Trust in Central Banks

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Abstract: Trust in the central bank is an essential ingredient to a successful conduct of monetary policy. However, for many central banks trust has recently declined, for instance in the wake of the post-pandemic inflation surge, due to large errors in central banks' inflation forecasts, or given problems when exiting from forward guidance. The rapid, substantial and persistent erosion of trust make it clear that trust needs to be earned continuously. This paper reviews why trust is important, what determines it and how central banks can enhance it. It also argues that it is important for central banks to improve the measurement and monitoring of trust. It ends by highlighting some future challenges for maintaining trust.

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Introduction

Over the course of the early 2020s, the topic of trust in central banks has regained prominence both in academic research and in discussions among policymakers. The reasons for this are obvious – there have been at least three developments that challenged the extent to which the public trusts their central banks. First, the post-pandemic inflation surge brought inflation in many advanced economies to levels that had not been observed since the 1970s and 1980s. As most central banks have inflation targets in place, it became glaringly apparent that central banks had missed their own objectives by a wide margin. Second, and related to this, central bank's inflation projections turned out to be underpredicting the inflation surge substantially, and persistently so, tarnishing the image of central banks as expert and knowledge-based institutions. Third, once central banks wanted to tighten monetary policy to counteract the inflation surge, several of them still had forward guidance in place that was inconsistent with raising policy rates immediately.[2] Some decided to go ahead, raising rates earlier than what was expected based on the central bank's own forward guidance, leading to extensive criticism among the public and a loss in the credibility of the instrument of forward guidance – the effectiveness of which is entirely based on its credibility.

Against this background, this paper reviews the relevant literature (a substantial amount of which was released in the last few years). In so doing, it makes 10 statements about trust in central banks, covering the reasons why trust matters, the determinants of trust, means to generate and maintain trust, and future challenges to do so.

But what is trust in an institution? OECD (2017a) defines it as follows: "Institutional trust is generated when citizens appraise public institutions and/or the government and individual political leaders as promise-keeping, efficient, fair and honest". Related concepts are reputation and credibility, and these are often used interchangeably in the relevant literature. Often, reputation refers to the opinion that people hold about the central bank, and is usually seen as determined by people's assessment of the central bank actions and behaviour. Credibility is often related to the belief that the central bank will adhere to its communicated objectives; Blinder (1998, pp. 64-65) defines it as "... that your pronouncements are believed—even though you are bound by no rule and may have an incentive to renege". This makes it clear that these concepts are interrelated – having a

[2] For a review and critical discussion of the issues, see, e.g. Reserve Bank of Australia (2022).

"good" reputation will foster trust and credibility. Similarly, a central bank that is seen as credible is more likely to be trusted.

Statement 1: Trust and credibility are central to central banking

Central banks' mission statements or their codes of conduct often emphasise the importance of being a trusted central bank. The Reserve Bank of Australia's vision is "to be a world-leading central bank that is trusted for our analysis, service delivery and policies" (Reserve Bank of Australia 2023), and the Bank of Canada's vision is "to be a leading central bank – dynamic, engaged, and trusted – committed to a better Canada" (Bank of Canada 2024). The Bank of England's code of conduct stresses that the Bank's ability to achieve its mission "depends on public trust, and a belief that we will demonstrate the highest standards of public service" (Bank of England 2024), and the mission statement of the Eurosystem (i.e. the European Central Bank and the National Central Banks of the euro area) specifies that "in pursuing our objectives, we attach utmost importance to credibility, trust, transparency and accountability." (European Central Bank 2024).

That central banks put the issue of trust centre stage in their mission statements is not surprising, because trust is important for many dimensions of central banking. Banknotes will only serve their purpose if the public trusts that they are safe to use; the same will apply to digital currencies (Bijlsma, van der Cruijsen, Jonker and Reijerink 2023). Financial stability relies on trust that the financial system is stable. And monetary policy requires trust, along various dimensions – to keep inflation expectations anchored, to affect interest rate expectations, e.g. via forward guidance, and to ensure central bank independence. After all, monetary policy works largely by affecting forward-looking variables such as longer-term interest rates and other asset prices. This paper focuses on the monetary policy-related aspects of trust, and will turn to the relevant empirical evidence on these issues below.

A recent survey among former members of the ECB's Governing Council (which consists of six members of the ECB's Executive Board and the Governors of the National Central Banks of the euro area countries) asked about the objectives of central bank communication (Ehrmann, Holton, Kedan and Phelan 2024). Respondents were given various options, covering "enhance transparency", "manage expectations", "ensure accountability", "enhance credibility and trust" and "safeguard central bank independence". While all of these statements were seen as important, enhancing credibility and trust was viewed as the most important objective of central bank communication. More than 70% of respondents found this reason to be "extremely important", more than 20% answered "very important", and all remaining respondents thought this was "important".

But why is credibility and trust so important to policymakers? An earlier survey by Blinder (2000) where he solicited central bank governors' opinions on several questions related to central bank credibility gets at this question. The main reasons why credibility was seen as important by the respondents were that it makes disinflation less costly, helps keep inflation down once it is low, makes defending the currency easier and helps garner support for central bank independence.

Statement 2: Trust, not popularity, matters

Monetary policy has distributional effects, whether it uses its conventional or its unconventional tools. Raising interest rates, for instance, benefits savers but hurts borrowers. This implies that monetary policy is, at least at times, unpopular – an important reason for making central banks independent from government. By being independent, central banks can take their decisions independently from short-term political considerations. It follows naturally that an independent central bank also needs to establish its trust independently from the government. However, given the need to take unpopular measures, central banks should not strive for popularity, but for trust – or, to quote Warsh (2010): "The only popularity central bankers should seek, if at all, is in the history books."

As a trusted institution, a central bank will find it easier to conduct its policies also if these are unpopular with the public or even the government. Actually, it has been argued that the German Bundesbank has gained trust, which in turn has helped it keep its independence, precisely by being unpopular, namely by holding its line in various conflicts with the government (Berger and De Haan 1999; Issing 2018; Mee 2019).

The quest for trust rather than popularity might also impinge on the desirability of broadening central banks' mandates. In listening events with the general public, the ECB was often urged to broaden its mandate and policy actions in order to address wider societal and economic issues (see European Central Bank 2021). FOMC Chair Powell (2023) called for caution in that regard, arguing that "it is essential that we stick to our statutory goals and authorities, and that we resist the temptation to broaden our scope to address other important social issues of the day. Taking on new goals, however worthy, without a clear statutory mandate would undermine the case for our independence.”

Statement 3: Trust helps anchor inflation expectations and reduce uncertainty about future inflation

In their study of Dutch consumers, Christelis et al. (2020) find that trust in the ECB helps anchoring consumers’ inflation expectations, in two ways. First, it lowers consumers’ uncertainty about future price developments. Second, those who trust are less likely to hold inflation expectations that are far from the ECB’s inflation target. On average, consumers tend to have exaggerated inflation expectations (Weber, D’Acunto, Gorodnichenko and Coibion 2022; D'Acunto, Charalambakis, Georgarakos, Kenny, Meyer and Weber 2024). As higher levels of trust lead to an overall reduction in inflation expectations, this brings them closer to target. Importantly, however, the authors identify a non-linearity in this effect: trust in the ECB *raises* inflation expectations among individuals with *low* inflation expectations, while it *lowers* inflation expectations among those with *high* inflation expectations. Furthermore, the effect is stronger for those with high inflation expectations. In the middle of the distribution, the responsiveness is close to zero and insignificant, meaning that respondents who have inflation expectations close to target barely change them when their trust in the ECB increases. In other words, trust in the ECB helps anchoring inflation expectations around the ECB’s inflation objective – and effect that is identified after controlling for respondents’ knowledge about the ECB’s objectives, suggesting that institutional credibility can have some independent influence on people’s inflation expectations.

Corroborating evidence for the ECB is provided by Brouwer and De Haan (2022) in a later survey conducted among Dutch consumers, by Rumler and Valderrama (2020) for Austria and by Mellina and Schmidt (2018) for Germany, and the pattern also applies outside Europe: Niizeki (2023) provides causal evidence that decreasing trust in the Bank of Japan raised inflation expectations, moving them further away from the Bank of Japan’s inflation target.

But is it important to have consumer inflation expectations close to target? That consumers act upon their beliefs has been shown by a large number of studies, which are summarised in D'Acunto, Charalambakis, Georgarakos, Kenny, Meyer and Weber (2024). In particular, consumption decisions respond to consumers’ inflation expectations. Typically, spending increases if inflation expectations increase (see., e.g., D'Acunto, Hoang and Weber 2022). However, the opposite pattern results if an increase in future inflation is taken to be a stagflationary signal, leading to more precautionary behaviour (Coibion, Georgarakos, Gorodnichenko, Kenny and Weber 2024).

Statement 4: Trust helps contain political pressure on the central bank

Even if central banks have been made independent from government, this does not mean that this independence is always and everywhere respected by politicians – especially in recent years, when the concept of central bank independence has been discussed more critically also within the economics profession (Goodhart and Lastra 2018, Issing 2018).

Binder (2021b) assembles an extensive dataset on political pressure faced by 118 central banks in the 2010s. She shows that such pressure is frequent – on average, about 10% of central banks experience such pressure per year. Even for central banks with high legal independence, pressure is not uncommon. In the vast majority of cases, the central bank is pressured to *loosen* its monetary policy. And such pressure does impress financial markets. There is ample evidence that asset prices respond – for the ECB and the US FOMC (Demiralp, King and Scotti 2019), or in a panel of countries that includes in particular Turkey, where the central bank has been exposed to particularly sizeable pressures (Çakmakli, Demiralp and Güneş 2023). To give one example, tweets by former US president Trump about the US Federal Reserve have been analysed in several studies, and have been shown to affect asset prices (Bianchi, Gómez-Cram, Kind and Kung 2023, Camous and Matveev 2021, Tillmann 2020) and even consumers' long-term inflation expectations (Binder 2021a).

This issue connects with trust in the central bank. As Ehrmann and Fratzscher (2011) show, low public trust in the ECB increases the likelihood that national politicians exert pressure on the ECB to conduct a looser monetary policy, and that they assess the ECB's policy not with a euro area perspective, but instead against the background of their national growth performance. This evidence supports the notion that a trusted central bank is harder to criticise and to pressurise, as politicians are more likely to face resistance by the electorate in such cases – as illustrated in May 1974 by then German chancellor Helmut Schmidt. In a confidential report (which was subsequently leaked to the media), he wrote to the leadership of Germany's social democratic party: "We are not able to make use of any public conflict with the Bundesbank: public opinion would not stand on our side."[3]

Statement 5: Trust facilitates the achievement of the central bank objective

Beyond anchoring inflation expectations and containing political pressure, are there further effects triggered by trust in the central bank, in particular with regard to the macroeconomy, i.e. when it comes to business cycle stabilisation and controlling inflation developments? The literature on this question is surprisingly scant.

A large literature studies the role of reputation in optimal monetary policy. For instance, the seminal paper by Barro and Gordon (1983) shows that building up a reputation allows the central bank to improve upon discretionary monetary policy. Moscarini (2007) adds to this that a central bank's (reputation for) competence makes monetary policy under discretion credible and transparent, as the public expects that a competent central bank will not want to stimulate output by generating inflation surprises, but instead uses its discretion to pursue its postulated target.

But the issue of trust goes beyond reputation. Even a central bank that is reputed for its anti-inflationary policy might face a loss of trust, for instance if the public starts doubting whether the central bank is actually able to achieve its objective. Bursian and Faia (2018) analyse this question in a macro model, by endogenising trust and studying its role for the monetary transmission mechanism. In their model, trust emerges from a strategic interaction between policy makers that face a time inconsistency problem and agents that are averse to "betrayal". Agents rely on past policy outcomes as signals to decide whether or not to trust that the central bank will stick to its anti-inflationary policy stance in the future. They show that reduced trust increases the risk aversion of private agents and amplifies business cycle fluctuations. It also steepens the sacrifice ratio because a change in the policy rate has weaker effects on future consumption and inflation expectations. A related mechanism is at play in Park (2023), where increasing central bank credibility, through anchoring private agents' expectations, stabilises the macroeconomy.

More recently, De Grauwe and Ji (2024) take this issue further by differentiating trust in the central bank's inflation target and trust in the central bank's capacity to stabilise the

[3] Quoted from Mee (2019), page 298.

business cycle. The first is related to the concept of reputation, i.e. the extent to which the central bank is credible in its inflation-fighting objective, and whether the inflation target itself is therefore credible. The second relates to the belief that the central bank is actually able to achieve its objective, even if it credibly likes to pursue it. Their model allows for a “good” and a “bad” trajectory of the output gap and inflation in response to large negative shocks. In this setting, initial conditions matter. Unfavourable initial inflation and output expectations tend to put the economy onto a bad trajectory and lead to a collapse of trust, whereas favourable initial expectations make the economy respond along the good trajectory and leave trust unaffected.

Statement 6: Trust is determined by many factors, some of which lie outside the central bank’s control

Many empirical studies test for the drivers of trust in central banks. Often, these relate to trust in the ECB and are based on the Eurobarometer survey, a public opinion survey that has been conducted on behalf of the European Commission since 1974, i.e. long before the ECB was established. It is conducted at least twice a year in all European Union (EU) member states and contains questions on trust in many EU institutions, among which (since its inception) the ECB. For this survey, micro data are made available to researchers, which allows studying the importance of socio-demographic characteristics.

Political orientation, gender, income education level and employment status have been identified as key factors explaining trust in the ECB (Farvaque, Hayat, and Mihailov 2017; Bursian and Fürth 2015). Higher income and education are correlated with higher levels of trust, whereas females, unemployed respondents and individuals more to the left of the political spectrum report lower trust on average. Also regional or national variation matters – for instance, in regions where general trust in others is low, trust in the ECB is also lower than in regions with high general trust (Angino, Ferrara, and Secola 2022). Similar findings have been reported for other countries where comparable data is available. Age is another determinant – older respondents tend to trust the central bank more, both in New Zealand (Hayo and Neumeier 2021) and in the UK (Farrell, Fry, and Fry 2021). The latter study also identifies regional variation, with higher levels of trust in the Bank of England being reported in London (controlling for other socio-demographic factors).

Going beyond socioeconomic determinants, several studies of trust in the ECB have studied the role of macroeconomic developments, and identified several important determinants. Somewhat surprisingly, several of these are unrelated to the ECB's mandate and not necessarily under its control. Bursian and Fürth (2015) show that real GDP growth impacts trust positively, whereas government debt, government bond yield spreads and the unemployment rate have a negative effect on trust. Neither of these are covered by the ECB's single mandate, which is price stability. What is more, the only variable included in their analysis that is related to the ECB's mandate, inflation deviations from the target level, is not found to determine trust in the ECB once the other macroeconomic conditions are controlled for.[4] It is also interesting to note that it is national rather than euro area macroeconomic developments that determine trust in the ECB (Wälti 2012), even though the ECB's mandate relates to price stability in the euro area as a whole, not to price stability in the individual member states.

Beyond regular macroeconomic developments, trust is particularly affected by crises. Ehrmann, Soudan, and Stracca (2013) study the fall in ECB trust during the global financial crisis and show that the severity of the banking sector's problems in the various countries explains a substantial share of the fall in trust in the ECB. This is in line with the more recent study by Brouwer and de Haan (2022), which finds that respondents whose bank was bailed out during the global financial crisis report more trust in the ECB.

Also the COVID-19 pandemic had a bearing on trust in the ECB. Based on a consumer survey that asks directly about trust in the ECB, van der Cruijsen and Samarina (2023) find that respondents who reduced the number of working hours due to COVID-19 have lower trust in the ECB than those with unchanged working hours. Coleman and Nautz (2023) take a different approach. In their survey of German consumers, they ask for respondents' long-term inflation expectations and use these as a measure of the credibility of the ECB's inflation target. They find that credibility has decreased in the course of the deep recession implied by the Covid-19 pandemic – not because of fear about low inflation, but (even though inflation rates in Germany had been below 2% for several years) because more people expected inflation to be clearly above 2% over the medium term.

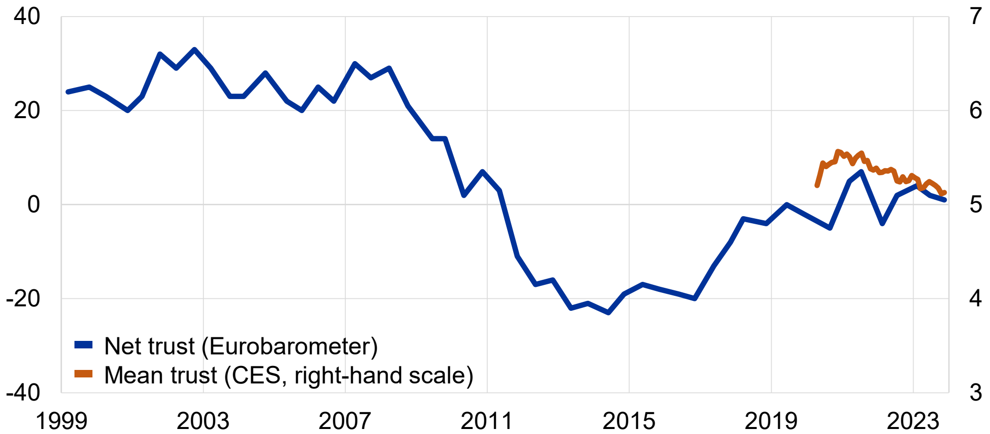
[4] This study relates to the early years of the ECB, namely from 1999 to 2010, when inflation deviations from target were relatively moderate, especially compared to the recent inflation surge. An update of the analysis would therefore be warranted.

Statement 7: Trust is more easily lost than gained

As just discussed, trust in central banks is not only determined by its inflation-fighting credentials. Trust is correlated with the macroeconomy and with other developments that the central bank is associated with in the minds of the general public. Especially during crises, trust in central banks tends to fall, and at times precipitously. This is illustrated in Figures 1 and 2, which report net trust in the ECB (calculated as the share of respondents who tend to trust the ECB minus the share of respondents who tend not to trust it, based on Eurobarometer data) and net satisfaction with the Bank of England (calculated as the share of respondents who are satisfied with the Bank of England minus the share of those who express their dissatisfaction, based on the Bank of England's Inflation Attitudes Survey).

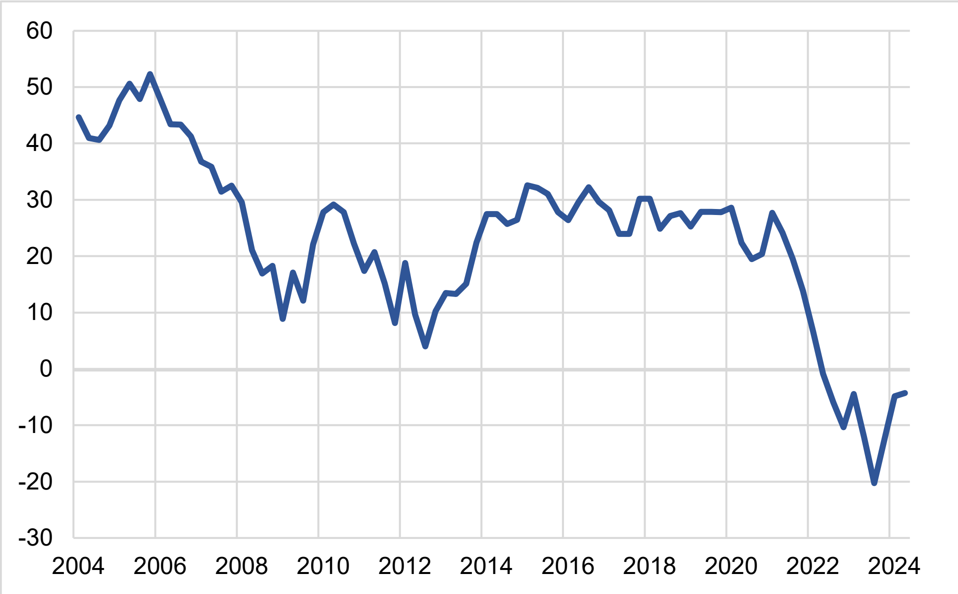
In its first decade, net trust in the ECB remained stable at around 20-30%, but then declined substantially in the wake of the global financial crisis and the European sovereign debt crisis, to a low of around -20%. Even though it started to recover subsequently, it did so only slowly (Bergbauer, Hernborg, Jamet, and Persson 2020), and still has not returned to its earlier levels.

Figure 1: Trust in the ECB



Sources: Standard Eurobarometer, ECB Consumer Expectations Survey (CES) and author's calculations. Reproduced from Dreher (2024).
Notes: Standard Eurobarometer data cover survey waves 51 (spring 1999) to 100 (autumn 2023). Net trust is the percentage of respondents answering "tend to trust" minus the percentage answering "tend not to trust". Respondents who answered "don't know" are disregarded. CES data are a weighted average and cover monthly survey waves from April 2020 to December 2023. The CES trust question is answered on a scale of 0 to 10 (with 0 being no trust at all and 10 being complete trust).

Figure 2: Satisfaction with the Bank of England



Sources: Quarterly Bank of England Inflation Attitudes Survey and author's calculations.
Notes: Net satisfaction based on answers to the question "Overall, how satisfied or dissatisfied are you with the way the Bank of England is doing its job to set interest rates in order to control inflation?" Possible answers are: "Very satisfied", "Fairly satisfied", "Neither satisfied nor dissatisfied", "Fairly dissatisfied", "Very dissatisfied" and "No idea". Net satisfaction is calculated as the difference between the share of respondents who answer they are very or fairly satisfied and the share of respondents who are very or fairly dissatisfied. Numbers are expressed in %.

The chart for the Bank of England shows a similar pattern, whereby satisfaction can drop sharply and struggles to recover subsequently. Net satisfaction started from 40-50% in the early 2000s, then fell to single-digit (albeit positive) levels before it recovered partially to 20-30%. Subsequently, in the course of the post-pandemic inflation surge, it fell sharply into negative territory, bottoming out at -20% in Q3 2023.

In contrast to the sharp decline during the recent inflation surge for the Bank of England, trust in the ECB does not seem to have been affected much (see Figure 1). This is in line with the results by Bursian and Fürth (2015) reported above, that trust is determined by many macroeconomic developments, but not necessarily inflation. However, in other surveys, a loss of trust is visible also for this latter period. Based on a survey among Dutch consumers, van der Cruijsen, van Rooij, and de Haan (2023) identify a substantial drop in trust in both the ECB and the Nederlandsche Bank (the National Central Bank of the Netherlands). Remarkably, this study also finds that most respondents think that maintaining price stability is the responsibility of the government. Not surprisingly, trust in politics therefore also saw a decline.

A drop in trust in the ECB in the recent high inflation period is also observed in the ECB's Consumer Expectations Survey (CES; see Dreher (2024) and Figure 1), which contains a more granular measure of trust, measured on a scale of 0 to 10 (with 0 being no trust at all and 10 being complete trust). Also, Guillochon and ter Ellen (2024) report that inflation starts to determine trust in the ECB once it becomes a concern for respondents, i.e. only once it has crossed a certain threshold.

The picture that emerges from this is that even though results differ across the specific surveys (more on this in the next section), there are several instances where trust in (or satisfaction with) the central bank declines rapidly. All recent crises showed this pattern, be it the global financial crisis, the European sovereign debt crisis, the pandemic or the post-pandemic inflation surge. In contrast to the rapid fall in trust, it is also a common pattern that recovery is slow and only partial. This question is analysed more systematically in Istrefi and Piloiu (2020), who show that shocks to economic policy uncertainty induce economic contractions and sharp deterioration in trust or satisfaction measures, and that rebuilding trust takes longer than the recovery of economic growth.

Statement 8: To monitor trust, it needs to be measured; this is not straightforward

The concept of trust is not well defined, which implies that it is not straightforward to measure it. But measurement is a precondition for monitoring trust. The complexity of measuring in particular institutional trust is described in the guidelines for measuring trust proposed by the OECD (2017b).

The literature on trust in central banks as well as the practice within central banks have taken different approaches. One possible measurement is the extent to which long-term inflation expectations are anchored at the central bank's target. This is often done based on financial market data. However, long-term inflation expectations are not directly observed from asset prices, and hence need to be estimated, e.g. by adjusting for time-varying risk premia (for a review of this literature, see Baumeister 2023).

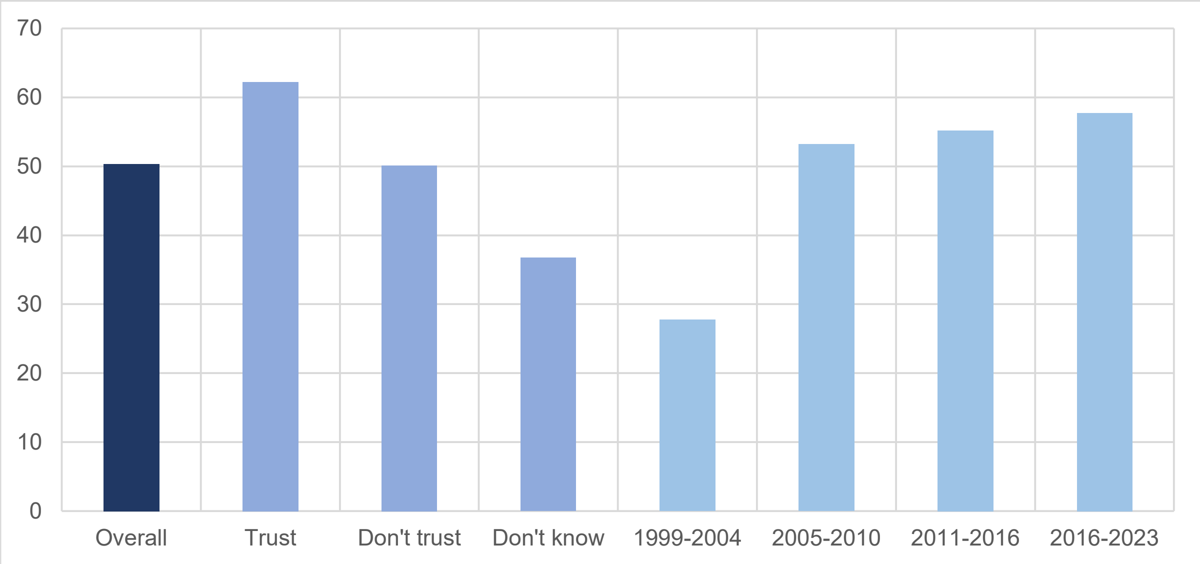
Another avenue to measure the anchoring of inflation expectations is by conducting surveys among professionals, firms or households. For the case of the ECB, professional expectations are collected through the ECB's Survey of Professional Forecasters (SPF; Garcia 2003), firms' expectations via the Survey on the Access to Finance of Enterprises (Baumann, Ferrando, Georgarakos, Gorodnichenko and Reinelt 2024), and consumers' expectations through the CES (Georgarakos and Kenny 2022). Such surveys allow going beyond the aggregate statistics, which can mask considerable heterogeneity. Binder, Jensen and Verbrugge (2023) investigate the US SPF and show that while the aggregate long-run inflation expectation has usually been near the Federal Reserve's inflation target, individual forecasters' expectations fluctuate substantially and show sizeable deviations from the inflation target. The importance of looking at distributions rather than central tendencies is also emphasised by Reis (2023), who furthermore calls for a combination of different measures to get a robust measurement of inflation expectations.

Aa an alternative, in surveys it is also possible to ask respondents directly about the trust they place in the central bank, as is done for instance in the Eurobarometer for the ECB. Yet also when asking respondents directly, measurement poses several challenges. As discussed in the previous section, different surveys about trust in the ECB yield different results because they use slightly different wordings or options to answer. For instance, while in the Eurobarometer survey, the respondents can answer that they "Tend to trust", "Tend not to trust" or "Don't know", in the DNB Dutch Household Survey, respondents are given a ten-point scale, and Hayo and Neumeier (2021) offered a five-point scale.

Not only the wording, but also the order of questions in the survey matters. Angino and Secola (2022) experiment with the positioning of the question about trust in the ECB in the ECB's Knowledge and Attitude Survey. They find that reported trust in the ECB is higher when it is asked early (the authors refer to this as "instinctive" trust) than when it asked later, after the survey participants had the chance to learn and think more about the role of the central bank (what the authors label "reflective" trust). This result is driven in particular by respondents who feel they have little knowledge about the central bank's policies.

Often, the various surveys that cover trust in the central bank contain related questions about trust in other institutions. This can generate framing effects, for instance by connecting the national central bank to the national government (Hayo and Neumeier (2021) show that respondents place more trust in the Reserve Bank of New Zealand (RBNZ) if they have higher trust in government institutions in general, whereas Niţoi and Pochea (2024) find that this link is weaker for more financially literate respondents), or in the case of the ECB to other European Union institutions. The Eurobarometer asks inter alia about trust in the EU as well as about trust in the European Commission, the European Parliament and the ECB. As highlighted by Ehrmann, Soudan and Stracca (2013), most respondents do not differentiate their answers across the different institutions.

Figure 3: Share of Eurobarometer respondents with identical answers for trust in 4 EU institutions



Sources: Standard Eurobarometer and author's calculations.
Notes: Standard Eurobarometer data cover survey waves 51 (spring 1999) to 100 (autumn 2023). The chart reports the share of respondents who provide the same answer with regard to their trust in all four EU institutions (the EU, the European Commission, European Parliament, ECB), for the full sample ("Overall"), for those who tend to trust the EU, who tend not to trust it or who don't know, and the share of share of respondents who provide the same answer with regard to their trust in all four EU institutions for different subsamples. Numbers are expressed in %.

This also holds true for an updated sample. Looking at all standard Eurobarometer waves from 1999 to 2023, slightly more than 50% of respondents provide the same answer for all four institutions (see Figure 3). 62% of those who report that they trust the EU (which is the first of the four institutions covered in the survey) provide the same answer throughout. More differentiation takes place among those who say they do not trust the EU (here, 50% provide the same answer for all four institutions) and those who say they do not know whether they trust the EU (in this case, 37% also file a don't know response for all institutions). The share of respondents who do not differentiate their answers has been increasing over time. It started off with 28% in the first 6 years of the survey, and stands now at 58% (59.3% in the last two years covered, 2022-2023). The high interconnectedness of responses is also corroborated by Dreher (2024) based on the ECB's CES. He documents a correlation of over 72% for all institution pairs when pooling all survey responses, and based on a principal component analysis identifies both an EU factor and a central bank factor, which implies that trust in the ECB is influenced by trust in EU institutions and in central banks more broadly.

As discussed above, trust in the central bank or in its inflation-fighting credentials is one thing, but trust that the central bank will actually be able to achieve price stability, and thus deliver on its mandate, is another. To get at this perspective, it is important to adjust the relevant survey question. This has been done in Ehrmann, Georgarakos and Kenny (2023). Their question on credibility is formulated as "How likely do you think it is that the ECB will maintain price stability in the euro area economy over the next 3 years?", and respondents can give any answer between 0% and 100%. Respondents are not provided with any further information about what price stability means or how it should be interpreted, to avoid framing effects. They are therefore able to provide their perception of the likelihood that price stability will be achieved, consistent with their own subjective understanding of price stability. This novel measure of perceived credibility yields plausible results, for instance because higher credibility is associated with better-anchored medium-term inflation expectations.

Statement 9: There are ways to enhance trust

Above, I argued that trust is determined by many factors, some of which lie outside the central bank's control. While this is certainly the case, it also holds that there are avenues for the central bank to enhance trust. Clearly, the most important avenue is to deliver on the mandate. In Blinder's (2000) survey, "establishing a history of living up to its word" was ranked as the most important factor in building credibility. In line with this, Goldberg and Klein (2011) find that the ECB started to gain credibility through its policy decisions, and in particularly following its first monetary tightening. Similarly, Bauer, Pflueger and Sunderam (2024) show that following the long-lasting episode where US policy rated were constrained ay the zero lower bound, markets had to re-learn the Federal Reserve's reaction function, and did so once the Federal Reserve started hiking policy rates to counteract the inflation surge.

But there are also other factors that can help enhance trust and are (at least partially) under the central bank's control. Transparency is one of them (van der Cruijsen and Eijffinger 2010; Horvath and Katuscakova 2016) – but on what issues? In particular, how transparent should central banks be in situations where less favourable issues would need reporting (such as, for example, during the recent inflation surge and the poor performance of central banks' forecasting models)? Eickmeier and Petersen (2024) provide evidence that speaks to this issue based on a survey of German consumers. Respondents who care about the central bank's *competence* report higher trust in the ECB – evidence which is in line with results for Israel in Kril, Leiser, and Spivak (2016). In contrast, Eickmeier and Petersen (2024) also find that respondents who place greater importance on *values* (such as the integrity of policy makers, honesty in communication and caring for the well-being of the general public) tend to trust the ECB less. This suggests that the traditional focus of many central bank communications on the central bank's competence is well placed, but should be extended with a stronger emphasis on values – even (or possibly especially) when things are not going according to plan, a conclusion that is also in line with the broader report on how to rebuild public trust issued by the OECD (2017b).

One example of such communication is the ECB's dealing with its recent forecast errors. The ECB decide to tackle the issues up-front and openly, by providing thorough analysis on the source of the forecast errors and by promising follow-up on the side of the ECB (Chahad, Hofmann-Drahonsky, Meunier, Page and Tirpák 2022 and Chahad, Hofmann-Drahonsky, Page and Tirpák 2023). A similar approach has been adopted by other central banks (Bank of Canada 2022). That such communication might help enhancing trust is also in line with the findings by McMahon and Rholes (2023), who show that previous forecast errors by the central bank affect its credibility, but that communication can partly mitigate the effect of the forecast errors.

Another area where central banks can help improve trust is by enhancing knowledge about central banking matters. An impressive number of papers has shown, for various countries and many different sample periods, that either financial literacy more generally or knowledge about central banking issues enhances trust (Hayo and Neuenkirch 2014; Mellina and Schmidt 2018; Haldane and McMahon 2018; Hayo and Neumeier 2021; Brouwer and de Haan 2022; van der Cruijsen and Samarina 2023; Niţoi and Pochea 2024). This suggests that increased educational efforts might help overcome what Haldane (2017) refers to as a "twin deficit" problem, whereby central banks are faced with both, a deficit of public understanding and a deficit of public trust.

But how should this be done? After all, Hwang, Lustenberger and Rossi (2023) suggest that giving more speeches might be counterproductive and *reduce* the level of trust that is endowed to the central bank, so it is likely not just about increasing the quantity of communications. One issue is to ensure that the communications can be understood by the public. Bholat, Broughton, Ter Meer, and Walczak (2019) provide experimental evidence that the relatability of information matters: more relatable content helps increase trust and furthermore improves the perception of the central bank, a result that is corroborated by subsequent work (Mochhoury 2023).

Furthermore, simplicity is another factor that helps getting the central bank messages through to its citizens. McMahon and Naylor (2023) argue that complex messages reduce attention to the communication, but that it is less important to reduce the "semantic" complexity than to tackle the "conceptual" complexity of texts. In other words, while it might not harm to improve on margins such as shortening word and/or sentence length, it is particularly valuable to reduce the use of jargon. Importantly, the study finds that conceptual complexity is detrimental to getting the central bank message through even to individuals with economics degrees, i.e. people who possess prior information about central banking issues.

Another important dimension is to not only confront the public with facts, but to also provide explanations. In their randomised control trial (RCT) based on the ECB's CES, Ehrmann, Georgarakos and Kenny (2023) find that making consumers aware of the central bank's inflation target enhances credibility. Respondents who are provided with factual information about the inflation target report higher levels of credibility that the ECB will achieve price stability. But the effects of this information treatment vanish quickly, and no credibility gains are observed among the less financially literate. In contrast, by providing information about the target together with some background explanations about the rationale for the target and its implications for how monetary policy can stabilise the economy, the effect on credibility is substantially larger, it is more persistent, and it also gets through to the less financially literate respondents.

Statement 10: Several developments will make it more challenging to maintain trust going forward

The previous discussion has shown that gaining and maintaining trust is a worthwhile, but not an easy task. Going forward, it might become even more challenging to do so, for various reasons.

First, economies might be hit by sizable and persistent supply shocks more often (Carstens 2022). Monetary policy affects demand conditions in the economy, so it is much easier for central banks to deal with demand than with supply shocks. The post-pandemic inflation surge has likely been caused (or at least been strengthened) by major supply shocks (Lagarde 2024), and has already led to a deterioration of trust in central banks. More of this might be under way if central banks are indeed more often faced with supply shocks.

Second, there is a notable rise in populism. As discussed by Funke, Schularick and Trebesch (2023), this tends to foster economic disintegration, decreasing macroeconomic stability and the erosion of institutions – none of which will be conducive to enhancing trust in central banks. The rise of populism has already been related to low trust in government (Algan, Guriev, Papaioannou, and Passari 2017). In addition, the rise in populism endangers central bank independence (Goodhart and Lastra 2018) and the likelihood that populists' criticism of central banks' policies will be taken on by the general public.

A third factor is the changing media landscape. While it still holds that consumers tend to learn about central banking issues (if at all) from the traditional media (Gardt, Angino, Mee and Glöckler 2021), social media are gaining in importance. Research has shown that discussions of central bank actions on social media are particularly influential when they are critical: in their study of tweets about the ECB, Ehrmann and Wabitsch (2022) provide evidence that tweets with negative, stronger or more subjective views are more likely to be retweeted, liked or replied to. This implies that social media can act as a multiplier of central bank criticism, thereby further complicating the rebuild of trust in the institution.

Fourth, and related to the rise of social media, there are increasing threats of disinformation and misinformation (i.e. the spread of false information with our without the intention to mislead the recipient). While Budak, Nyhan, Rothschild, Thorson and Watts (2024) find that exposure to false content is low and concentrated among specific user groups, central banks have already been victims to fake news, such as deepfake videos featuring central bank governors. Cœuré (2017) has furthermore warned about the risk of fake or low quality statistics for central banks.

Last, the broader mandates that central banks have taken on in recent years have increased the complexity of the central bank and its communication. For instance, there is an asymmetric reputational risk for a central bank that is entrusted with financial supervision (Goodhart 2002). While successful supervisory roles usually go unnoticed, failures attract a lot of media attention and might adversely affect trust in the supervisory wing of the central bank. Such a decline in trust could, in turn, spill over to the central bank's monetary policy function if the public does not distinguish between these two functions but instead forms a view of the central bank in general (Born, Ehrmann and Fratzscher 2012).

Conclusion

Trust is central to the conduct of monetary policy, but has for various reasons taken a hit in recent times. Past experience suggests that trust can fall precipitously, but is much harder to rebuild. And maintaining or rebuilding trust might become even more challenging going forward. How should central banks deal with these challenges? Clearly, central banks need to be aware of them, monitor developments in trust and strengthen their communication with the general public. An improved understanding of the role of the central bank will make citizens less susceptible to become a victim of disinformation, to understand and disentangle the various central bank functions and to understand the limits as to what central banks can and cannot achieve, for instance when faced with supply shocks.

The increased emphasis of several central banks on their communication with the general public is a promising avenue. As Blinder, Ehrmann, de Haan and Jansen (2024, p. 451) write in conclusion of their literature review of central bank communication with the general public: "All this makes us think that building trust may be the most important objective of central bank communication with the general public—and that there is at least some hope for success."

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