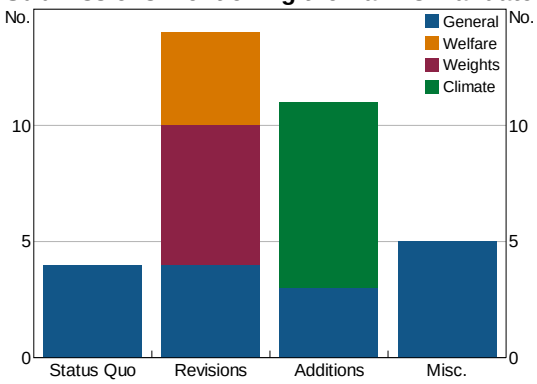
MONETARY POLICY OBJECTIVES: HOW MANY AND WHAT KIND?[1]

We discuss some considerations related to the choice of monetary policy objectives for a central bank. In doing so, we draw on the literature about the optimal design of central banks and make comparisons against other central banks. A key message from the literature is that the central bank should ideally have a small number of well-defined objectives that are aligned with its policy instrument(s). This facilitates public scrutiny of the central bank's performance and reduces the risk that other objectives are elevated above the primary objective of price stability.

Motivation and Scope

Graph 1

Submissions Mentioning the Bank's Mandate



Sources: Authors' Calculations; Commonwealth Treasury

The Review of the RBA is assessing Australia's monetary policy arrangements, including the objectives specified in the *Reserve Bank Act 1959* and interpreted in the Statement on the Conduct of Monetary Policy (SCMP). A range of views about the Bank's monetary policy objectives have been expressed in public submissions to the Review. Graph 1 summarises the contents of submissions that explicitly mention the Bank's mandate: 'Status Quo' are submissions that suggest the current mandate is broadly appropriate; 'Revisions' suggest maintaining the current mandate with some changes, including explicitly specifying weights on objectives and the meaning of concepts such as 'welfare'; and 'Additions' suggest adopting additional monetary policy objectives, including objectives related to climate change and inequality.

Against this backdrop, we summarise key messages from the literature about monetary policy objectives. We begin by explaining why it is important for central banks to have objectives and outline some considerations related to the choice of objectives. We then describe the Bank's current monetary policy objectives and briefly compare them against those of central banks in some other advanced economies. Our focus is on *monetary policy* objectives as opposed to objectives for the *central bank* more broadly, where monetary policy is broadly defined as policies aimed at manipulating the term structure of interest rates (usually by setting a short-term nominal interest rate and sometimes by directly influencing longer-term rates). We distinguish between the choice of *objectives* (e.g. price stability) and the *framework* used to achieve those objectives (e.g. inflation or price-level targeting), which is the focus of other work

Why Does A Central Bank Need Objectives?

Before discussing the choice of objectives for a central bank, it is useful to outline *why* a central bank needs objectives.

1 Thanks to the Library for their assistance in searching for relevant literature. Thanks also to Meredith Osterholm, and seminar participants for useful feedback.

Inflation (too high, low or variable) is socially undesirable

The uncertainty caused by inflation makes it harder for households and firms to plan, and distorts their decisions about how to allocate their resources.[2] For example, in standard New Keynesian models, prices are 'sticky' and inflation generates price dispersion, which means that firms with the same cost of production charge different prices. As a result, relative prices no longer reflect relative costs of production and there is an inefficient allocation of resources (e.g. Nakamura et al 2018). Similarly, in 'menu costs' models of price setting, firms face fixed costs when they adjust prices, so inflation generates price dispersion and additionally results in firms inefficiently diverting more of their resources to implementing price changes (e.g. Golosov and Lucas 2007). In standard models, inflation and deflation generate the same price dispersion and so are equally costly. However, other problems associated with deflation that are not present in standard models (e.g. debt-deflation traps, as in Fisher (1933)) mean that a positive rate of inflation is desirable in practice.

A lot of the costs of inflation are associated with unexpected inflation rather than high inflation *per se*. However, it is difficult to find examples where inflation has been both high and stable, which suggests that the level of inflation is positively correlated with its volatility (Cecchetti 2000). The costs of too high, low or variable inflation motivate stabilising it around some low, but positive, level.

Government faces incentives to deliver inflation, so need an independent monetary policymaker

In principle, a government could choose to set monetary policy itself to target inflation. However, governments face incentives to deliver inflation by running the economy above its productive capacity. Reasons for doing this include raising revenue via seigniorage and eroding the real value of government debt. To the extent that households and firms understand these incentives, they will expect higher inflation, which will feed into higher realised inflation (e.g. via wage and price setting). It is therefore desirable for the government to delegate monetary policy to an independent central bank, which faces less of an incentive to deliver unexpectedly high inflation (e.g. Fischer 1994, 1995).

Assigning monetary policy objectives promotes accountability and aligns incentives

An independent central bank is less directly accountable to society than are elected representatives, though it may still be subject to oversight. Consequently, setting objectives for the central bank is important to ensure that it targets socially desirable outcomes (e.g. Blinder 1998; Cecchetti 2000).[3]

Setting appropriate objectives can also reduce the incentive for the central bank to set policy in a way that is 'time inconsistent'. Although central banks do not face the same incentives to generate unexpectedly high inflation as governments, in theory a central bank that aims to maximise social welfare still faces an incentive to deliver unexpected inflation (Kydland and Prescott 1977; Barro and Gordon 1983). Different solutions have been proposed to mitigate this problem, such as appointing a 'conservative central banker' who places a larger weight on inflation stabilisation than in the social welfare function (Rogoff 1985) or by tying the rewards of the central banker to realised inflation (Walsh 1995).[4]

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2 For some high-level discussions about the costs of inflation, and additional references, see Bernanke and Mishkin (1997), Cecchetti (2000) or Bernanke, Olekalns and Frank (2019).

3 The governance arrangements of the central bank are also crucial for ensuring that it is accountable for its performance. compare the Bank's governance arrangements to those of its peers and to best practice identified in the broader governance literature.

4 In a similar vein, Chang (2022) adds heterogeneous households to the standard model of time inconsistency and shows that the inflation bias can be offset by assigning the central bank a mandate under which wealthier agents receive a higher relative weight than in the social welfare function.

Other authors argue that time inconsistency is not a problem in practice, because the central bank can always choose to ignore the incentive to deliver unexpectedly high inflation (e.g. McCallum 1995; Blinder 1997). Nevertheless, it remains possible that the central bank may at times face political pressure to pursue overly expansionary monetary policy. The presence of explicit monetary policy objectives can help mitigate these pressures or reduce the incentive for governments to pressure the central bank in the first place (e.g. McCallum 1995; Mishkin 1999).

How Many and What Kind of Objectives?

As discussed above, it is important for the central bank to have objectives against which its performance can be assessed. This section discusses considerations related to the choice of objectives.

Number of tools and objectives should be aligned

The 'Tinbergen Rule' states that a policymaker must have as many instruments as it does competing objectives, otherwise it cannot in general simultaneously achieve its objectives (Tinbergen 1952). This principle implies that the central bank can achieve at most one objective given one instrument, unless multiple objectives happen to align. For example, in the standard New Keynesian model, the central bank controls a single instrument, which is a short-term nominal interest rate. In this framework, the central bank can stabilise both inflation and output when facing only demand shocks (the 'divine coincidence'), whereas cost-push shocks create a trade-off between inflation and output stabilisation (Blanchard and Galí 2007). Although central banks now have access to several monetary policy tools (e.g. a short rate, bond purchases, forward guidance, yield curve control), for the purposes of the current discussion these can be viewed as a single instrument; the central bank manipulates aggregate demand by influencing the term structure of interest rates.

Nominal target is key, debate over form

There is broad consensus that central banks should have an objective involving a numerical target for a nominal variable (e.g. inflation or the price level). A key feature of having a numerical target is that it allows the public to monitor the central bank's progress in achieving its objective, and so holds the central bank accountable for its performance. There is debate around features of this objective, and in practice different central banks have different nominal targets. For example, should the target be a 'point' (potentially with a 'tolerance band') or a range?[5] If targeting inflation, how should the measure of inflation be defined and how should the level of the target be chosen?[6,7] While these are all important questions, they are arguably of secondary importance relative to having *some* explicit nominal objective.

5 Hammond (2012) outlines some arguments for selecting between a point and a range.

6 In the standard New Keynesian model, the natural measure of inflation to target is inflation in a consumer price index, which is consistent with the inflation targets of central banks in advanced economies (Hammond 2012). In more realistic settings, the optimal measure of inflation to target may differ (e.g. Woodford 2010).

7 The optimal inflation rate in the standard New Keynesian model is zero, because this eliminates price dispersion in steady state. However, in practice, all inflation-targeting central banks have positive targets. In choosing a level for the target, there is a trade-off between the costs of higher inflation (described above) and the benefits, which include reducing the frequency and average duration of episodes where the policy rate is constrained by its effective lower bound (a feature missing from the standard model). For a discussion of these trade-offs, see Blanchard, Dell-Ariccia and Mauro (2010) and Ball (2014). Papers that model the optimal level of the inflation target include Andrade *et al* (2019) see Blanco (2021).

Strong support for a real objective, but hard to define numerically

There also appears to be fairly broad support for the idea that central banks should either have an explicit second objective related to real activity (e.g. full employment) or that they should account for the effects of monetary policy on real activity when pursuing their nominal objective. This recognises the economic and social costs of unemployment, including its potential long-run scarring effects.[8] Arguments for a 'dual mandate' hinge on monetary policy facing a short-term trade-off when responding to shocks that push activity and inflation in opposite directions, since stabilising one would push the other further from target; in the absence of such a trade-off, a second 'real' objective would be redundant.

While standard theory suggests that the central bank should attempt to target an output (or unemployment) 'gap', such gaps are not directly observable. Consequently, it is difficult to operationalise this type of objective in terms of a numerical target (e.g. by setting an explicit target for 'full employment').

Weights on objectives guided by societal preferences

When it is not possible for a central bank to simultaneously achieve multiple objectives, it must weigh its objectives when making policy decisions. In the standard New Keynesian model, the weights on inflation and output objectives can be derived from an approximation of the representative household's welfare function, and will depend on model parameters.[9] More practically, a number of prominent economists argue that the weights on objectives should be guided by societal preferences, as expressed through democratically elected representatives (e.g. Reis 2013; Bernanke 2017). However, frequent changes to these weights could limit the effectiveness of the central bank's objectives by threatening its operational independence.[10]

The relative weight on objectives can also be determined implicitly by specifying the horizon over which the policymaker is expected to meet its inflation target (e.g. Svensson 1999). For example, allowing the policymaker to return inflation to target more slowly following shocks implicitly places higher relative weight on fluctuations in real activity. Similarly, specifying the inflation target as a range allows the central bank some flexibility in achieving its nominal objective; widening this range could be interpreted as the central bank assigning greater weight to its real objective (e.g. Bernanke and Mishkin 1997).

Objectives should be measurable, aligned to instrument(s) and avoid distributional judgements

As noted above, there have been calls for the Bank to be assigned a variety of additional monetary policy objectives. From a theoretical perspective, there are examples of macroeconomic models in which it is optimal for the central bank to use monetary policy to target variables in addition to inflation and a measure of spare capacity. The common premise of these models is that some friction (e.g. a financial friction) or externality (e.g. carbon emissions) generates welfare costs. By placing weight on a particular

8 For a detailed discussion about the costs of unemployment, see Coates and Ballantyne (2022). New Keynesian theory also suggests that it is desirable to stabilise output fluctuations to some degree; in the standard model, a second-order approximation of the representative agent's welfare function includes squared output gaps in addition to inflation gaps (e.g. Rotemberg and Woodford 1997).

9 Note that we are discussing the weight assigned to competing objectives in the social welfare function rather than how the central bank actually sets monetary policy to achieve these objectives. In standard settings the optimal path for the policy rate will depend on the slope of the Phillips curve as well as the (relative) weight on output fluctuations (e.g.). See McKay and Wolf (2023) for an accessible discussion of how inequality interacts with (optimal) monetary policy.

10 A government can also engineer changes in the inherent weights attached to the central bank's objectives by appointing a central banker who cares more or less about inflation variability, as in Rogoff (1985).

variable that relates to this friction or externality when setting the policy rate, the central bank is able to mitigate these costs. However, the distortions introduced in these models are often more effectively addressed via some other policy tool.[11]

As discussed above in the context of the nominal objective, it is desirable that objectives be measurable, since this facilitates the public's ability to assess the central bank's performance in achieving its objectives. However, in some cases it may be difficult to determine an appropriate variable to explicitly target. For example, in the context of a financial stability objective, should the central bank target a credit spread, a leverage or debt-to-income ratio, lending standards or some other variable? Macroeconomic theory may not be particularly useful in solving this problem, because guidance about which variable(s) to target may be highly dependent on the assumed structure of the model.

It is also important that any additional objectives are well-aligned with the central bank's policy instrument(s), in the sense that there is a convincing case that the instrument(s) can be effectively used to achieve the objective (e.g. Reis 2013). It is not always obvious that monetary policy is well-equipped to achieve some objectives. For example, in the context of financial stability, there is a debate about whether monetary policy is an effective tool to address financial imbalances (e.g. Svensson 2017; Saunders and Tulip 2019). Similarly, evidence about the distributional effects of monetary policy is mixed, with some evidence suggesting that the effects of monetary policy are relatively evenly distributed along some dimensions (e.g. McKay and Wolf 2023). It is therefore unclear whether monetary policy could effectively target objectives related to inequality.

One risk posed by assigning additional objectives to the central bank is that doing so may potentially compromise the central bank's independence and/or impede its ability to achieve its primary objective of price stability (e.g. Bernanke 2022; Tucker 2022). If the central bank is required to make decisions that require large value judgements or with significant distributional consequences, there is a risk that the actions of the central bank become politicised. For example, Powell (2023) argues that addressing climate change seems likely to require policies that would have significant distributional effects along multiple dimensions. Additionally, in a central bank with multiple competing objectives, the objective of price stability can potentially be undermined by assigning a monetary policymaker who places more weight on other objectives. These considerations suggest that policy decisions with distributional consequences should either be made by the government or delegated to some other independent institution, keeping the central bank's mandate as narrow as possible.

11 For example, Woodford (2012) sketches a model in which the probability of a financial crisis varies endogenously depending on the state of the economy and the central bank's loss function includes a term related to the incidence of financial crises. In this model, it is optimal for monetary policy to respond to some measure of financial stability risk. He argues that the availability of additional policy instruments, such as macroprudential policy, should allow for better outcomes than assigning monetary policy sole responsibility for containing risks to financial stability. In a model with non-rational expectations about housing prices, Adam and Woodford (2021) show that it is optimal for the central bank to respond to unexpected changes in housing prices in addition to inflation and output gaps. In a model where emissions from production have a negative externality on productivity, Chen *et al* (2021) show that it may be optimal for monetary policy to respond to an 'emissions gap'. And so on.

Central Bank Objectives in Practice

Current interpretation of the Bank's objectives

The Reserve Bank Act mandates three objectives for monetary policy:[12]

1) the stability of the currency of Australia;
2) the maintenance of full employment in Australia; and
3) the economic prosperity and welfare of the people of Australia.

The interpretation of these objectives has evolved over time. The Governor and Government's common understanding of these objectives has been recorded in the SCMP since 1996 (most recently, in the 2016 SCMP). Currency stability has been interpreted as price stability and operationalised through the Bank's flexible inflation-targeting framework, under which the Bank aims to keep consumer price inflation between 2 and 3 per cent, on average, over time. The SCMP states that the Bank's primary monetary policy objective is price stability, since this is viewed as a crucial precondition for long-term economic growth and employment. The flexible nature of the inflation-targeting framework allows the Bank to account for the effects of monetary policy on real economic activity and employment in the short term, thus addressing the 'full employment' objective. In the wake of the Global Financial Crisis, the 'welfare' objective has been interpreted as providing flexibility to balance meeting short-term objectives with the build-up of longer-term risks to financial stability (e.g. 2016 SCMP; Bullock 2022; RBA 2022).

Objectives in other advanced economies

Table 1 summarises the current monetary policy objectives of other inflation-targeting central banks in advanced economies. The majority of these central banks have a single objective, which is almost always price stability. The exception is the Bank of Canada, which has a single mandate 'to promote the economic and financial welfare of Canada'; however, pursuing price stability and 'maximum sustainable employment' are considered effective means to achieve the welfare objective (Bank of Canada 2021). In practice, evidence suggests that most central banks with a single price-stability objective operate as if they followed a dual mandate by accounting for the effects of their policy decisions on real activity (Kuttner 2004).

A minority of central banks in Table 1 have explicit dual mandates, focusing on price stability alongside another objective. All central banks in Table 1 have financial stability included as part of their broader (non-monetary policy) mandates.

The Bank is unique amongst these central banks in having a triple mandate. While the Federal Reserve Act lists a third objective of promoting 'moderate' long-term interest rates, it is still considered as having a dual mandate. The reason given for this is that achieving price stability and full employment creates the conditions needed for long-term interest rates to settle at moderate levels, so the third objective is redundant (Federal Reserve 2021).

12 These objectives were originally outlined in the *Commonwealth Bank Act* 1945.

Table 1: Monetary Policy Objectives of Inflation-targeting Central Banks in Advanced Economies

Economy	Mandate Type	Objectives
Australia	Triple	Price stability, full employment, welfare
Canada	Single	Welfare
Euro area	Single	Price stability
Japan	Single	Price stability
New Zealand	Dual	Price stability, full employment
Norway	Single	Price stability
South Korea	Dual	Price stability, financial stability
Sweden	Single	Price stability
Switzerland	Single	Price stability
United Kingdom	Single	Price stability
United States	Dual	Price stability, full employment

Sources: Bank of Canada, Bank of England, Bank of Korea, European Central Bank, Federal Reserve System, Norges Bank, Reserve Bank of Australia, Reserve Bank of New Zealand, Swiss National Bank, Sveriges Riksbank.

Conclusion

A key message from the literature on central bank design is that the central bank should have a small number of well-defined objectives that are aligned with its policy instrument(s). This facilitates public scrutiny of the central bank's performance and reduces the risk that other objectives are elevated above the primary objective of price stability. Consistent with this message, most central banks in advanced economies have at most one monetary policy objective in addition to price stability. Viewed through this lens, the idea of assigning additional monetary policy objectives raises potential risks in terms of the Bank's ability to achieve its current objectives. Importantly, this does not mean that the Bank should ignore developments related to proposed additional objectives (e.g. climate change or trends in inequality), since these developments may affect the Bank's ability to achieve its current objectives (e.g. by directly affecting inflation or the transmission mechanism of monetary policy).

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Already publicly available material also relevant to the request:

Executive Accountability Framework -
https://www.rba.gov.au/about-rba/our-policies/executive-accountability-framework.html

What is monetary policy -
https://www.rba.gov.au/monetary-policy/about.html

Monetary Policy Explainer -
https://www.rba.gov.au/education/resources/explainers/pdf/the-transmission-of-monetary-policy.pdf?v=2023-04-18-15-34-37

Codes of Conduct:
Board -
https://www.rba.gov.au/about-rba/our-policies/code-conduct-rba-board-members.html

Staff -
https://www.rba.gov.au/about-rba/our-policies/code-conduct-rba-staff.html

Governance and Accountability -
https://www.rba.gov.au/publications/annual-reports/rba/2022/governance-and-accountability.html

Corporate Plan -
https://www.rba.gov.au/about-rba/pdf/corporate-plan-2022-23.pdf

Review of the RBA's approach to forward guidance -
https://www.rba.gov.au/monetary-policy/reviews/approach-to-forward-guidance/index.html