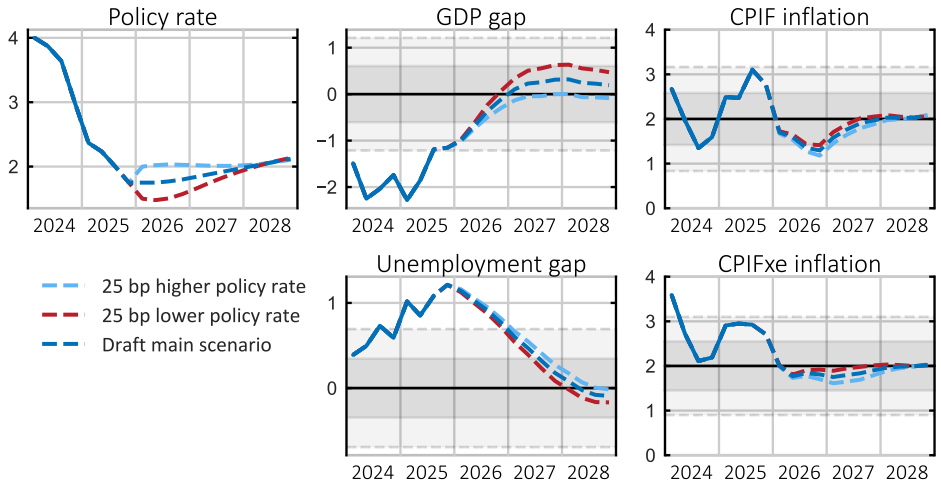
Figure 1 shows monetary policy scenarios from the December 2025 policy round. At this time, it was not clear whether the initial draft main scenario (dark blue lines) was technically efficient. The inflation trajectories in the figure are below target initially, and resource utilisation is negative in the first year of the forecast, before the output

[12] The model is estimated using Swedish data and exhibits empirically reasonable properties. For more details see Corbo and Strid (2020).

gap turns positive (the unemployment gap remains negative until the very end of the forecast period).

The figure also includes two alternative monetary policy scenarios (light blue and red lines). In these scenarios, the policy rate at the upcoming meeting was adjusted by ±25 basis points. The subsequent policy-rate paths follow from so-called impulse response functions (IRFs), which describe how the projected paths of target variables change in response to an unexpected change in (or "shock" to) the policy rate. See Andersson and Lundvall (2024) for details.

Figure 1. Internal monetary policy scenarios from the December 2025 policy round



Note. The solid blue line depicts outcomes. We use the impulse responses from a monetary policy shock, implemented in the first quarter 2026, to compute the alternative scenarios. The lines only show the point estimates and do not illustrate impulse response uncertainty. The darker grey field corresponds to 0.25 standard deviations from the target, while the outer grey field corresponds to 0.5 standard deviations. CPIF and CPIFxe inflation refer to inflation excluding the direct effect of the change in VAT on food (see Sveriges Riksbank 2025).

Sources: Statistics Sweden, Sveriges Riksbank and own calculations.

Analysis based on technically efficient frontiers

It is not always evident from figures like Figure 1 that one alternative is more efficient than another. We therefore also use a more theoretical approach, relying on a loss function commonly used in monetary policy analysis. This loss function represents policymakers' preferences as a linear combination of the inflation gap and the real-economy gap, and is defined as:

(1) $$L = L_\pi + \lambda L_y.$$

Here, L_π and L_y denote the discounted sums of the squared inflation and real-economy gaps, respectively, over the forecast period.[13] By using squared gaps, we implicitly assume that positive and negative gaps are treated symmetrically, and that an increased gap is more costly the larger the gap is. The parameter λ reflects the policymakers' relative weight on stabilising the real economy compared to stabilising

[13] The losses are discounted by $\beta = 0.98$ every quarter, see Appendix A for details.

inflation. The loss function intentionally simplifies the trade-offs faced by decision-makers. The aim is that, when considered as a whole, the checklist captures these trade-offs in a more comprehensive manner.

Given this loss function, all technically efficient monetary policy scenarios form an *efficiency frontier*, where technical efficiency means that neither L_π nor L_y can be reduced without the other increasing (see for example Svensson (2012) for more details).[14] To derive an (approximate) efficiency frontier, we extend Barnichon and Mesters' (2023) method for deriving optimal policy, see Appendix B.[15]

The curved black lines in Figure 2 represent efficiency frontiers derived from the draft main scenario in the December 2025 policy round. The four panels correspond to different combinations of measures of inflation and the output gap.[16]

The dots in Figure 2 show the losses in the three monetary policy scenarios from Figure 1.[17] As shown in the upper panels, when resource utilisation is measured by the GDP gap, both the scenario with a lower policy rate at the upcoming meeting (red dots), and the main scenario (dark blue dots) lie on the efficiency frontier, whereas the scenario with a higher policy rate (light blue dots) does not. In the lower panels, resource utilisation is instead measured by the unemployment gap. Here, none of the scenarios lie on the efficiency frontier. However, the red dot is closest to the efficiency frontier, suggesting that a more expansionary policy could be preferable.

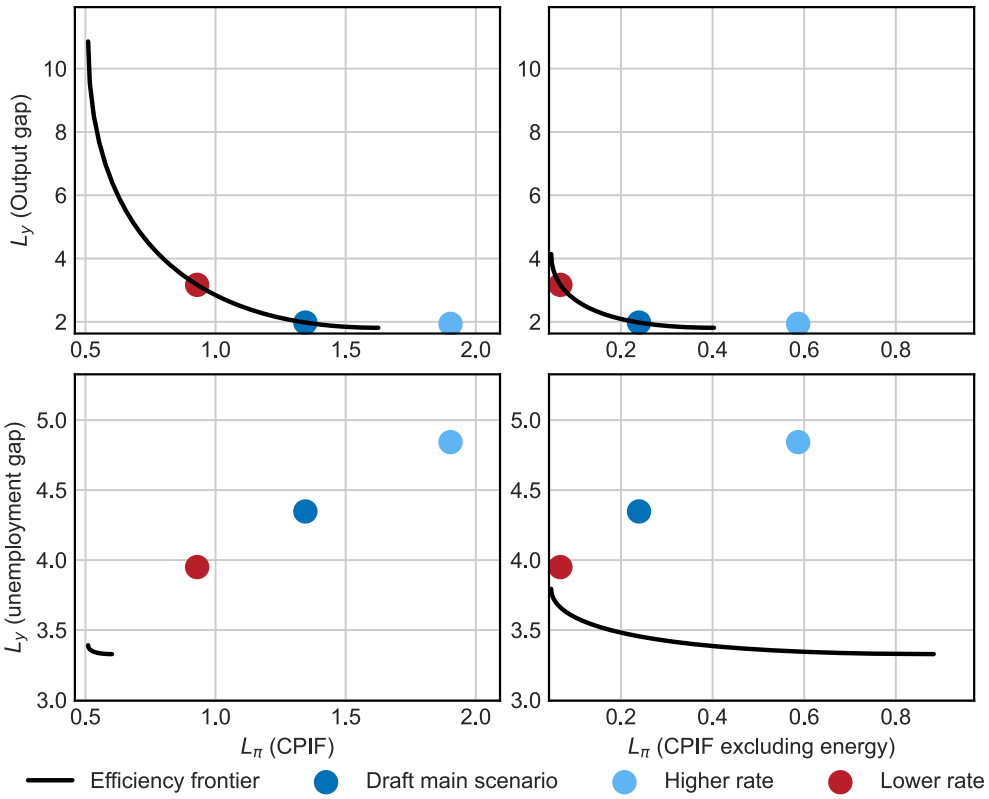
[14] The concept of an efficiency frontier is closely related to what is often called a ''Taylor curve'' in monetary policy analysis, cf. Taylor (1979, 1993).

[15] See also McKay and Wolf (2023) and de Groot et al. (2021).

[16] The frontier is bounded (has a finite length, as λ is assumed to take values in the interval [0, 1000] only; see Appendix B for details). At present, we only have IRFs for a standard monetary policy shock at the upcoming meeting. To construct a fully efficient frontier, IRFs for unexpected changes in the whole policy path would be required. Nevertheless, this method for constructing an efficiency frontier is highly useful – both for assessing criterion 3 and, as we show next, for assessing criterion 4.

[17] The Riksbank introduced this method for comparing monetary policy scenarios in MPR October 2009. In the toolbox developed to evaluate the checklist, it is easy to adjust the time period over which the losses are calculated. For example, a policymaker may want to disregard the losses in the first year since monetary policy has limited effects on inflation and resource utilisation in the short term.

Figure 2. Efficiency frontiers and monetary policy alternatives from the December 2025 policy round



Note. Dark blue dot = draft main scenario. Light blue dot = 25 bps higher policy rate. Red dot = 25 bps lower policy rate. We use the impulse responses from a monetary policy shock, implemented in the next quarter, to compute the alternative scenarios. The dots correspond to the mean squared gaps associated with the different scenarios. The efficiency frontier shows the different combinations of losses for inflation and the real economy that minimise the loss function for different values of λ.

Source: Sveriges Riksbank and own calculations.

Analysis based on bulls-eye charts

We also use so-called bulls-eye charts to assess Criterion 3.[18] A bulls-eye chart plots the average inflation gap and resource utilisation for a specific scenario on the y-axis and x-axis, respectively. The diagram has four quadrants. In scenarios where the dots are located in quadrants 2 or 4 (north-east or south-west) there is no trade-off, as both gaps can be reduced by pursuing a different monetary policy.[19] The bulls-eye

[18] Norges Bank regularly publish bulls-eye charts in their Monetary Policy Report, see for example Norges Bank (2025). The Federal Reserve Bank of Chicago has also used the bulls-eye chart to visualise the Federal Reserve's dual mandate (see for example Evans 2014).

[19] For a simple theoretical illustration of the rationale for this diagram, one might look at the three-equation New Keynesian model (comprising the IS curve, the New Keynesian Phillips curve and a quadratic loss function), where optimal policy is derived by minimising the loss function subject to the rest of the model. The first-order condition for optimality under a time-consistent policy states that the ratio of the inflation gap to the output gap should equal the ratio of the weight on the output gap in the loss function to the slope of the Phillips curve. Intuitively, this means that the central bank balances deviations in inflation and output according to their relative importance in the loss function and the responsiveness of inflation to economic activity.

chart can be useful – both for verifying Criterion 3 and, as we show next, for assessing Criterion 4. It can also be used for storytelling.

Figure 3 shows a bulls-eye chart with the projected CPIF and GDP gaps as our targets.[20] The draft main scenario from December 2025 is located in quadrant 3, one of the preferred quadrants.

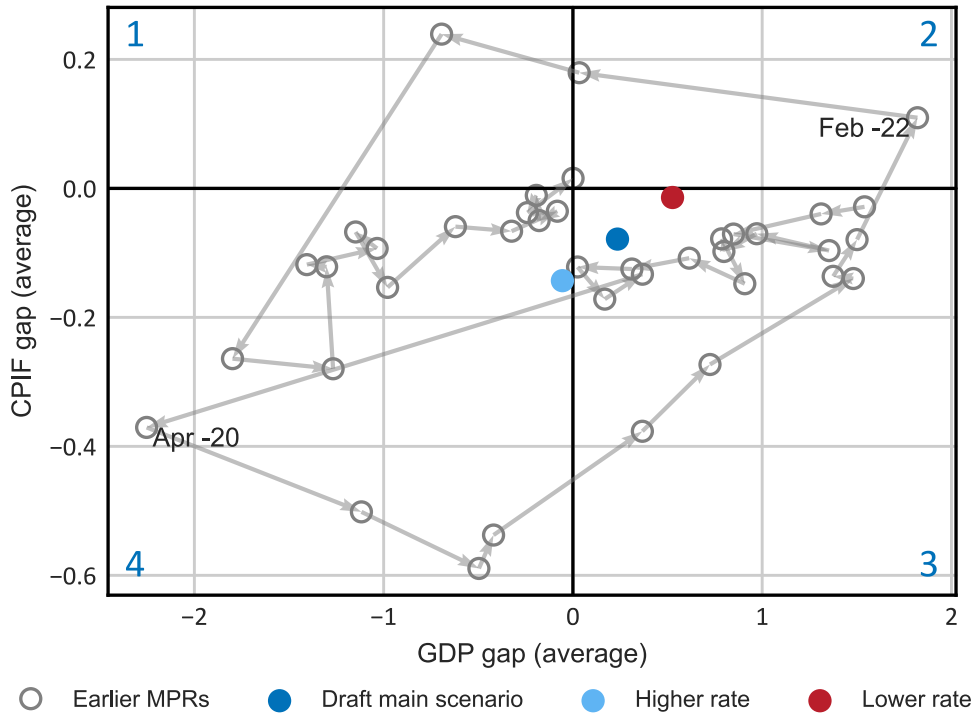
Figure 3 also shows that previous main scenarios have often been outside the preferred quadrants. Two examples are highlighted in the figure. In the first, from the early phase of the pandemic (April 2020), the scenario was in quadrant 4. At this point, output had dropped significantly and both inflation and inflation expectations were low. The policy rate was at zero and the Riksbank had already pursued large asset purchases. The scope for more expansionary monetary policy was therefore limited. In addition, there was considerable uncertainty regarding the size of the GDP gap.[21]

The second example is from the MPR in February 2022, which was published two weeks before Russia's full-scale invasion of Ukraine. The main scenario implied that both the inflation gap and the GDP gap would be positive. The assessment was that expansionary monetary policy was needed to stabilise inflation at target in the medium term. Inflation had, on average, been below target in the previous years, leading to a tolerance for some overshooting. Soon after the publication, however, it became clear that inflation would be higher and more persistent than initially expected, and the Riksbank tightened policy to bring projected inflation back to target. Consequently, the forecasts in later policy rounds shifted to quadrant 4, with both inflation and GDP gaps below zero. On these occasions, the Riksbank judged the risk of inflation becoming entrenched as large and considered it important to ensure that inflation would fall back swiftly.

[20] We focus on the last two years of the forecast period. This makes comparisons over time more meaningful, as monetary policy has limited impact in the near term and because the economy's starting point can differ substantially across different monetary policy rounds.

[21] If the projected output gaps did not properly capture supply constraints during the pandemic, for example, if supply shocks affecting the economy were not captured in the measured output gap, this would have been a reason to deviate from the checkpoint, and to put a higher weight on stabilising inflation.

Figure 3. Bulls-eye from the December 2025 policy round and earlier MPRs.



Note. Dark blue dot = draft main scenario. Light blue dot = 25 bps higher policy rate. Red dot = 25 bps lower policy rate. We use the impulse responses from a monetary policy shock, implemented in the next quarter, to compute the alternative scenarios. The dots correspond to the average gaps, computed over the last two years of the forecast, associated with the different scenarios. The dot in the figure is from the February 2018 MPR.

Source: Sveriges Riksbank and own calculations.

4.4 Is monetary policy flexible?

The two checkpoints under this criterion state that both inflation and the real gap should be stabilised within the forecast period, and that there should be a reasonable balance between achieving the inflation target and stabilising the real economy.

Checkpoint 4.1. (stabilisation of inflation and the real economy)

To assess whether these conditions are met, we first review the initial draft of the main scenario in Figure 1. If inflation stabilises at 2 per cent and the real economy stabilises, as was the case in December 2025, Checkpoint 4.1. is fulfilled.

Checkpoint 4.2. (neither gap substantially larger than the other)

To evaluate Checkpoint 4.2., which states that one gap should not be substantially larger than the other, we use bulls-eye charts. As shown in Figure 3, the main scenario from the December 2025 policy round fulfils the checkpoint (when the GDP-gap is used as measure of the real gap).

4.5 Is monetary policy robust?

Checkpoint 5.1. (Monetary policy can be adapted)

The first checkpoint under this criterion assesses whether plausible risk scenarios allow for acceptable target attainment; monetary policy should remain adaptable if risks materialise and avoid unduly increasing vulnerability to future shocks. We use risk scenarios to evaluate this checkpoint.

We construct risk scenarios by adding shocks to the draft main scenario with the help of structural and empirical models. When necessary, assumptions about the functioning of the economy may also be adjusted.[22]

In addition to the quantitative risk scenarios described above, we also consider several qualitative risk scenarios. These are typically presented in a stylised table showing combinations of (plausible) economic developments and monetary policy responses. We focus on identifying risks where monetary policy cannot easily be adjusted to achieve acceptable outcomes. We generally pay particular attention to risks that are endogenous to monetary policy, especially the risk of de-anchored inflation expectations.

0 shows some qualitative risk scenarios that were discussed in the December 2025 policy round. In this policy round, the risk scenarios identified centred on two key assumptions in the forecast: the assessment of inflationary pressures and of the economic recovery. Each row represents a risk scenario, and each column corresponds to a monetary policy alternative. The key purpose of this table is to identify whether monetary policy will lead to acceptable outcomes also under realistic alternative assumptions. While some of the risk scenarios imply that additional tightening or some change in the policy stance would be needed, the assessment in the December 2025 policy round was that there was sufficient room for manoeuvre with the policy path in the draft main scenario to deal with these risks should they materialise.

[22] For a discussion of the Riksbank's use of alternative scenarios, see Seim (2025).

Table 2. Risk Scenarios for policy deliberations from the December 2025 policy round

	Looser monetary policy in the near term	Baseline policy	Tighter monetary policy in the near term
Stronger inflationary pressure	Some change in policy stance necessary	Need some additional tightening, but no substantial change in policy stance	Policy relatively well-balanced
Weaker inflationary pressure	Policy relatively well-balanced	Baseline too tight, some change in policy stance necessary	Some change in policy stance necessary
Higher resource utilisation and stronger economic recovery	Policy too loose, clear tightening needed. Potential effect on inflation expectations	Baseline insufficient to stabilise resource utilisation and inflation, additional tightening needed	Policy relatively well-balanced
Lower resource utilisation and weaker economic recovery	Policy relatively well-balanced	Baseline too tight, some change in policy stance necessary	Change in policy stance necessary. Potential effects on inflation expectations

Note. The scenario with higher resource utilisation and stronger economic recovery could result from underestimating business cycle dynamics or from larger than expected effects of fiscal stimulus. The scenario with lower resource utilisation and weaker economic recovery could materialise if the weak labour market is a better indicator of current resource utilisation or if global demand develops weaker than expected.

Sources: Sveriges Riksbank.

Checkpoints 5.2. and 5.3. (Cross-checked policy)

The second and third checkpoints under this criterion state that the policy path should be reasonably close to simple monetary policy rules (in the near term) and external forecasters' expectations.

For the second checkpoint we use a set of simple policy rules described in Appendix C. As input data we use forecasts for the target variables from the draft main scenario, as well as forecasts from the National Institute of Economic Research (NIER).

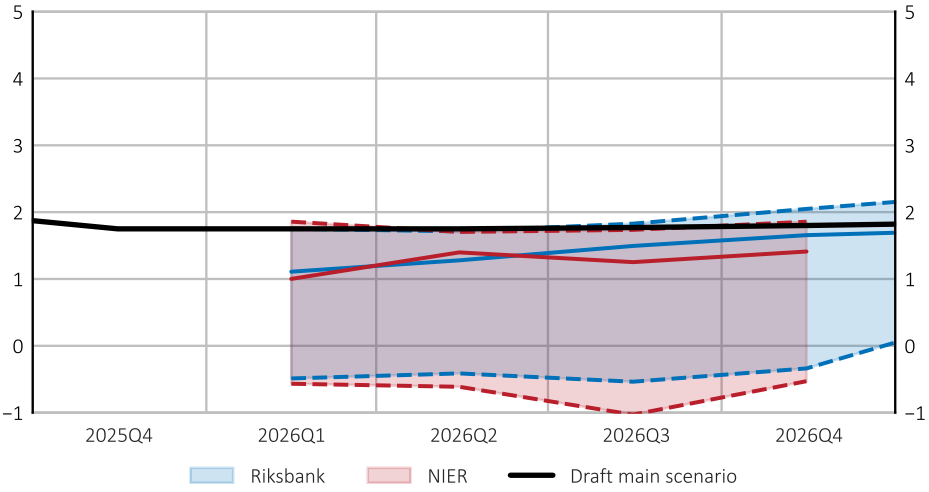
Figure 4 illustrates the policy path in the draft main scenario from the December 2025 policy round (the black line) alongside the rates implied by simple rules. The blue shaded area is based on input data from the draft main scenario. The interval shows the range between the minimum and maximum values implied by these rules, with the median depicted by the blue line. The red shaded area and the red line represent the range and the median implied by the same set of rules when using NIER forecasts as inputs.

In Figure 4, the policy rate in the draft main scenario from the December 2025 policy round is clearly in the upper range of both intervals. The rules that use unemployment as the measure of resource utilisation are generally in the lower end of the range and therefore imply a lower policy rate. Several of the rules that use the GDP gap as the measure of resource utilisation do, however, lie relatively close to the main scenario.

This holds regardless of whether we use Riksbank or NIER forecasts as inputs to the rules.

The interval from the simple policy rules is also used to check if the draft main scenario is realistic (Criterion 1). For the draft main scenario to be realistic, the policy path proposed should normally not deviate from this (blue) range.

Figure 4. Simple rules for monetary policy in the near term from the December 2025 draft main scenario

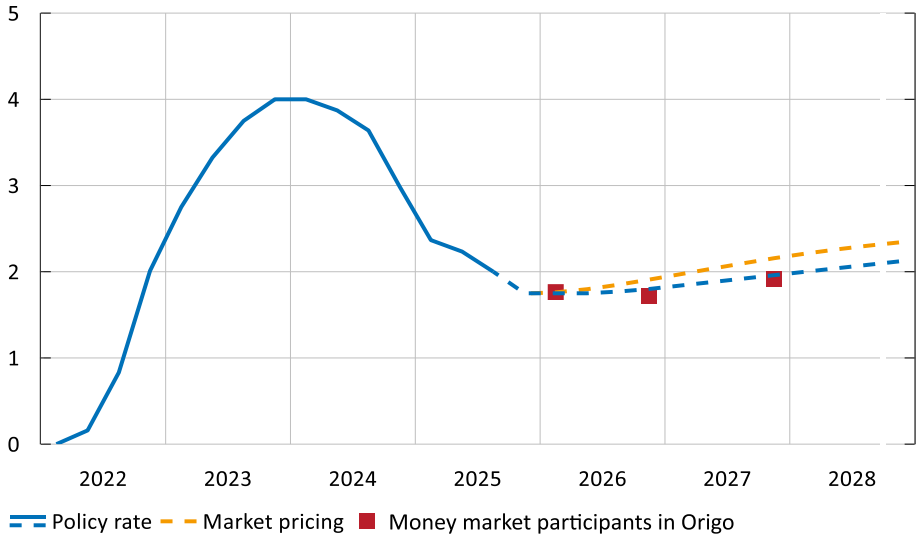


Note. The blue field illustrates the minimum and maximum of a set of monetary policy rules, taking the forecasts of inflation and the real economy in the draft main scenario as given. The blue line depicts the median value of these rules. The red field (line) illustrates the minimum and maximum (median) values of the same rules, using forecasts from the National Institute of Economic Research as inputs.

Sources: National Institute of Economic Research, Sveriges Riksbank and own calculations.

For the third checkpoint, we compare the policy path in the draft main scenario to market expectations according to forward pricing and survey-based expectations. Figure 5 shows that leading up to the December 2025 policy decision, there were no substantial discrepancies, suggesting that the draft main scenario rested on realistic assumptions.

Figure 5. Market expectations from the December 2025 policy round



Note. The yellow dashed line shows market-based expectations according to forward pricing. The red markers show survey-based expectations for the policy rate according to Origo Group's monthly survey of money market participants. The blue solid line shows the history of the policy rate, and the blue dashed line shows the policy path in the draft main scenario.

Sources: Origo Group and Sveriges Riksbank.

Checkpoint 5.4. (Small steps)

The fourth checkpoint states that policy rate changes should normally be made in small steps (for example, 0.25 percentage points), which is straightforward to verify. The policy path in the draft main scenario was consistent with this checkpoint.

4.6 Is monetary policy predictable?

Checkpoint 6.1. (Stable preferences)

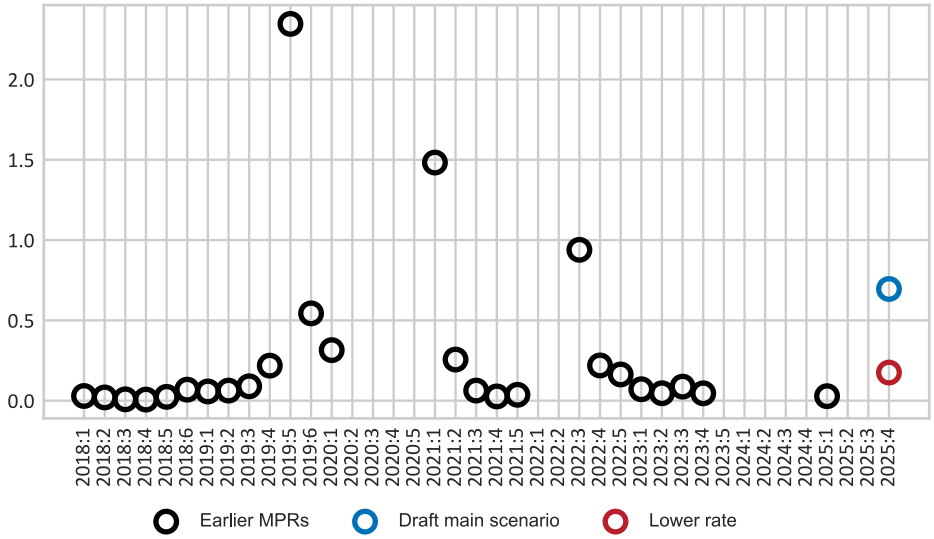
To evaluate if preferences are stable, we derive the weight on the real economy (λ) that is implicit in the draft main scenario. This is done by finding the tangent to the efficiency frontier in Figure 2, at the point where the frontier and the dot associated with the draft main scenario intersect. The method builds on the work by Barnichon and Mesters (2023), and backs out a value for λ given IRF:s and the forecast. See Appendix B for details.

It is natural for λ to shift somewhat over time, for example due to changes in the composition of the Board, or owing to other considerations not captured in the simple loss function. This can, for example, be due to robustness or financial stability reasons. However, the relative weight should remain reasonably stable over time. A λ that moves around substantially over time might indicate frequent preference shifts, reducing predictability.

Figure 6 illustrates the λ implicit in the Riksbank's published forecasts and in two of the three monetary policy scenarios from Figure 1, derived under the assumption that

decisions were optimal (see Appendix B).[23] In the figure, CPIF inflation and the GDP gap are used as target variables. In most cases, the weight on the real economy is close to zero, but in a few instances the backed-out implicit λ deviates more clearly. This was, for example, the case early in the monetary policy tightening phase in 2022. In the December 2025 policy round, the draft main scenario (dark blue dot in the figure) was higher than the historical pattern, implying a larger weight on the real economy than normal. The lower-rate scenario (red dot) was more in line with the historical pattern. However, when using underlying inflation (CPIF excluding energy) as the measure of inflation, also the draft main scenario was in line with the historical pattern.

Figure 6. Implicit lambdas from the December 2025 policy round and earlier MPRs, using CPIF and the GDP gap as arguments in the loss function



Note. Dark blue circle = draft main scenario. Red circle = 25 bps lower policy rate. Black circles = historical monetary policy decisions. We use the impulse responses from a monetary policy shock, implemented in the first quarter 2026, to compute the alternative scenarios. The circles correspond to the implied values of λ. Observations and scenarios where monetary policy is not on the efficiency frontier have been excluded.

Source: Sveriges Riksbank and own calculations.

Checkpoint 6.2. (Reaction function)

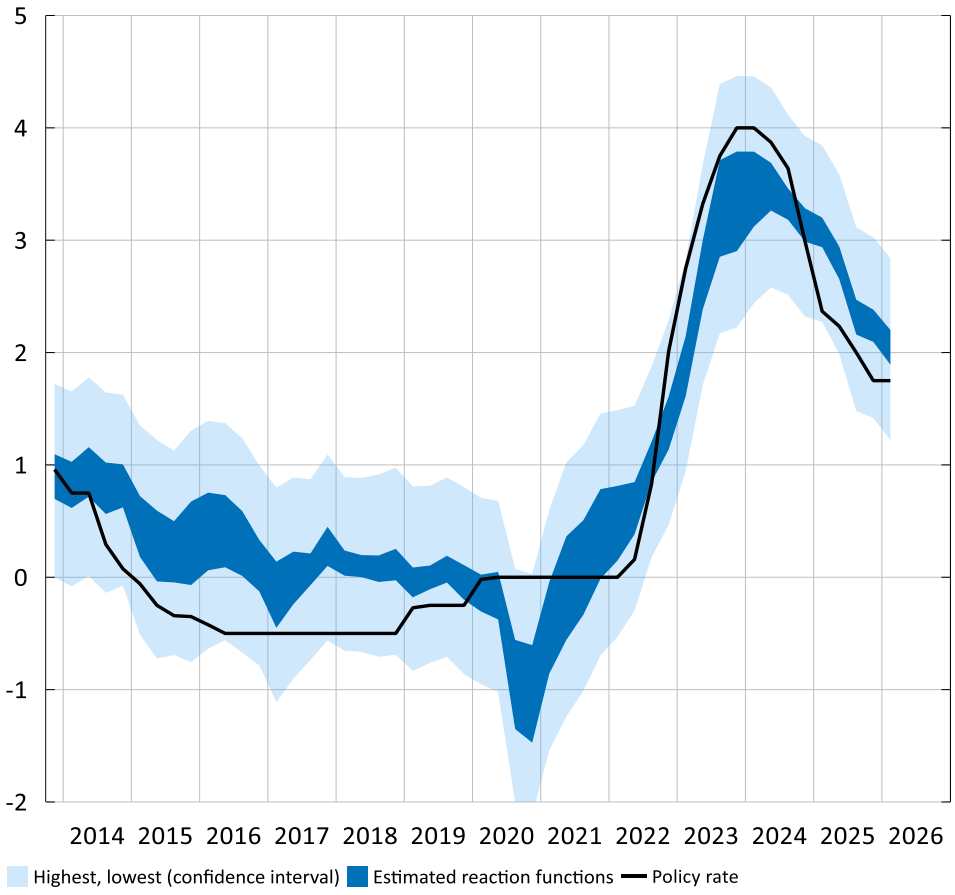
Here we compare the near-term policy path in the draft main scenario with estimated reaction functions based on Gustafsson and Nessén (2026). Unlike the simple rules in Figure 4, estimated reaction functions recover the Riksbank's actual past behaviour. The functions link the policy rate to real-time data on inflation, resource utilisation, a measure of the long-term nominal interest rate, and previous policy rate levels

[23] Monetary Policy reports where monetary policy has not been on the efficiency frontier have been excluded, as has the scenario with a higher policy rate from the December 2025 policy round, which was also not on the frontier. One possible reason why monetary policy is not on the efficiency frontier is that policymakers have taken into account factors that are not captured by the simple loss function.

(interest-rate smoothing). Specifically, they answer what the policy rate would be – conditional on the Riksbank's projections for inflation and resource utilisation next quarter – assuming that the central bank adheres to its historical reaction function.

Figure 7 shows the estimated reaction function compared to the policy path in the draft main scenario. A policy path that deviates significantly in the near term from the estimated reaction function may indicate a change in the reaction pattern, a shift in preferences or perceived risks, or a response to some other change in circumstances. In the December 2025 draft main scenario, the policy rate at the upcoming meeting was within the confidence interval (but below the range for the point estimates) of the reaction function.

Figure 7. The estimated reaction function from the December 2025 policy round



Note. The blue field shows the range between the highest and the lowest policy rate according to the estimated reaction functions. The light-blue field shows the highest and the lowest value of the policy rate using the 95 percent confidence intervals from the different estimations.

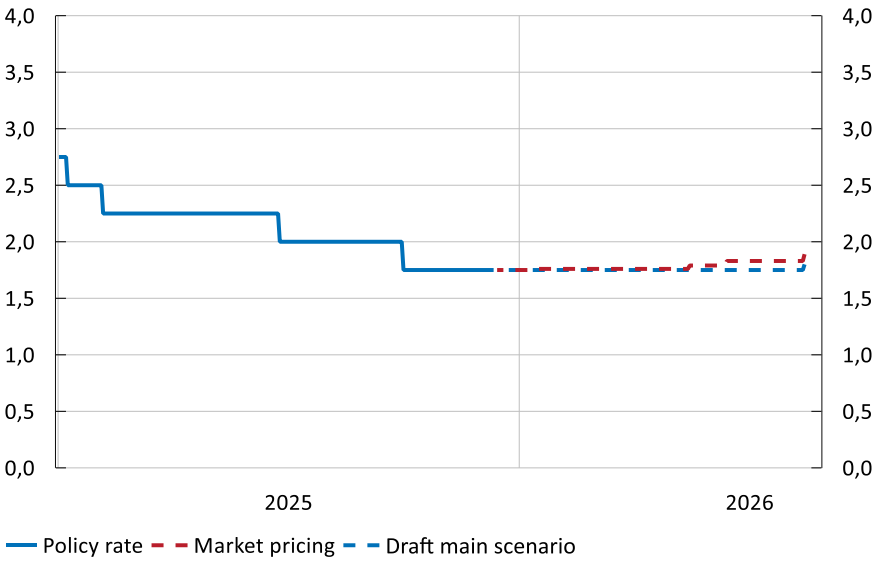
Sources: Sveriges Riksbank and own calculations.

Checkpoint 6.3. (External forecasters)

Predictability is also assessed by comparing the near-term policy rate in the draft main scenario to market pricing and to external forecasts. Figure 8 illustrates market expectations for the policy rate at upcoming monetary policy meetings, based on so-

called RIBA futures contracts. The figure shows that, for the December 2025 policy round, expectations were well aligned with the policy path in the draft main scenario.

Figure 8. Market expectations (per monetary policy meeting) in the near term



Note. The solid line refers to historical outcomes for the policy rate. Market pricing is based on the implied policy rate at upcoming monetary policy meetings, computed using RIBA contracts from 2025-12-02. For the December 2025 policy round, unusually low trading activity makes the estimates uncertain. Market pricing based on STINA contracts indicates a somewhat higher policy rate throughout this period.

Sources: Sveriges Riksbank.

4.7 Is monetary policy proportionate?

Checkpoint 7.1 states that unconventional monetary policy should not create unacceptably high financial risks. This must be concretised when the checkpoint is applied in practice.

According to the Sveriges Riksbank Act, the Riksbank shall take into account the effects of monetary policy on its balance sheet (Chapter 1, Section 8). To analyse how a given policy-rate forecast affects the balance sheet, we use an analytical tool developed by Vestin et al. (2025). When a change in the balance sheet is proposed for monetary policy purposes, we also examine whether it entails a risk that equity (in the draft main scenario or in plausible risk scenarios) falls below the statutory minimum level.

In the December 2025 policy round, no change in the balance sheet for monetary policy purposes was discussed.

5 Concluding remarks

While the checklist has proven valuable in our application, there are reasons to reflect on its limitations and its applicability to other central banks. One possible objection is that it risks functioning as a straitjacket – an overly schematic framework in a decision-making domain where judgment, experience, and intuition play a central role. Another objection is that it may be difficult to use when monetary policy decisions are made collectively rather than by a single decision-maker.

These objections are understandable, but we argue that they can be addressed. The checklist is not intended to mechanise decision-making or to replace judgment. On the contrary, it leaves room for discretion, not least in how the criteria are interpreted and weighed against one another. It can also coexist with various types of heuristic approaches, such as rules of thumb or more narrative forms of analysis. Rather than replacing such approaches, it serves as a support – a way to systematise, evaluate, and communicate the assessments.

Moreover, when decisions are made collectively, the checklist can serve a particularly important function. It can act as a shared frame of reference that structures discussions, clarifies where consensus exists, and where disagreements remain. At the same time, there is a risk that overly strict use may inhibit flexibility or dampen valuable dissenting views. How the checklist is used in practice is therefore crucial.

Overall, the checklist should be seen as a tool that supports, but does not direct, decision-making. Its primary contribution is to promote clarity, consistency, and accountability, while still leaving room for different perspectives.

It is also important to emphasize that the checklist is not universally applicable in its current form. It needs to be adapted to each central bank's institutional settings, objectives, and working methods. The criteria express broad ambitions that are likely shared by many, but the specific checkpoints must be adjusted to the particular context. They should therefore be seen as evolving components that can be adjusted with changing circumstances and experience. The objective is to maintain a framework that supports a monetary policy that is systematic, transparent, and firmly grounded in analysis, and which thereby ultimately contributes to price stability.

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APPENDIX A – The loss function measuring target attainment

When applying the checklist to evaluate alternative monetary policy scenarios, we use various tools. Several of these tools make use of a loss function. Below, we briefly explain the loss function that these tools use.

The loss function is a quantitative measure of target attainment. We have chosen one that is commonly used in the literature and specify the loss function as

$$L = L_\pi + \lambda L_y = \sum_{h=0}^{H} \beta^h (\pi_h - 2)^2 + \lambda \sum_{h=0}^{H} \beta^h y_h^2,$$

where L_π is the deviation of inflation from target (the inflation loss) aggregated over time, L_y is the resource utilisation loss aggregated over time, and H is the time period over which we measure the losses. The loss function can be used to assess checkpoints related to efficiency and flexibility, as well as predictability.

The loss function has the following properties: (i) the losses are separable in time, so that the loss in one period does not affect the loss in another period; (ii) the losses are separable between target variables; (iii) the relative weights on the two variables are constant over time, (iv) losses are symmetric, that is, it is equally costly for positive and negative deviations from the target; and finally, (v) the cost of increased deviations is greater when the deviation is already large than when it is small.

APPENDIX B – Constructing alternative monetary policy scenarios and the efficiency frontier

To construct policy counterfactuals, we use the draft main scenario forecasts for inflation and the real economy, $f_{\pi h}$ and f_{yh}, as well as impulse response functions (IRF:s), $R_{\pi h}$, R_{yh}, that follow from a monetary policy shock, $s \in \{\pm 25\ bps, \pm 50\ bps\}$. h is a period in the forecast, which at the Riksbank currently spans the interval $h \in \{0, \dots, 12\}$ (from the current quarter until 12 quarters ahead). When the IRF:s are linear, the resulting projections p_{xh} for inflation and the real economy can be written as

$$p_{xh} = f_{xh} + sR_{xh}, \qquad x \in \{\pi, y\}.$$

Calculating the optimal shock size in a linear model with quadratic preferences

We have a loss function L, IRF:s R_h, and forecasts f_h for inflation π_h and resource utilisation y_h. The maximum number of periods in the forecast is H. We can specify a loss function for a given scenario as

$$L = \sum_{h=0}^{H} \beta^h [(\pi_h - 2)^2 + \lambda {y_h}^2].$$

This loss function can be rewritten in terms of a combination of the forecast and the IRF:s that follow from the shock, s, as

$$L = \sum_{h=0}^{H} \beta^h \left[(f_{\pi h} - 2 + s \cdot R_{\pi h})^2 + \lambda \left(f_{yh} + s \cdot R_{yh}\right)^2\right].$$

The optimal shock size, s^*, is the one that minimises the loss function. Minimising the loss function with respect to the shock size yields the first-order condition:

$$\sum_{h=0}^{H} \beta^h \left[R_{\pi h}(f_{\pi h} - 2 + s \cdot R_{\pi h}) + \lambda R_{yh}\left(f_{yh} + s \cdot R_{yh}\right)\right] = 0.$$

From this, we solve for the shock size, s^*, to express the shock as a function of forecasts and IRF:s:

$$s^* = -\frac{\sum_{h=0}^{H} \beta^h \left[R_{\pi h}(f_{\pi h} - 2) + \lambda R_{yh} f_{yh}\right]}{\sum_{h=0}^{H} \beta^h \left(R_{\pi h}^2 + \lambda R_{yh}^2\right)}.$$

The optimal projections $p^*_{\lambda xh}$ for inflation and output can be written as

$$p^*_{\lambda xh} = f_{xh} + s^*_{\lambda} R_{xh}, \qquad x \in \{\pi, y\}$$

where s^*_{λ} is the optimal size of the monetary policy shock for the given weight on the real economy. From the projections and the IRF:s, we can calculate the losses for a range of different values of λ (in our example, $\lambda \in [0{,}1000]$) to construct the efficiency frontier – the combinations of losses for inflation and the real economy that minimise the loss function – for all relevant values of λ.

Implicit λ

For each monetary policy decision when a Monetary Policy Report (MPR) is published, a forecast is also published for the variables that are important for the Riksbank's monetary policy. Thus, for a given loss function, it is possible to calculate a loss associated with the monetary policy decision that was made in connection with the publication of the MPR. Above, we show how to find the optimal shock size, that is, the size of the shock to the policy rate that would minimise the policymaker's loss function. In calculating the implicit λ, we assume that the projected paths are optimal and therefore set the optimal shock size to zero. For each monetary policy decision where we have a forecast of the target variables, we can solve for λ in the equation for the optimal shock size setting $s^* = 0$:

$$\lambda = -\frac{\sum_{h=0}^{H} \beta^h R_{\pi h}(f_{\pi h} - 2)}{\sum_{h=0}^{H} \beta^h R_{yh} f_{yh}}$$

APPENDIX C – Simple monetary policy rules

Simple monetary policy rules specify how the policy rate should respond to information available to the policymaker. Specifically, they prescribe a relationship between the policy rate and a few indicators of inflation and resource utilisation. Some rules include the lagged policy rate. A common form for simple monetary policy rules is:

$$i_t = \rho i_{t-1} + (1-\rho)[r^* + \pi_t + \alpha(\pi_t - \pi^*) + \beta(y_t - y^*)].$$

The policy rate, i_t, is assumed to depend on the previous period's policy rate, a long-term real rate, r^*, actual inflation, the deviation from the inflation target and the deviation from normal resource utilisation (a real gap). Here, * denotes potential, or targets for, variables. Common measures of resource utilisation are the GDP gap or the unemployment gap. ρ captures the degree of interest-rate smoothing (normally between 0 and 1), whereas α and β determine how much the policy rate responds to deviations from the inflation target and from a normal resource utilisation.

Inspired by the Federal Reserve Bank of Cleveland, we consider several different simple policy rules listed below. [24]

- Taylor (1993)
  - $i_t = r^* + \pi_t + 0.5(\pi_t - \pi^*) + 0.5(y_t - y^*)$
- Taylor (1993) with core inflation (that is, excluding energy)
  - $i_t = r^* + \pi_t^{XE} + 0.5(\pi_t^{XE} - \pi^*) + 0.5(y_t - y^*)$
- Taylor (1999)
  - $i_t = r^* + \pi_t + 0.5(\pi_t - \pi^*) + (y_t - y^*)$
- Inertial Taylor rule[25]
  - $i_t = 0.8i_{t-1} + 0.2\big(r^* + \pi_t^{XE} + 0.5(\pi_t^{XE} - \pi^*) + 0.5(y_t - y^*)\big)$
- Forward-looking rule
  - $i_t = r^* + \pi_{t+3}^{Pr} + 0.1(\pi_{t+3}^{Pr} - \pi^*) + 0.1(y_t - y^*)$
- First-difference rule with unemployment rate (1)
  - $i_t = i_{t-1} + 1.74(\pi_{t+3}^{Pr} - \pi^*) - 1.19(u_{t-1} - u_{t-2})$
- First-difference rule (2)
  - $i_t = i_{t-1} + 0.5(\pi_t - \pi^*) + 0.5(y_t - y_{t-4})$.

[24] For more information about the different rules see "Simple Monetary Policy Rules" Federal Reserve Bank of Cleveland https://doi.org/10.26509/frbc-monpolrules. Accessed on January 16, 2026.

[25] We set $\rho = 0.8$ as used by Cleveland Fed.

To vary the measure of resource utilisation, we use both the GDP gap and the unemployment gap. For specifications with the unemployment gap, we multiply the gap by a factor of $-(1/b)$, where b is an Okun coefficient that we set to 0.5.

We assume that r^* is given by the midpoint of the Riksbank's assessed interval (-0.5-1 per cent) for the long-term neutral policy rate, that is 0.25 per cent. When we use data from the National Institute of Economic Research as input to the rules, we set the long-term neutral policy rate to 0.6 in line with their assessment.

The forward-looking policy rule includes more information and accounts for the lags in monetary policy transmission by including forecasts instead of outcomes.

The two first-difference rules omit unobserved variables. The first is based on Orphanides and Williams (2008, 2013) and its parameters are from the Federal Reserve Bank of Cleveland.[26] The second is a version from the Board of Governors of the Federal Reserve System (2018) where the change in the policy rate depends on inflation and output growth.[27]

[26] The parameters are set to minimise a specific loss function.

[27] For more information see the Federal Reserve Board of Governors' website https://www.federalreserve.gov/monetarypolicy/policy-rules-and-how-policymakers-use-them.htm.