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TOWARD A HOLISTIC APPROACH TO CENTRAL BANK TRUST

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Beyond Technocracy: Toward a Holistic Approach to Central Bank Trust
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ABSTRACT

We examine public trust in the European Central Bank (ECB) and its determinants using data from the Bundesbank Household Panel survey for Germany. Drawing on insights from political science and psychology, we move beyond technocracy and develop a more holistic account of central bank trust. We show that trust in the ECB is associated with both perceived competence—defined as effectiveness in maintaining price stability and reliance on rules, scientific analysis and data—and perceived values—particularly the integrity of senior policymakers, honest communication and broader societal concern. Respondents who report that competence matters more report significantly higher trust in the ECB. In contrast, those who place greater importance on values tend to express lower trust. Trust in the ECB is also strongly associated with trust in political institutions more generally and, to a lesser extent, interpersonal trust. Together, our findings offer a fresh perspective on trust in central banks, indicating that it is necessary to move beyond a purely technocratic approach to central bank policy. Importantly, such efforts are fully consistent with—and may even support central banks’ existing mandates and institutional independence.

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Augustín Carstensen (BIS): *“The soul of money is trust”*.¹

Christine Lagarde (IMF at the time, later ECB): *“The ECB needs to be understood by the markets that transmit its policy, but it also needs to be understood by the people whom it ultimately serves. People need to know that it is their central bank, and it is making policy with their interests at heart. One of the priorities of my Presidency, if confirmed, will be to reinforce that bridge with the public.”*²

1 Introduction

Trust is widely recognized as a cornerstone of monetary stability. Trust in stable money, in turn, depends on trust in central banks. Empirical research demonstrates the significance of public trust in central banks for anchoring inflation expectations (e.g. [Christelis et al. 2020](#), [Mellina and Schmidt 2018](#)). Public trust also underpins acceptance of central bank independence, which shields monetary policy from political interference and, in turn, reinforces its effectiveness ([Schnabel 2020](#)). Nurturing public trust in central banks is therefore central to safeguarding monetary and macroeconomic stability.

[Figure 1](#) illustrates the trajectory of trust in the European Central Bank (ECB) since its inception. Trust was initially high, with more than 60% of euro-area citizens reporting confidence in both the ECB and the euro.³ However, following the Global Financial Crisis, trust in the ECB declined sharply, plummeting to 30% in the mid-2010s. Although trust has partially recovered, only around half of surveyed respondents currently report that they trust the ECB. In contrast, trust in the euro has remained relatively stable, at over 75% in recent years. Notably, trust in the ECB closely tracks trust in other political institutions. This pattern highlights the need for a better understanding of the factors that shape trust in central banks.

To foster trust in central banks, emphasis has so far been placed on (technical) competence, particularly regarding a strong track record in achieving their primary objective of price stability. Decisions are rooted in rules, technical analyses, data, and scientific evidence. Some

¹See [Carstensen \[2022\]](#), General Manager of the Bank for International Settlements, speech at the conference on “Data, Digitalization, the New Finance and Central Bank Digital Currencies: The Future of Banking and Money” at Goethe University in Frankfurt / M.

²See [Lagarde \[2019\]](#), Opening Statement by Christine Lagarde at hearing before the Economic and Monetary Affairs Committee of the European Parliament.

³We present separate series for Germany and the rest of the euro area to facilitate comparison with our German-based survey data.

Figure 1: Trust in the ECB and in other political institutions and interpersonal trust



Notes: Trust by survey participants from Germany (by DE), and the euro area without Germany (by EU). Trust in euro-area institutions are taken from Eurobarometer. Survey participants are asked: “Do you tend to trust or tend not to trust the European Central Bank / the national government / the EU / the EU parliament?” (or very similarly). We report shares of “Tend to trust” (over sum of “Tend to trust”, “Tend not to trust” and “Don’t know”). Survey participants are asked: “Please tell for each statement, whether you are for it or against it. A European economic and monetary union with one single currency, the euro”. We show the shares of “For” (over the sum of “For”, “Against”, “Refusal”). Interpersonal trust data are taken from the Integrated Values Surveys (IVS), which is the joint EVS (European Values Study) - WVS (World Values Survey) time series data. The question asked is: “Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?”. We report the share of respondents who state “Most people can be trusted” (over sum of “Most people can be trusted”, “Can’t be too careful” and “Don’t know”). The euro area comprises Belgium, France, Greece, Italy, Ireland, Luxembourg, Spain, the Netherlands, Finland, Portugal, Austria. Country data are available for different time periods. For each country the measures were linearly interpolated and then, to form the aggregate, pooled together using GDP (2019) weights.

attention is paid to values, but far less consideration is given to them. Transparency has notably improved in recent decades, following a period of limited and cryptic communication by central bankers (Bernanke 2015, Jansen et al. 2008, Ehrmann et al. 2024). Efforts are made to provide information to financial markets and the public regarding the present and future state of the economy, along with explanations of actions and outcomes through speeches, regular publications, and, increasingly, social media. Moreover, institutional independence is upheld to safeguard the integrity of central banks and their leaders.

The paper makes two major contributions. First, it introduces a fresh, more holistic perspective on trust in the ECB that moves beyond a purely technocratic understanding. By holistic, we mean an approach that views trust as emerging from the interaction of multiple, interconnected factors rather than as the product of technical competence alone.⁴ To develop this perspective, we draw on two complementary interdisciplinary literatures that, despite their different origins, converge on remarkably similar conclusions about the additional drivers of trust. First, we build on the OECD framework for public trust and related

⁴Our approach, hence, aligns with ontological holism, which views reality as interconnected wholes rather than isolated parts, making entities incomprehensible when analyzed in isolation. Instead, we assume, as discussed later, that trust *emerges* from human interaction.

work in political science ([Murtin et al. 2018](#), [OECD 2017](#)), which argues that institutional trust depends not only on competence but also on public institutions’ adherence to shared values, such as integrity, openness, and fairness. This literature also recognizes interpersonal trust as an important foundation of institutional trust. While these insights have so far been applied primarily to public institutions, we argue that they are equally relevant and applicable to central banks. Second, we draw on insights from humanistic (depth) psychology, which likewise emphasizes the central role of shared values and interpersonal trust, viewing trust as emerging through human relationships and shaped by the values individuals bring to these interactions. Since central banks are ultimately composed of people interacting with citizens, these relational mechanisms should also matter for trust in central banks.

Applying these interdisciplinary approaches and introducing a new perspective on central bank trust brings about several challenges. One is that these dimensions are more difficult to measure, although advances in survey design increasingly make it possible to capture them empirically. A closely related challenge is that they are typically expressed in disciplinary languages and conceptual frameworks that differ from standard economic terminology, limiting cross-disciplinary learning. More fundamentally, this reflects a general human tendency: individuals and disciplines alike rely on familiar frameworks and habits of thought, making it difficult to move beyond established perspectives and embrace new ways of thinking. This is also reflected in the conventional view of central banks as independent, mandate-driven technocratic institutions. While this perspective remains fundamental to their legal framework, central banks are also embedded in a broader macroeconomic and societal environment. This is increasingly reflected in practice—for example, through the ECB’s climate engagement and its efforts to make communication more relatable. Yet how to reconcile this institutional independence with central banks’ broader interconnectedness with society—and what this implies for the formation of public trust—remains an open conceptual question. Our paper takes on these challenges.

As a second contribution, building on this conceptual foundation, we provide an empirical contribution by developing a first attempt to incorporate more holistic trust factors into a formal empirical model of central bank trust. We draw on novel data from the Bundesbank Household Panel (BOP-HH), a rich longitudinal survey of more than 4,000 households in Germany. We augment this dataset with non-standard questions designed specifically to elicit respondents’ trust in the ECB and the potential determinants influencing their own trust. The BOP-HH is uniquely suited to our purpose, as it combines detailed measures of institutional trust, political attitudes, and interpersonal beliefs, enabling a nuanced analysis

of how different dimensions of trust interact. Leveraging this dataset we carry out a regression analysis to examine relationships between these factors and trust in the ECB. While this empirical analysis cannot fully capture the richness of the broader conceptual perspective, it offers an initial quantitative step toward integrating these dimensions into an analysis on central bank trust.

Specifically, we ask survey respondents which factors shape their trust in the ECB. Alongside competence, we consider fundamental values that have received limited attention in the central banking literature, including the perceived integrity of ECB leadership, honesty in communication—even when outcomes are unfavourable—and a demonstrated concern for broader societal welfare. We also examine whether respondents perceive the ECB as acting in isolation or as embedded within a broader context. A second dimension we examine is interpersonal trust. As shown in [Figure 1](#), levels of interpersonal trust are closely aligned with trust in the ECB and political institutions more generally. Given this pronounced comovement, it is natural to ask whether changes in trust in the ECB are part of a more general societal crisis of trust rather than being driven by factors specific to the ECB. This motivates our further analysis of the relationship between trust in the ECB and broader societal trust.

Our approach is consistent with recent efforts by central banks to better connect with the public through more transparent, and relatable communication. An example is the “Listening” events pioneered by the Federal Reserve and later adopted by the ECB and other central banks, which facilitate direct, face-to-face engagement between policymakers and citizens. It also aligns with and goes beyond recent empirical work illustrating that central bank trust is closely tied to broader institutional trust (e.g., [Brouwer and de Haan 2022](#), [Ehrmann et al. 2013](#)) and is strengthened by transparent, relatable communication (e.g., [Bholat et al. 2019](#), [Haldane and McMahon 2018](#), [Kryvtsov and Petersen 2021](#)). This literature also emphasizes the importance of social and climate awareness (e.g., [Eickmeier and Petersen 2026](#), [Krill et al. 2016](#)) and the role of implicit “general impressions” in shaping public attitudes toward central banks ([Angino and Secola 2022](#)). Our paper adds to this by demonstrating how these and additional factors jointly relate to trust in the ECB.

Our main findings are as follows. Respondents report that both competence and values matter for their trust in the ECB. Individuals who place greater weight on competence—particularly the ECB’s ability to maintain price stability and its technocratic policy approach—express significantly higher levels of trust in the institution. In our baseline esti-

mates, a one-standard-deviation increase in the perceived importance of price stability and technocratic policy is associated with an increase in self-reported trust in the ECB by 0.4 and 0.3 units, respectively, on a 0–10 scale.

We also find that respondents who assign greater importance to values—such as the integrity of top central bankers, honesty in communication, and concern for the broader public good—tend to express *lower* levels of trust in the ECB. A one-standard-deviation increase in the importance attributed to these value-based considerations is associated with a decline in trust of between 0.07 and 0.18 units.

Moreover, trust in the ECB is found to be strongly associated with trust in political institutions more broadly. A one-standard-difference increase in trust in political institutions translates into a 1.2-unit rise in trust in the ECB—an effect of considerable magnitude. The association between interpersonal trust and trust in the ECB is more modest, at 0.14 units, but this correlation nearly quadruples when general political trust is excluded from the model. This pattern suggests that trust in political institutions is closely associated with both trust in the ECB and interpersonal trust, and that the bivariate association between interpersonal trust and trust in the ECB is substantially reduced once general political trust is included in the model. Finally, we show that trust in the ECB is central to anchoring inflation expectations, underscoring its importance for monetary policy credibility.

Our results offer two key policy implications. While competence remains essential, our findings suggest that people also care about value orientation; accordingly, central banks may be able to foster trust by credibly committing to such values. A second key implication is that trust in central banks cannot be understood in isolation from the broader social and political environment. Central banks operate within a wider system of institutions, and the strong link between trust in the ECB and trust in political institutions raises the question of whether trust in central banks is also affected by broader trends of political polarization and declining institutional and interpersonal trust. In the context of a broader societal trust crisis, sustaining trust in central banks may therefore require a better understanding of its relationship with broader institutional and interpersonal trust, alongside credible engagement with public concerns.

The remainder of the paper is organized as follows. [Section 2](#) introduces our holistic perspective on central bank trust. It reviews the rationales underlying the technocratic approach and discusses its limitations, surveys the existing literature on central bank trust alongside

relevant interdisciplinary research, and motivates why a broader framework incorporating additional drivers of trust is needed. [Section 3](#) introduces the empirical analysis by describing the survey design, conceptual framework, and data. Our main findings are presented in [Section 4](#). [Section 5](#) provides additional analyses to further explore the drivers of public trust in the ECB and the implications for monetary policy credibility, as measured by long-term inflation expectations. Finally, [Section 6](#) concludes and discusses policy implications.

2 Rethinking central bank trust through the literature: moving beyond technocracy

In this section, we introduce a broader perspective on central bank trust that moves beyond the traditional technocratic approach. We begin by outlining the reasons typically used to justify the technocratic approach and discuss their limitations. We then review several strands of literature that point toward the need to look beyond technocratic policymaking: recent empirical studies showing that factors beyond performance and technocracy shape trust in central banks; the OECD’s political-science framework, which emphasizes not only competence but also values and interpersonal trust as key determinants of trust in public institutions; and humanistic (depth-psychological) perspectives, which conceive of trust as a more fundamental, multidimensional concept.

2.1 Reconsidering the rationales for a technocratic approach to central bank trust

The strong focus on technocratic central banking is typically justified by four main rationales. While influential, these rationales are neither beyond question nor immutable. Revisiting them is important because they are often taken as self-evident in discussions of central bank trust, rather than examined as contingent foundations that may constrain how trust is understood and fostered.

First, widely perceived as technocratic institutions, central banks are deemed more reliable than political counterparts due to their reduced reliance on value judgments and the discretion of imperfect human beings. As underscored by [Issing \[2000\]](#), “[c]entral bankers are no super-humans”. While human fallibility is undeniable, it is not obvious that minimizing the role of human judgment—and sidelining capacities such as ethical reasoning, relational engagement, and authenticity—necessarily leads to better outcomes. This raises the question of whether trust is better supported by attempting to remove humans from the equation,

or instead by more fully exploring and cultivating human potential within institutional constraints.⁵

The second rationale often provided by economists and central bankers is that, unlike politicians who lead other policy institutions, central bankers are not elected through democratic processes and often lack direct electoral mandates.⁶ Consequently, they should refrain from direct engagement with the general public.

However, this view runs counter to the fact that central banks, like other political institutions, require public legitimacy. They operate in the public sphere and directly affect people’s lives. By managing inflation, they influence households’ purchasing power and economic security, with effects that go well beyond abstract numbers and materially shape overall well-being (Stancheva 2024). At the same time, public expectations and decisions play a crucial role in shaping policy outcomes. Central banks are therefore already *connected* to citizens, whether explicitly or implicitly, and the relevant question is whether this connection should remain opaque or be made more visible and deliberate. Moreover, while technocrats are often viewed as skilled and effective, a perceived disconnect between citizens and decision-making processes, especially when people feel sidelined by unelected experts (“central bankers in their ivory towers”), can foster skepticism, resentment, and ultimately a loss of trust. Engaging more deeply with the public places high demands on central bankers. Those with a strong sense of integrity may remain firmly committed to their mandate while maintaining personal independence and resisting political pressure, whereas those guided by short-term, personal considerations may find this balance harder to sustain.⁷

The third rationale is that technocratic policymaking may help central banks distinguish

⁵Harari [2024] recently noted that the preference for Bitcoin might be based on distrust of human institutions (banks and governments). Rather than reinforcing institutional trust, this can be interpreted as a technocratic approach that seeks to eliminate institutions—and the human actors within them—from the system altogether (rather than the prevailing approach of stripping institutions of human involvement). Harari points out that this is a worrying development because money’s purpose is to create trust between strangers. Furthermore, whether these circumstances ultimately shape the success of such currencies remains an open question.

⁶This is the case for the ECB. Some central banks, such as the Bank of Canada, are in close and active engagement and consultation with the general public as they go through periodic mandate renewals [MPF, 2021].

⁷Federal Reserve Chair Powell [2026] recently highlighted, among other points, the importance of personal integrity in the face of a threatened criminal indictment linked to his testimony before the Senate Banking Committee by the current U.S. administration.: “I have carried out my duties without political fear or favor, focused solely on our mandate of price stability and maximum employment. Public service sometimes requires standing firm in the face of threats. I will continue to do the job the Senate confirmed me to do, with integrity and a commitment to serving the American people.”

themselves from other policy institutions by decoupling trust in central banks from partisan politics (e.g., [Hansen 2022](#)). [Figure 1](#), however, suggests that trust in central banks does not consistently exceed trust in other political institutions. This raises doubts about whether technocratic practices alone are sufficient to set central banks apart from other policymakers. While central banks are *de jure* independent, they are *de facto* political institutions, particularly given that monetary policy is a core component of macroeconomic governance. The relevant challenge, therefore, may not be how to avoid these interdependencies altogether, but how to navigate them in ways that sustain credibility and trust.

The fourth reason for the technocratic approach, which has received comparatively less attention, is that contemporary central banking reflects the broader foundations of the modern worldview. Rooted in a modern (Newtonian) understanding of the world, modern science has shaped prevailing standards of knowledge by emphasizing what can be measured, quantified, and understood through analytical decomposition. This orientation has also influenced modern institutional design, which is based on principles of functional specialization and value-neutrality: institutions are assigned clearly defined responsibilities and are expected to pursue their respective objectives within these boundaries. Central banking represents a prominent example of this logic, with independent central banks designed to focus on specific mandates and to rely on technical expertise and measurable outcomes. This framework has contributed to a conception of trust centered primarily on competence and performance, while leaving less room for the relational, ethical, and human dimensions that may also shape trust.

Recently, economists have advocated for reintegrating values and more fundamental psychological factors into economic frameworks ([Bowles and Carlin 2020](#), [Carney 2021](#), [Eickmeier \[2025\]](#), [Mazzucato 2018](#), [Sandel 2012](#)). Moreover, central banks are increasingly confronted with new challenges, such as climate change and a more complex societal and economic environment in which they operate, requiring them to adapt and respond. This may also have important implications for central bank policy and communication.

Summing up, this section has reconsidered the commonly cited rationales for a technocratic approach to central bank trust. The discussion shows that each rationale is more contingent and limited than often assumed, thereby opening space for more holistic (value-integrated and relational) perspectives on how trust in central banking may be built and sustained.

2.2 Empirical evidence on non-technocratic determinants of central bank trust

Recent empirical work on public trust in central banks increasingly emphasizes factors beyond policy performance and technocratic competence. This literature examines the role of socio-demographic characteristics, individual economic circumstances, and broader economic prospects in shaping trust, as highlighted by Schnabel [2020] and documented comprehensively in Ehrmann [2025]. In addition, trust in central banks has been shown to be closely linked to trust in other political institutions, as demonstrated by Brouwer and de Haan [2022], Ehrmann et al. [2013], Farvaque et al. [2017], Hayo and Neuenkirch [2014], Hayo and Neumeier [2020], and Hwang et al. [2023]. Moreover, research by Brouwer and de Haan [2022], Haldane and McMahon [2018], Hayo and Neumeier [2020], and Mellina and Schmidt [2018] has observed that individuals who possess knowledge about their central banks and its functions tend to exhibit higher levels of trust in the institution.⁸

Our paper contributes to the literature on central bank trust by examining not only transparency—understood as the disclosure of economic conditions and policy decisions—but also the perceived honesty of central bank communication. In two related papers, Bulutay [2025] and Kril et al. [2016] ask survey respondents in Germany and Israel, respectively, the extent to which they agree with different statements about their central bank’s *recent* and *future* roles, and correlate that with prior trust in their institutions. Kril et al. emphasize *perceived* professionalism and transparency as key determinants of trust, while also identifying social awareness, innovativeness, and the perceived influence of the central bank on people’s lives as important drivers of trust in the context of the Bank of Israel. Similarly, Bulutay reports a positive and consistent correlation between German respondents’ prior trust in the ECB and their expectations of fulfilling these different roles (ranging from 0.61-0.67). Our paper seeks to tackle a related but different question. We ask respondents to self-report the extent to which different factors are important in the formation of their trust in the ECB. To the best of our knowledge, this is the first survey on central bank trust that actually asks respondents what factors matter in shaping their trust?. This first step is important as central banks develop their public engagement strategies.

In a similar spirit, we explore how trust in the ECB is associated with concerns that extend beyond technical competence and economic transparency, including public perceptions of the bank’s awareness of and responsiveness to broader societal issues. Our analysis is closely

⁸For German-specific studies, see Hayo and Neuenkirch [2014] and Mellina and Schmidt [2018]

related to [Eickmeier and Petersen \[2026\]](#), who show that a large majority (69%) of surveyed respondents in Germany reported increased trust in the ECB following its engagement in climate policy, reflecting public support for an expanded institutional role. Consistent with this evidence, [Baranyai et al. \[2025\]](#) document public backing for central bank climate action in Hungary, further underscoring the relevance of broader mandates for sustaining institutional trust.

A growing body of research also highlights the importance of relatability in central bank communication for building public trust and enhancing policy effectiveness. The survey by [Blinder et al. \[2024\]](#) discusses the persistent challenges in fostering trust through central bank communication. At the same time, several studies argue that trust and awareness can be improved by simplifying messages and avoiding technical jargon, thereby making communications more accessible to the general public ([Gloeckler and Mee 2022](#), [Haldane and McMahon 2018](#), [Kryvtsov and Petersen 2021](#)). In particular, [Bholat et al. \[2019\]](#) find that the use of everyday language, personal pronouns (“you” and “us”), and references to people’s lived experiences improves comprehension and increases trust in the Bank of England. These findings are reinforced by the experimental study in [Mochhoury \[2023\]](#), who shows that simpler language and the use of first-person plural pronouns (“we”) significantly raises trust in the central bank among general audiences. At the same time, [Hwang et al. \[2023\]](#) find that increasing the quantity of public speeches can actually undermine trust, likely reflecting individuals’ limited capacity to process large volumes of information and the resulting risk of overlapping or inconsistent messages. Together, this evidence suggests that central banks can strengthen trust not by communicating more, but by communicating more clearly and in ways that feel personal, inclusive, and grounded in the everyday realities of the people they serve.

Our paper is also related to [Angino and Secola \[2022\]](#), who examine the distinction between instinctive (implicit) and reflective trust in the ECB, finding that instinctive trust tends to dominate, particularly among women with limited knowledge of the ECB. Building on this insight, we investigate the extent to which a positive or negative “general impression” of the ECB—reflecting implicit trust and often described as a “halo effect” in the literature—shapes overall trust in the ECB relative to other determinants.

Finally, while central bankers often emphasize that independence safeguards integrity, there is, to our knowledge, no formal empirical work directly examining whether integrity affects perceived trustworthiness in central banks. Our survey addresses this gap by eliciting re-

spondents’ view on the integrity of leading central bankers.

In summary, our research examines both established and less-explored determinants of public trust in central banks. In addition to socio-demographic factors, trust in political institutions and perceptions of technical ability in managing monetary and economic conditions, we consider broader and more holistic dimensions such as integrity, honesty, and perceptions of the central bank’s society awareness and scope beyond narrowly defined economic objectives. By widening the analytical lens, our approach adds depth to the existing frameworks and contributes to a more comprehensive understanding of the drivers of public trust in the ECB.

2.3 Insights from other disciplines

The OECD / political science framework to trust in public institutions It is equally valuable to incorporate perspectives from other fields. We start here with the OECD’s framework to trust in public institutions (e.g., [Brezzi et al. 2021](#); [Murtin et al. 2018](#); [OECD 2017](#)), which is grounded in the political science literature (e.g., [Uslaner 2018](#)). The framework defines citizens’ trust in political institutions or governments as “a person’s belief that another person or institution will act consistently with their expectations of positive behavior”. This definition encompasses the behavioral definition of trust as well as invisible (cognitive and other) aspects underlying individuals’ behaviour.⁹

Two pertinent concepts concerning trust in political institutions are institutional trust (i.e., trust in institutions) and interpersonal trust (i.e., trust in other people or generalized trust) — a distinction also drawn by [Hayo and Neumeier \[2021\]](#).^{10 11} Our survey design enables us to assess these two dimensions of trust. The OECD distinguishes five facets of institutional trust, which encompass responsiveness and reliability (indicative of an institution’s competence, i.e. the government’s ability to provide citizens with the necessary services), as well as openness, fairness, and integrity (reflective of an institution’s values, i.e. guiding principles informing and shaping government actions), most of which we cover as well ([Murtin](#)

⁹The behavioural definition has been proposed by [Coleman \[1990\]](#), as cited by [Fehr \[2009\]](#): “An individual [...] trusts if she voluntarily places resources at the disposal of another party [...] without any legal commitment from the latter. In addition, the act of trust is associated with an expectation that the act will pay off in terms of the investor’s goals.” Furthermore, the definition “captures the essence of trust, which consists of the investor’s willingness to make herself vulnerable to others’ actions” ([Fehr 2009](#)).

¹⁰[Hayo and Neumeier \[2021\]](#) find that institutional trust predicts trust in the Reserve Bank of New Zealand while interpersonal trust does not once the former is controlled for.

¹¹Throughout the paper we will talk about “interpersonal trust”. Interpersonal trust here refers to generalized trust, which is trust in unknown individuals, as opposed to “limited trust”, which refers to trust in family, friends, etc.

et al. 2018, OECD 2017). Values are sometimes synonymous with willingness, motivations, or intentions, as noted by Brezzi et al. [2021] and Kril et al. [2016] (citing Castelfranchi and Falcone 2010). Also, values are not necessarily linked to outcomes. Empirical findings indicate that government competence, including public service satisfaction, accounts for 21% of the cross-sectional variation in self-reported trust in government, while government values contribute nearly 10% (Murtin et al. 2018).¹² Integrity, particularly low corruption, emerges as the most crucial factor for trust in values. However, recent survey results for OECD countries reveal that only 30% of the population believes an elected or appointed official would likely decline a well-paid private sector job in exchange for a political favor (OECD 2022).

Interpersonal trust is relevant in this context because individuals who struggle to trust others may also find it difficult to trust institutions. Moreover, institutions are ultimately composed of human beings—those who work within and represent them—who interact with and influence the lives of people outside the institution. As a result, trust in institutions and trust in the individuals working within them are closely intertwined, even though formal roles and constraints define institutional boundaries and can shape attitudes toward individuals within them (Campos-Castillo et al. 2016, p. 101). Consistent with this perspective, Dinesen et al. [2022], examining trust in Swedish public institutions, find that trust in political institutions appears to be a driver of interpersonal trust, while interpersonal trust does not exert a symmetric causal effect on political trust once dynamic feedback and confounding factors are properly addressed.¹³ Interpersonal trust is commonly understood to hinge on expectations about the trustworthiness of individuals or institutions, as well as on underlying preferences (e.g. risk aversion or social preferences), which, as economists have increasingly emphasized, are shaped by individuals’ experiences.¹⁴

The broader literature on institutional legitimacy is likewise relevant for understanding the

¹²Perceptions about society and individual characteristics explain an additional 10%. Another significant portion is left unexplained.

¹³At the same time, interpersonal trust can shape institutional design itself: Berggren et al. [2014] document a U-shaped relationship between interpersonal trust and central-bank independence across 149 countries, whereby societies with either very low or very high trust are more likely to delegate substantial authority to independent monetary authorities, while countries with intermediate levels of trust grant their central banks less autonomy.

¹⁴Alesina and La Ferrara [2002] emphasize the impact of traumatic experiences (such as divorce, disease, accidents, or financial misfortune) on interpersonal trust. Other scholars highlight the role of personal experiences, memory, and neuroplasticity in shaping expectations and economic outcomes (see, e.g., Malmendier 2021, Malmendier and Wachter 2023, Malmendier and Sheng 2023; see also Malmendier and Nagel 2016 and Salle et al. 2024 for inflation applications directly relevant to central banks).

foundations of trust in central banks. Central banks have traditionally derived their legitimacy primarily from technocratic legitimacy, that is, from their ability to deliver effective policy outcomes, especially price stability, rather than from direct democratic participation (Majone 1998). Building on Scharpf [1999], this corresponds to output legitimacy, complemented by limited input legitimacy through democratically enacted mandates. More recently, Schmidt [2013] introduced throughput legitimacy, emphasizing transparency, accountability, and responsiveness in governance. As central banks have assumed broader and more politically salient responsibilities, scholars have questioned whether technocratic legitimacy alone remains sufficient (Argyroulis and Vagdoutis 2025). We contribute to this literature by examining the factors that shape these three dimensions of institutional legitimacy.

The psychological approach to trust We next consider interpersonal trust from a psychological standpoint—a perspective that also offers relevant insights for our discussion. A behavioural approach to trust is adopted by Kril et al. [2016], drawing on Castelfranchi and Falcone [2010]. The authors distinguish between reason-based and implicit trust. Reason-based trust arises from rational argumentative decisions, whereby the trustor evaluates the trustee’s competence and willingness to achieve a specific goal. By contrast, implicit trust reflects an automatic, unintentional, and unconscious (affective) reaction to stimuli. This approach aligns with the view of the human mind as comprising an impulsive (automatic) system—associated with the emotional brain and “fast thinking”—and a reflective, rational system—associated with the rational brain and “slow thinking” (e.g., Kahneman 2011).

In humanistic (depth) psychology (e.g. Maslow 1968), Rogers 1961 (interpersonal) trust emerges naturally from genuine human connection (Rogers 1961, pp. 283-284). It can be eroded through negative experiences and restored through positive ones, such as congruence (or authenticity), empathy, kindness, integrity, care for safety (Almaas 1987, pp. 96-106, Maslow 1968, pp. 102, 107, Rogers 1961, pp. 49, 61, 236, 283-284), as well as presence (which requires an openness of the mind), attunement, and resonance (Siegel 2020, pp. 200-201). These definitions are also consistent with a systems’ view of the brain and social groups.¹⁵ For more details on the psychological approach to trust, see Appendix A.1.

¹⁵Almaas [1987, pp. 96-106] further distinguishes three levels of trust: the first, most superficial one being the knowledge that “the person is not going to hurt you”; the second, deeper one, is trust that “the person wants what is best for you” (tied to the qualities compassion and kindness); and the third, even deeper one, is trust “because of what the person is”, e.g. “that the person has integrity, which has nothing to do with you”, or truthfulness, which can imply that one gets hurt.

Values, hence, emerge from human relations and are not treated as normative prescriptions (“how people should be”), but as descriptive features of human experience (“how people are”) (see [Eickmeier 2025](#), [Singer 2023](#)). Notably, qualities such as integrity and openness, emphasized in humanistic psychology and in Siegel’s work, also feature prominently among the values highlighted by the OECD. While behavioral economics has become firmly embedded in mainstream economics, insights from psychological traditions beyond behavioral psychology remain less integrated. In this regard, surveys—now widely used by economists—offer a promising avenue for capturing intangible constructs such as trust and values.

2.4 A fresh perspective on central bank trust

We are now ready to examine trust in central banks from a new perspective. A first observation is that central banks already incorporate some of the insights discussed above. For instance, they have increasingly sought to enhance their relatability with the public through initiatives such as “Listening” events, pioneered by the Federal Reserve and later adopted by the ECB and others. Such initiatives emphasize interpersonal trust but remain primarily transactional, aimed at shaping economic expectations. The challenge is to foster genuine connections rather than merely instrumental engagement.¹⁶ A further challenge central banks are currently addressing is the heterogeneity of the public, to which they respond with more targeted outreach and communication strategies tailored to different social groups.

Recent innovations also reflect a growing awareness of broader societal interdependencies, for example through the consideration of climate change within the scope of central bank mandates. Taken together, these developments—alongside advances in the empirical literature—suggest that a purely technocratic approach to central bank trust is reaching its limits, prompting an increasing recognition within central banks that new ways of engaging with rising complexity are required.

Insights from other disciplines provide valuable guidance. However, integrating values into central banking is far from straightforward. Values have largely faded from modern eco-

¹⁶For example, [Carstens \[2023\]](#) stated: “trust is not an end in itself. Trust in monetary and fiscal policies, and financial regulation and supervision is a necessary but not sufficient condition for meeting higher objectives for society’s well-being, including higher incomes, more and better paid jobs, and an adequate provision of social services to the public.” While trust alone is certainly not sufficient to ensure well-being, from both a systems perspective and a deep psychological standpoint, trust is unlikely to emerge when it is treated primarily as an instrument for achieving other ends, such as economic outcomes.

nomics, despite recent attempts to reintroduce them, as discussed above.¹⁷ Similarly, systems thinking and a focus on relationships remain relatively limited in much of economic analysis. Beyond these conceptual challenges, questions also arise from the existing institutional framework and its underlying principles: how can the consideration of values and interpersonal trust be reconciled with central banks' mandates and independence?

To address this question, it is crucial to distinguish between values and preferences, the latter of which have become more firmly embedded in modern economics. Preferences may incorporate values but typically do not. Instead, they are often “flat”, referring to personal likes, choices, interests, opinions, or inclinations associated with survival and self-assertion (the personality). This distinction between deeper values and more superficial personal preferences is often blurred, contributing to confusion in debates about whether central banks should uphold values.

A first concern is that assigning a role to values in central bank decision-making could be interpreted as an expansion or dilution of the mandate, particularly if it is feared that compassion or broader awareness could shift judgments away from primary objectives. This concern, however, is not necessarily warranted. Shared core values can contribute to greater societal and economic stability, by fostering trust, social cohesion, and confidence in public institutions, thereby creating conditions under which central banks are better positioned to fulfill their mandates, as has already been recognized in the case of considering climate change. Moreover, public officials working in central banks already carry a responsibility to act in accordance with such (constitutional) values. Hence, the legislator has already designed it in such a way that both the mandate and values are compatible.

A second concern is that bringing values into central bank decision-making may be perceived as a threat to independence. This concern is warranted if values are understood as personal or (partisan) political preferences that could influence policy judgments. Similarly, some may worry that greater compassion or broader awareness could introduce biases that expose policymakers to accusations of politicisation or undermine credibility. However, independence and adherence to fundamental values go hand in hand. Integrity and honesty enable central bankers to maintain personal independence in the face of short-term political or personal pressures, whereas those with weaker ethical foundations may be more vulnerable to such

¹⁷Fundamental values and deeper dimensions of the human mind still feature prominently in the work of early and later economists such as Smith (moral sentiments), Mill (higher and lower pleasures), Marx (alienation and self-realization), and Sen (capabilities).

pressures. Rather than weakening independence, a value-based perspective places higher demands on central bankers to remain firmly committed to their mandate while recognizing the broader societal consequences of their decisions.

Some final remarks: we do not seek to create a dichotomy between values and competence. Rather, we distinguish between competence and values in line with the OECD framework, which provides a useful structure for our analysis. Values, ideally, are not upheld *in order to* achieve specific outcomes (Section 2.3). Yet when public institutions act in ways that reflect shared values, they can strengthen public trust and, in turn, enhance their capacity to fulfill their core mandates and meet societal expectations. Ideally, political institutions demonstrate both technical competence and a commitment to values. The relative importance citizens attach to these dimensions—and whether they perceive tensions between them—may vary, an issue we examine in the context of the ECB.

A further question is whether a greater emphasis on values by central banks could reduce trust among individuals who primarily value technical competence. Humanistic psychological theory suggests that fundamental values are intrinsic to human beings and that all individuals have the capacity to resonate with shared values. However, access to these values may vary depending on individuals' experiences and the conditions that enable or constrain their expression. This suggests that a value-oriented approach requires individuals to have access to these values in order to resonate with them. At the same time, by increasingly appealing to and embodying shared values, public institutions may help individuals reconnect with these deeper foundations of trust. The challenge is therefore to combine a strong emphasis on values with continued emphasis on technical competence, ensuring that individuals with less immediate access to shared values are not excluded and that trust is not undermined.

The next section seeks to operationalize this new perspective. Specifically, we examine whether values such as integrity, transparency, and compassion, alongside technical competence and interpersonal trust, are associated with public trust in the ECB—factors that have been highlighted as important drivers of trust in the interdisciplinary approaches discussed above. While our empirical analysis cannot capture all dimensions of this broader perspective, it represents a first step toward assessing the relevance of these additional drivers of trust.

3 Data

The survey was performed within the Bundesbank Online Panel of Households (BOP-HH). It is conducted online monthly on a representative set of German respondents.¹⁸ The survey consists of a core set of questions related to expectations about household and macroeconomic outcome, as well as a set of special questions. A total of 4,151 respondents participated in the survey. In Wave 42 of the BOP-HH, we introduced a series of special questions to gauge trust in the ECB and its determinants, as perceived by respondents.¹⁹

Trust in the ECB.²⁰ “On a scale from 0 to 10, how much trust do you have in the European Central Bank (ECB)?” where 0 refers to “No trust at all” and 10 refers to “Absolute trust”.

Trustworthiness of the ECB. “On a scale from 0 to 10, to what extent do the following aspects play a role in your trust in the ECB?” where 0 refers to “Does not play a role at all” and 10 refers to “Plays a major role”.

(a) It has largely achieved its main objective of price stability in the past. **Achieved price stability in past**

(b) It makes its decisions on the basis of previously defined rules, technical analyses, scientific evidence, and facts. **Technocratic**

(c) It provides the general public, through speeches and written statements, with sufficient information regarding its actions and the state of the economy. **Provides sufficient information**

(d) The ECB’s President and senior management have a moral compass, i.e., they are people with integrity. **Integrity**

(e) It is honest in its communication (things are communicated even if they are not going well or according to plan). **Honest communication**

(f) It sees and takes into account the overall picture (e.g., complex relations, even extending beyond economic matters). **Accounts for overall picture**

(g) It acts out of concern for the well-being of the general public (extending beyond economic concerns). **Acts on broader concern**²¹

¹⁸See <https://www.bundesbank.de/en/bundesbank/research/rdsc/research-data/bop-hh-757542> for a description of the survey.

¹⁹Questions in the surveys were not asked in randomized order, but items within each of the questions were.

²⁰The bolded abbreviations here and henceforth were not included in the survey questions. We list them here for easy reference in later data analysis.

²¹In another study (Eickmeier and Petersen 2026), utilizing the same June 2023 survey, we provided

Statements (a) and (b) would be related to the ECB’s trustworthiness in terms of competence (in the OECD’s sense), as perceived by respondents. (a) captures performance (the outcome), and (b) covers reliability and responsiveness. Variables (c)-(e) and (g) would be related to values. (c) and (e) would capture transparency (openness), (d) integrity, which (e) would capture as well. (g) would be related to concern (the latter accounting for a sense of care and compassion). (f) can, *a priori*, be interpreted as both competence or values. It requires broader awareness, but possibly also technical competence (such as models capturing interlinkages between areas), and our analysis will reveal which aspect predominates in respondents’ assessments. Note that we do *not* ask households if they would like the central bank to act beyond its mandate—such actions would be illegal. We inquire into whether all relevant interconnections are taken into account and into the underlying mindset central bankers conduct policy from. Compassion is an essential quality associated with the deeper “being” levels, where a broader perspective also emerges. These capacities are inherent and, in principle, accessible to all humans. Cultivating compassion and a wider view can help central banks connect more deeply with the public and better fulfill their mandates. Ignoring climate change, for example, means overlooking information directly relevant to primary objectives; likewise, a lack of compassion may lead people to doubt that central bankers act in their best interest, weakening trust and impairing policy effectiveness. This places high demands on central bankers, who must keep the larger picture in view and resist external pressures. Still, we argue that rigidly separating clearly interconnected areas is no longer a viable solution.

People’s ability to trust / interpersonal trust. “On a scale from 0 to 10, to what extent do the following statements describes you?”, where 0 refers to “Not at all” and 10 refers to “Fully”.

(h) I find it easy to trust others. **Find it easy to trust others**

(i) In general, I trust political institutions. **Trust in political institutions**

Variable (h) serves as our primary measure of what the literature commonly refers to as “interpersonal trust” (Murtin et al. 2018). By focusing on the trust in “others”, we refer to individuals outside the close circles of family and friends (the ingroup)—those who are

participants with information regarding the ECB’s climate policies and inquired into the impact of this information on respondents’ trust in the ECB, *after* we assessed their perceptions of the ECB’s overall trustworthiness, also in terms of broader scope and concern (f) and (g). Therefore, responses to this question remain unaffected by participants’ knowledge about the ECB’s climate initiatives and reflections about their impact on trust.

not familiar or close to us (the outgroup). The formulation closely resembles the question posed to survey participants in the World Values Survey (WVS), known as the Rosenberg question (“Would you say that most people can be trusted or that you can’t be too careful in dealing with people?”), as well as in the OECD’s Trustlab (“In general, how much do you trust most people?”). Both the OECD survey and ours employ the same quantitative scale ranging from 0 to 10, ensuring quantitative comparability of responses. In Appendix A.3, we will delve into additional measures of interpersonal trust, supplementing our primary measure “Find it easy to trust others” to provide further insight into respondents’ viewpoints. Trust in political institutions captures both trustworthiness of institutions and an individual’s ability to trust them. Trust may vary across institutions and influence trust in the ECB differently—an aspect not captured in our analysis, but reserved for future research.

We note that our aim is to take a holistic approach and explore factors beyond technical considerations. Broad questions regarding trust in other people or political institutions, of course, allow for more interpretation compared to inquiries about quantitative outcomes such as inflation expectations. This is because individuals’ mindsets and perspectives vary, and this variation is more significant for questions addressing inner dimensions. Our approach allows us to unpack the drivers of central bank trust, into technical and more holistic ones. Therefore, we prefer not to restrict ourselves to narrow measures of trust (or credibility). However, we will also investigate the drivers of credibility in Section 5.3.

The Bundesbank’s survey also collects data on economic expectations and socio-demographic characteristics, which we will investigate. Qualitative expectations for economic growth are asked on a five-point scale: “What developments do you expect in the following metrics over the next 12 months?” Answers range from 1 (Decrease significantly) to 5 (Increase significantly). Female is a dummy variable equal to 1 for females and 0 for males. Age is a continuous variable from 16 to 80 years and older. Income has categories 1-13 from under 500, 500-999, 1,000-1,499, 1,500-1,999, 2,000-2,499, 2,500-2,999, 3,000-3,499, 3,500-3,999, 4,000-4,999, 5,000-5,999, 6,000-7,999, 8,000-9,999, 10,000 and more EUR. Education ranges from 0-8, where 0: no degree, 1: in training / studying, 2: apprenticeship, 3: vocational school, 4: technical or commercial college, 5: university or cooperative education, 6: bachelor, 7: master / diploma, 8: doctorate. East (1989) is a dummy variable equal to 1 for respondents from the East and 0 for respondents from the West of Germany in 1989, just before German unification.

Table 1 presents the distribution of our data across socio-demographic groups. Notably, there

are more observations for males than females and a higher representation of respondents located in West Germany in 1989 compared to those in the East. Additionally, there are relatively fewer young participants and participants without educational degrees or still in training. We later explore the representativeness of the German population in more detail.²²

Table 1: Observations across groups, in % of all observations

Female	37.1
Male	62.9
Age (16-24 years)	2.3
Age (25-60 years)	53.1
Age (> 60 years)	44.6
Income (< 2,500 Euros)	11.6
Income (2,500-6,000 Euros)	62.0
Income (> 6,000 Euros)	26.4
Education (no degree or in training)	2.7
Education (less or equal techn. or comm. college)	59.1
Education (bachelor degree)	10.5
Education (graduate degree)	27.7
East (in 1989)	18.0
West (in 1989)	82.0

Notes: Education (less or equal techn. or comm. college) refers to apprenticeship, vocational school, technical or commercial college.

4 Findings

4.1 Descriptive statistics

Trust in the ECB, trust in political institutions more generally, and interpersonal trust We begin by examining baseline trust in the ECB, as self-reported by respondents. [Figure 2](#) shows its distribution, and [Table 2](#) presents summary statistics for trust in the ECB, political institutions, and interpersonal trust.²³ Mean (median) trust in the ECB is 5.18 (5), indicating moderate trust, with a hump-shaped, right-skewed distribution. While only 2% report complete trust (score of 10), 66% fall within the 5–10 range, and 8% report no trust at all (score of 0). Trust in political institutions is lower, with a mean (median) of 4.09 (4). Interpersonal trust lies between the two.

²²For information regarding the survey’s representativeness within the German population, see [BOP-HH \[2024\]](#). See also [Bui and Hayo \[2025\]](#) who question representativeness of the Bundesbank survey.

²³“Don’t know” responses are excluded throughout.

Figure 2: Distribution of trust in the ECB

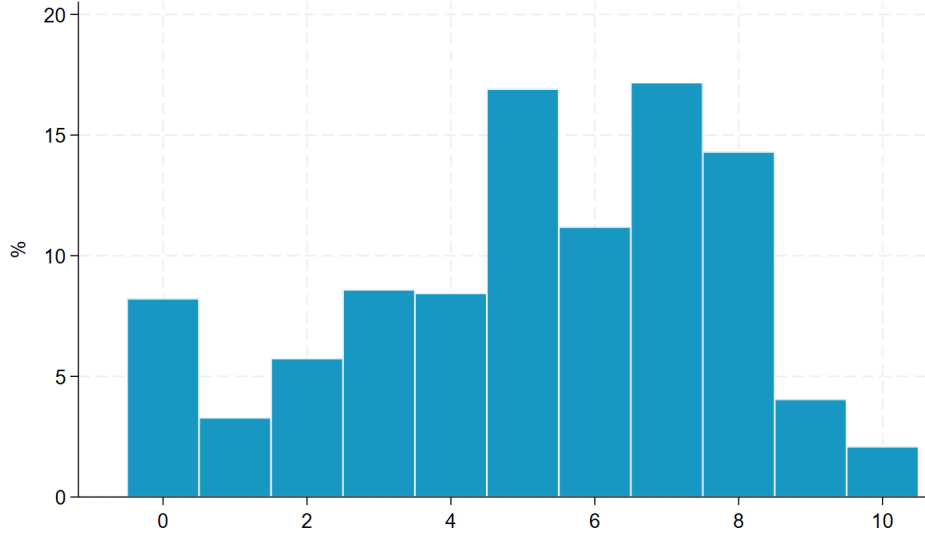


Table 2: Selected moments of self-reported trust

	Mean	Median	Std.dev.
Trust in the ECB	5.18	5	2.60
Trust in political institutions	4.09	4	2.77
Interpersonal trust	4.42	5	2.36

Notes: Interpersonal trust refers to the variable "Find it easy to trust others".

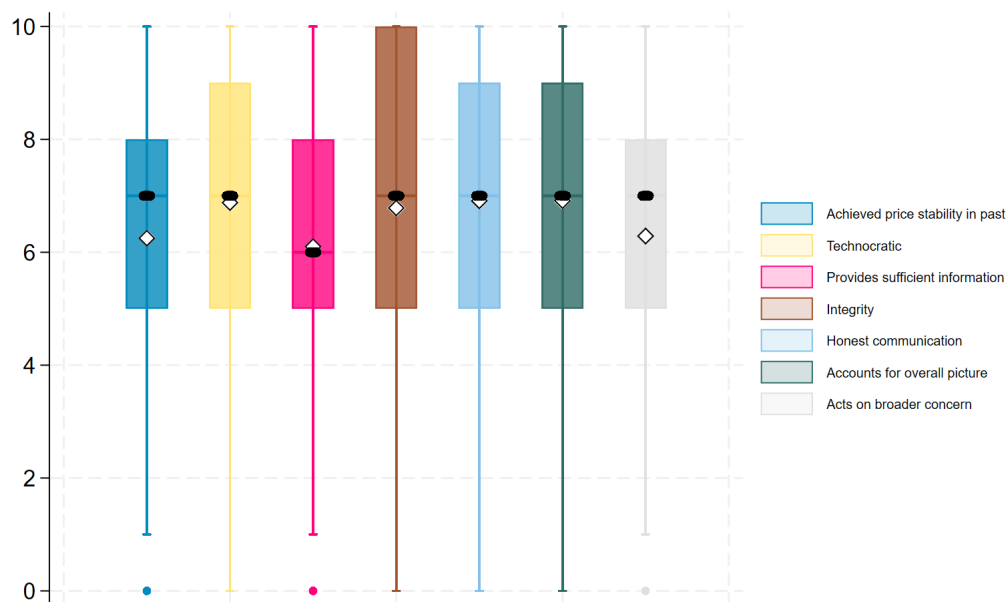
The observed low levels of trust in political institutions among surveyed respondents align with the prevailing narrative of widespread lack of trust in political institutions and the looming political crisis, marked by rising populism, extremism, and perceived inaction on issues like climate change (Al Gore 2022). Average trust in political institutions is consistent with prior literature. Our findings also support Brezzi et al. [2021], showing that citizens distinguish between institutions—reporting higher trust in the ECB than in political institutions. Similar patterns have been found for Israel (Krill et al. 2016). Figure 1, based on Eurobarometer data, shows that Germans currently trust the ECB more than their national government, but less than European institutions. Interpersonal trust levels broadly align with other surveys,²⁴ though slightly lower than past OECD estimates.

Determinants of trustworthiness of the ECB Turning to the determinants of the ECB’s perceived trustworthiness, Figure 3 shows that all mean ratings fall between 6 and 7.

²⁴Our mean (median) is slightly lower than the OECD’s 2017 estimate for Germany (Murtin et al. 2018), possibly due to today’s crisis context (e.g., climate and geopolitical instability). However, our results match OECD findings from the 2014 European Social Survey.

Traditional factors commonly regarded in central banking such as competence (“Achieved price stability,” “Technocratic”) and transparency (“Provides sufficient information”) do not stand out with higher ratings. The similarity across distributions—and the fact that perceived trustworthiness exceeds overall trust in the ECB—merits further exploration, which follows in later sections.

Figure 3: Factors associated with perceived trustworthiness of the ECB



Note: The figure shows medians (black horizontal lines), means (diamonds), interquartile ranges, minima and maxima as well as outliers (dots) of the variables. Outliers are defined as observations exceeding 1.5 times the interquartile range.

The high scores for “Honest communication” and “Integrity” are striking given the responsiveness–responsibility dilemma in political science, which highlights the tension between aligning with public preferences and making long-term decisions in the public interest—ensuring central bank accountability, even when those decisions diverge from immediate popular demands. Our findings suggest that respondents value responsibility and, echoing [Almaas \[1987\]](#), recognize that that honesty and “what the person is” has a deeper impact on trust than short-term pleasing (see Section 2.3).

The trustworthiness measures exhibit some level of (positive) correlation (although there is no indication of multicollinearity, as demonstrated in Appendix A.2). We cannot fully rule out the possibility of common-method bias arising from the use of survey-based measures. To shed light on the nature of the relationships between these measures, we conduct a factor analysis of the seven regressors associated with perceived trustworthiness of the ECB.

We use maximum likelihood (ML), retaining three uncorrelated factors. The data reveal a strong factor structure, with the first ML factor explaining 91% of the variation in the data summarized by three factors, while the second and third factors account for only 7% and 2%, respectively (Table 3, rows 2 and 3). Consequently, we focus on the results for the first two factors. All variables load highly and positively on the first factor, while the signs of the loadings of the second factor replicate those observed in our regression analysis.

To aid interpretation, we rotate the factors using the varimax method, the simplest orthogonal rotation technique, which maximizes the variances of the squared raw factor loadings across variables for each factor. The first factor now explains 53% of the variance, the second factor 43%, and the third factor less than 4%. See Table 3, rows 4 and 5. While the factors are still not structurally identified, we can offer a tentative interpretation based on the loadings. The first factor exhibits the highest loadings (above 0.7) for “Honest communication” and “Integrity,” suggesting a strong association with these values. Additionally, this factor is positively correlated with “Acts on broader concern” and “Provides sufficient information.” Hence, the first factor reflects value-based trustworthiness of the ECB. The second factor appears to capture competence, loading highly on “Technocratic” and “Achieved price stability in the past”, and correlating positively with “Accounts for the overall picture”, which may reflect respondents’ emphasis on analytical and technical capacity.

Table 3: Loadings associated with the first 2 factors extracted from sets of measures of perceived trustworthiness of the ECB

	Factor 1	Factor 2	Factor 1	Factor 2	Factor 1	Factor 2
	(raw)	(raw)	(v)	(v)	(p)	(p)
Achieved price stability in past	0.573	0.234	0.264	0.546	0.030	0.567
Technocratic	0.740	0.321	0.360	0.728	0.090	0.753
Provides sufficient information	0.728	-0.096	0.596	0.397	0.550	0.181
Integrity	0.739	-0.231	0.714	0.307	0.777	-0.001
Honest communication	0.832	-0.162	0.741	0.421	0.752	0.134
Accounts for overall picture	0.785	0.172	0.471	0.639	0.261	0.571
Acts on broader concern	0.739	-0.123	0.610	0.381	0.562	0.151
Explained variance proportion	0.912	0.070	0.529	0.434		

Notes: raw: raw maximum likelihood factors. v: rotated factors using the varimax method. p: rotated factors using the promax method.

Unlike the varimax method, the promax method allows for correlated factors—and indeed, the first two factors are correlated (coefficient = 0.72). Despite this, their interpretation remains consistent with the varimax results (see Table 3, columns 6 and 7). In subsequent

regression analysis, we replace the individual trustworthiness measures with the two common (varimax and promax) (value- and competence-oriented) factors. Overall, the factor analysis provides some reassurance against common-method bias, as respondents appear to distinguish between conceptually different dimensions of trust formation rather than merely expressing a uniform evaluation of the ECB.

4.2 Regression analysis

To assess the quantitative importance and significance of the self-reported factors influencing trust in the ECB, we estimate the following linear regression model:

$$Trust_i = \alpha + \beta'X_i + e_i \quad (1)$$

where $Trust_i$ denotes trust in the ECB as reported by respondent i , X_i is an $n \times 1$ vector of regressors (i.e. socio-demographic and other determinants), β denotes the n -dimensional coefficient vector. X_i will vary across specifications. We estimate the regression using OLS with robust standard errors. We later also carry out a robustness analysis in which we use an ordered probit model which relaxes the assumption from the linear regression model of equal distances between the categories.

We begin by estimating the model with socio-demographic variables and expected growth as regressors (specification (1) in [Table 4](#)). We then progressively expand the set of regressors to include trust in political institutions, measures commonly emphasized for assessing trustworthiness within central banks, and additional, more holistic, factors (specifications (2)-(5)). Notably, the adjusted R^2 increases most sharply with the inclusion of trust in political institutions, rising from 0.16 to 0.40. It further increases to 0.47 with the addition of ECB trustworthiness measures and interpersonal trust. In the following paragraphs, we discuss results from our baseline specification (5) and related robustness checks. To assess economic significance, specification (5') reports the change in trust in the ECB associated with a one standard deviation change in each variable of interest.

Economic outlooks and socio-demographic factors Expected economic growth is positively and significantly associated with trust in the ECB, consistent with prior findings linking perceived economic conditions to institutional trust ([Hwang et al. 2023](#), [Schnabel 2020](#)). A one-category improvement in respondents' reported economic outlook translates

into a 0.47 unit increase in trust in the ECB.²⁵

Age, gender, and income are all positively and significantly associated with trust in the ECB, while education shows no significant effect. The positive relationships of income and age with trust in the ECB aligns with existing literature for political institutions (Brezzi et al. 2021, Murtin et al. 2018), possibly reflecting greater civic engagement and broader social networks among older and higher-income individuals.²⁶ Surprisingly, women report 0.2 units more trust in the ECB than men, despite typically higher inflation expectations among women (D’Acunto et al. 2021, Reiche 2023 who focuses on German respondents in the BoP-HH). While trust differences by gender are mixed in the literature—some studies find that men trust the ECB more (Ehrmann et al. 2013; Farvaque et al. 2017; van der Crujsen and Samarina 2023), others find the opposite (Hayo and Neuenkirch 2014 for German respondents)—our results align with the latter. Specifications (2) and (7) show that respondents from East Germany report 0.3 units less trust in the ECB than those from the West (not shown), consistent with prior research documenting lower institutional and interpersonal trust in the East.²⁷ Including the “East (1989)” variable excludes about 300 younger respondents, so we omit it from later specifications.

Trust in political institutions and interpersonal trust Regarding interpersonal trust, respondents who find it rather easy to trust others also exhibit higher trust in the ECB. The coefficient is significant, but rather small. A one standard deviation increase in interpersonal trust is associated with a rise in trust in the ECB by 0.14 units. Once we omit trust in political institutions (specification (6)), the coefficient on interpersonal trust becomes almost four times larger, suggesting that the association between interpersonal trust and trust in the ECB is substantially reduced when accounting for trust in political institutions.²⁸

²⁵Results are robust to alternative expectations: expected stock prices are positively associated with trust, while expected inflation and unemployment are negatively associated, all with highly significant coefficients.

²⁶When education is categorized into groups, the resulting dummy variables do not enter significantly. Using income dummies confirms the baseline result, with three middle-to-high income brackets entering significantly.

²⁷Explanations include the persistence of socialist values (Campbell 2012; Rohrschneider and Schmitt-Beck 2002), negative post-unification experiences and perceived inequality (Pollack 2007), and economic disparities (Campbell 2004).

²⁸To ascertain how the impact of interpersonal trust on trust in political institutions more generally compares with that in the ECB, we also regress trust in political institutions on expected growth, socio-demographic variables, “Find it easy to trust,” and “Achieved price stability in the past” (results are not shown). Interpersonal trust has a larger correlation (coefficient = 0.40), and perceived ECB performance is also significant (0.17), suggesting that success in one policy area may foster broader institutional trust. However, this model includes fewer controls and has a lower adjusted R^2 (0.30), so comparisons should be made cautiously.

Perceived trustworthiness of the ECB Turning to the variables that central banks commonly focus on, our results demonstrate that respondents who value the past record of price stability and decisions based on rules, technical analyses, scientific evidence, and facts tend to trust the ECB more. The effects are highly significant and substantial: A one standard deviation increase in the importance placed on price stability and technocratic policymaking raises trust by 0.43 and 0.30 units, respectively.

Furthermore, we observe that respondents who consider the provision of an appropriate amount of information by the ECB regarding the state of the economy and its actions to be important tend to report lower levels of trust in the ECB. This finding diverges somewhat from the current direction of the literature that suggests that an excessive amount of information (e.g., through speeches) may decrease public trust ([Hwang et al. 2023](#)), or that the complexity of the information provided may hinder understanding ([Gloeckler and Mee 2022](#), [Kryvtsov and Petersen 2021](#)). Criticism has also been directed towards central banks for communicating a lot because central banks have committed to what is beyond their means ([Fratzscher 2022](#)). This would suggest that the public may interpret an abundance of information as a negative signal, leading them to question if something is amiss and prompting the ECB to provide further explanations or justifications. Our estimates thus far suggest that the ECB could potentially enhance its trustworthiness by providing more, rather than less, information about the state of the economy and its actions. Nonetheless, the coefficient associated with “Provides sufficient information” is small, and we will explore this finding in more depth later.

Turning to the other more holistic measures of perceived trustworthiness, we observe that respondents who appreciate the ECB’s consideration of the overall picture tend to trust the ECB more, with a large and highly significant estimated coefficient comparable to that of the ECB’s past performance in maintaining stable prices. This finding aligns with our factor analysis results, indicating that respondents associate “Accounts for the overall picture” with competence. Integrity of the ECB president and senior management, as well as honest communication, are also significant regressors with negative coefficients, indicating lower trust when these aspects matter to respondents. While “Acts on broader concern” is not significant in specification (5), it becomes marginally significant when the “East (1989)” dummy is included in specification (7). Although the individual effects are modest—each reducing trust by 0.07 to 0.18 units per standard deviation—their combined impact is nontrivial.

We also find that the coefficients associated with sociodemographic characteristics diminish

once measures of perceived trustworthiness and interpersonal trust are included in the regression (specification (5) compared with specification (3)), suggesting that these additional measures account for part of the heterogeneity.

We conduct two robustness checks to address potential concerns related to the endogeneity of expected growth with respect to trust (Brouwer and de Haan 2022; Christelis et al. 2020). First, we drop expected growth from the baseline model (specification (8)); the coefficients and significance levels for trustworthiness measures, political trust, and interpersonal trust remain virtually unchanged. Second, we replace expected growth with its lag, reducing the sample to 2,194 respondents. Results (not shown) remain consistent.

We also re-estimate the baseline regression using post-stratification weights from the survey (BOP-HH 2024) to correct for imbalances in gender, age, education, and region (specification (9)). The results are nearly identical, except that “Provides sufficient information” becomes statistically insignificant. An ordered probit model (specification (10) in Table 4) confirms the main findings,²⁹ as do regressions that include regional fixed effects for North, South, West, and East Germany (results not shown).

5 Additional analyses

5.1 Replacing trustworthiness measures with the factors

We next replace individual measures of perceived trustworthiness in the regression with the two rotated factors (varimax and promax rotations), as shown in Table 5, specifications (11) and (12). The values-oriented factor enters significantly with a negative coefficient, while the competence-oriented factor enters significantly with a positive coefficient.

²⁹Note that coefficients from ordered probit and OLS are not directly comparable.

Table 4: Regression analysis I: baseline and more

<i>Trust</i>	(1)	(2)	(3)	(4)	(5)	(5')	(6)	(7)	(8)	(9)	(10)
Expected economic growth	0.985*** (0.04)	0.983*** (0.04)	0.538*** (0.04)	0.492*** (0.04)	0.472*** (0.04)		0.740*** (0.04)	0.471*** (0.04)		0.478*** (0.05)	0.246*** (0.02)
Female	0.250*** (0.08)	0.288*** (0.08)	0.258*** (0.07)	0.218*** (0.06)	0.202*** (0.06)		0.171** (0.07)	0.211*** (0.07)	0.151** (0.06)	0.197** (0.08)	0.081** (0.03)
Age	-0.002 (0.00)	-0.002 (0.00)	0.010*** (0.00)	0.012*** (0.00)	0.012*** (0.00)		0.007*** (0.00)	0.012*** (0.00)	0.014*** (0.00)	0.014*** (0.00)	0.007*** (0.00)
Income	0.095*** (0.02)	0.096*** (0.02)	0.041*** (0.01)	0.028** (0.01)	0.024* (0.01)		0.048*** (0.01)	0.017 (0.01)	0.022 (0.01)	0.028 (0.02)	0.013* (0.01)
Education	0.105*** (0.02)	0.117*** (0.02)	0.010 (0.02)	0.004 (0.02)	-0.006 (0.01)		0.046*** (0.02)	0.005 (0.02)	-0.011 (0.02)	0.001 (0.02)	-0.003 (0.01)
East (1989)		-0.578*** (0.11)						-0.307*** (0.09)			
Trust in political institutions			0.505*** (0.01)	0.444*** (0.01)	0.416*** (0.01)	[1.152]		0.406*** (0.02)	0.462*** (0.02)	0.451*** (0.02)	0.223*** (0.01)
Achieved price stability in past				0.183*** (0.02)	0.171*** (0.02)	[0.432]	0.219*** (0.02)	0.182*** (0.02)	0.179*** (0.02)	0.148*** (0.03)	0.098*** (0.01)
Technocratic				0.144*** (0.02)	0.122*** (0.02)	[0.301]	0.209*** (0.02)	0.118*** (0.02)	0.123*** (0.02)	0.107*** (0.03)	0.069*** (0.01)
Provides sufficient information				-0.062*** (0.02)	-0.047*** (0.02)	[-0.126]	-0.056*** (0.02)	-0.057*** (0.02)	-0.053*** (0.02)	-0.014 (0.02)	-0.023** (0.01)
Integrity					-0.048*** (0.02)	[-0.143]	-0.058*** (0.02)	-0.042** (0.02)	-0.052*** (0.02)	-0.067*** (0.02)	-0.026*** (0.01)
Honest communication					-0.064*** (0.02)	[-0.177]	-0.112*** (0.02)	-0.067*** (0.02)	-0.066*** (0.02)	-0.055* (0.03)	-0.035*** (0.01)
Accounts for overall picture					0.167*** (0.02)	[0.420]	0.185*** (0.02)	0.171*** (0.02)	0.181*** (0.02)	0.153*** (0.03)	0.092*** (0.01)
Acts on broader concern					-0.026 (0.02)	[-0.073]	-0.023 (0.02)	-0.033* (0.02)	-0.024 (0.02)	-0.042* (0.02)	-0.015 (0.01)
Find it easy to trust others					0.059*** (0.02)	[0.139]	0.220*** (0.02)	0.063*** (0.02)	0.065*** (0.02)	0.049** (0.02)	0.034*** (0.01)
Constant	1.414*** (0.25)	1.409*** (0.29)	0.687*** (0.20)	-0.651*** (0.21)	-0.786*** (0.21)		-1.189*** (0.24)	-0.665*** (0.24)	0.120 (0.20)	-0.720** (0.31)	
Observations	3793	3497	3793	3793	3793		3793	3497	3793	3793	3793
R^2 adj. / pseudo R^2	0.156	0.168	0.404	0.458	0.473		0.336	0.475	0.446	0.488	0.142

Notes: (1)-(8) are based on OLS regressions, (9) are based on an OLS regression, where weights are applied to adjust for differences in the distribution across socio-demographic characteristics between the survey sample and the German population, (10) is based on an ordered probit regression, for which we present the Pseudo R^2 . We use robust standard errors. (5') shows the unit change in trust in the ECB in response to a change of one standard deviation in the variables of interest. Qualitative expectations for economic growth, which are asked on a five-point scale. "What developments do you expect in the following metrics over the next 12 months?" Answers range from 1 (Decrease significantly) to 5 (Increase significantly). Female is a dummy variable equal to 1 for females and 0 for males. Age is a continuous variable from 16 to 80 years and older. Income has categories 1-13 from under 500, 500-999, 1,000-1,499, 1,500-1,999, 2,000-2,499, 2,500-2,999, 3,000-3,499, 3,500-3,999, 4,000-4,999, 5,000-5,999, 6,000-7,999, 8,000-9,999, 10,000 and more EUR. Education ranges from 0-8, where 0: no degree, 1: in training / studying, 2: apprenticeship, 3: vocational school, 4: technical of commercial college, 5: university of cooperative education, 6: bachelor, 7: master / diploma, 8: doctorate. East (1989) is a dummy variable equal to 1 for respondents from the East and 0 for respondents from the West of Germany in 1989. The dependent variable "Trust in the ECB" and all other explanatory variables take integer values between 0 and 10.

We next interact the two varimax factors with socio-demographic variables and expected economic growth (results not shown) to assess whether the relationship between perceived trustworthiness of the ECB and trust in the ECB varies across groups. This is relevant as central banks consider whether to tailor communication to specific demographics. Our analysis reveals that the positive association between the competence factor and trust in the ECB is attenuated for females. However, all other interaction terms are statistically insignificant, suggesting that the relationship between perceived trustworthiness and trust in the ECB is broadly consistent across demographic groups.

In summary, the factor analysis reinforces our conclusions derived from individual trustworthiness measures: respondents who emphasize competence tend to trust the ECB more, while those who prioritize values—especially integrity and honest communication—tend to trust the institution less.

5.2 Investigating into the halo effect

Respondents provided strikingly similar responses regarding what factors mattered for their trust in the ECB ([Figure 3](#)). This phenomenon could be interpreted as a “halo effect,” a cognitive bias, where a general evaluation or impression influences the assessment of individual components related to that impression, or where an evaluation of one component influences evaluation of other components. [Krill et al. \[2016\]](#) have suggested that this effect is a manifestation of implicit trust. To investigate this possibility, we first re-estimate our baseline regression excluding respondents who gave identical ratings across all trustworthiness items (specification (13)). Removing these approximately 400 respondents from the baseline sample of 3,793 does not materially alter the results.

Next, we subtract the common mean from the perceived trustworthiness measures and re-estimate the model in specification (14), including the demeaned regressors along with the common mean in the regression. The common mean, representing the general impression of the ECB, emerges as highly significant, in line with [Angino and Secola \[2022\]](#). Specification (14') shows that a one standard deviation increase in the common mean is associated with a 0.43-unit rise in trust in the ECB.

The two demeaned competence measures lose both statistical and economic significance. “Accounts for the overall picture” was omitted due to collinearity (and the regressor matrix not being full rank anymore). When we omit another variable, “Accounts for the overall

Table 5: Regression analysis III: common factors underlying perceived trustworthiness measures

<i>Trust</i>	(11)	(12)	(13)	(14)	(14')
Expected economic growth	0.482*** (0.04)	0.482*** (0.04)	0.423*** (0.04)	0.452*** (0.04)	
Female	0.219*** (0.06)	0.217*** (0.06)	0.172*** (0.07)	0.173*** (0.06)	
Age	0.013*** (0.00)	0.013*** (0.00)	0.014*** (0.00)	0.012*** (0.00)	
Income	0.025* (0.01)	0.025* (0.01)	0.025* (0.01)	0.025* (0.01)	
Education	-0.010 (0.01)	-0.010 (0.01)	-0.004 (0.02)	-0.005 (0.02)	
Trust in political institutions	0.418*** (0.01)	0.417*** (0.01)	0.389*** (0.02)	0.408*** (0.02)	
Value-oriented factor	-0.191*** (0.04)	-0.699** (0.07)			
Competence-oriented factor	0.815*** (0.05)	1.181*** (0.08)			
Achieved price stability in past			0.195*** (0.02)	-0.012 (0.03)	[-0.021]
Technocratic			0.134*** (0.02)	-0.036 (0.04)	[-0.053]
Provides sufficient information			-0.032* (0.02)	-0.198*** (0.03)	[-0.309]
Integrity			-0.051*** (0.02)	-0.202*** (0.03)	[-0.352]
Honest communication			-0.075*** (0.02)	-0.226*** (0.03)	[-0.313]
Accounts for overall picture			0.169*** (0.02)		
Acts on broader concern			-0.016 (0.02)	-0.208*** (0.03)	[-0.322]
Find it easy to trust others	0.062*** (0.02)	0.062*** (0.02)	0.060*** (0.02)	0.063*** (0.02)	
Common mean				0.227*** (0.02)	[0.427]
Constant	1.009*** (0.20)	1.012*** (0.20)	-0.893*** (0.22)	-0.341 (0.23)	
Observations	3793	3793	3428	3605	
R^2 adj.	0.466	0.466	0.457	0.437	

Notes: See notes to Table 4, specifications (1)-(9). (11) and (12) refer to factors rotated using the varimax and promax method, respectively. In (13) we only include surveyed respondents that do not choose the same category for all trustworthiness measures. (14) refers to a specification where we subtracted the common mean from the measures prior to the estimation. “Accounts for overall picture” was omitted because of collinearity. In (14') we report the unit change in trust in the ECB in response to a change of one standard deviation in the variables of interest.

picture” no longer enters the regression significantly, similar to the technical competence measures. In contrast, “Integrity” and “Honest communication” remain significant, and “Acts on broader concern” becomes highly significant—a relationship previously obscured.

³⁰ The effects of all value-related measures rise above 0.3 units in absolute terms in specification (14').

The mean value is relatively high—averaging 6.82—indicating that the ECB currently benefits from a halo effect: respondents generally hold a favorable impression of the institution and endorse its actions.³¹

Overall, these analyses provide further evidence that any potential common-method bias arising from the use of survey-based measures is limited. The observed relationships are not solely driven by a general evaluative tendency or halo effect, but also reflect meaningful differences in the relative importance respondents attach to competence- and value-related considerations.

5.3 Do our findings for trust extend to monetary policy credibility?

In this section, we examine whether our findings on trust also apply to the ECB's monetary policy credibility. We define credibility as the negative absolute difference between respondents' long-term inflation expectations (π^e) and the ECB's 2% target. We pool 3- and 5-year-ahead expectations,³² truncating responses outside the -5% to 20% range to exclude outliers and estimate the following:

$$Credibility_i = \kappa + \lambda'X_i + u_i \quad (2)$$

where λ denotes the n -dimensional coefficient vector. We estimate Equation 2 with OLS and robust standard errors. Our dependent variable is skewed to the right and bounded at zero (with 7% of the observations being equal to zero). We address this issue by estimating a tobit model. Alternatively, we transform our credibility variable to one that is approximately normally distributed using the zero-skewness log transform. We then use the negative of the transformed variable as the dependent variable in our OLS regression. In both cases, our key findings are not altered compared to the linear regression model, and we show in the remainder of the section only the least squares estimates. We also re-estimate

³⁰To test for differences by education, we re-estimate the model separately for respondents with and without a university degree. Results are consistent across both groups.

³¹This may also explain why the “whatever it takes” statement by former ECB President Draghi was effective during the peak of the European sovereign debt crisis (Draghi 2012). It resonated with people's implicit trust and is today considered as the turning point in the crisis.

³²Half the respondents report 3-year expectations, the other half 5-year expectations.

the baseline model using credibility as the dependent variable and later replace individual trustworthiness measures with varimax-rotated factors.

Results are presented in [Table 6](#). In specification (15), we only include trust in the ECB (together with socio-demographic characteristics, expected growth, and trust in political institutions). Trust is significantly and positively related to credibility. The coefficient is statistically significant: a one-unit rise in ECB trust is associated with an increase in credibility by 0.173 percentage points. In terms of economic significance, a one standard deviation increase in trust is associated with a 0.4 percentage point shift in long-term inflation expectations toward the 2% target.

In specifications (16) and (17), we replace trust in the ECB with its determinants. The adjusted R^2 drops to 0.15—lower than in the baseline trust regressions—indicating that credibility is less well explained by our model. This is not surprising, as the survey asked about drivers of trust, not credibility. Most coefficient signs mirror those in the trust regressions, except for gender: women perceive the ECB as less credible, despite reporting higher trust.³³

The coefficients on trust in political institutions and interpersonal trust are positive and significant, as are those for “Technocratic” and “Accounts for the overall picture.”³⁴ In contrast, integrity and transparency—measured by honest communication and information provision—are no longer significant. Respondents who value the ECB acting on broader concerns view it as less credible, and “Achieved price stability in the past” also lacks significance.

These results may seem surprising, but the timing of the survey provides context: in June 2023, inflation remained elevated—5.5% in the euro area and 6.8% in Germany—well above the ECB’s 2% target. In such periods, respondents may prioritize the ECB’s responsiveness to their broader well-being over its historical inflation performance. This interpretation aligns with [Louie et al. \[2023\]](#), who show that inflation-related hardship affects mental health, which may necessitate more immediate care and concern, rather than the performance in terms of price stability.

³³We also find that respondents with higher income and education perceive the ECB as more credible. This may reflect that the ECB’s inflation target and policy approach favor creditors over debtors, attracting more support from higher-income individuals. Education likely improves understanding of inflation dynamics, which matters more for credibility than for trust, which depends on broader evaluative capacities.

³⁴This result aligns with [van der Cruysen et al. \[2025\]](#) who observe lower inflation expectations for Dutch survey respondents with greater trust in their regional government and central banks.

Table 6: Regression analysis VI: determinants of monetary policy credibility

<i>Credibility</i>	(15)	(16)	(17)	(18)	(19)
Expected economic growth	0.395*** (0.06)	0.471*** (0.06)	0.470*** (0.06)	0.395*** (0.06)	0.394*** (0.06)
Female	-1.107*** (0.11)	-1.055*** (0.11)	-1.072*** (0.11)	-1.087*** (0.11)	-1.106*** (0.11)
Age	0.013*** (0.00)	0.015*** (0.00)	0.016*** (0.00)	0.013*** (0.00)	0.014*** (0.00)
Income	0.102*** (0.02)	0.102*** (0.02)	0.104*** (0.02)	0.098*** (0.02)	0.100*** (0.02)
Education	0.066*** (0.02)	0.054** (0.02)	0.058*** (0.02)	0.056** (0.02)	0.060*** (0.02)
Trust in political institutions	0.137*** (0.02)	0.188*** (0.02)	0.187*** (0.02)	0.122*** (0.02)	0.122*** (0.02)
Trust in the ECB	0.173*** (0.02)			0.158*** (0.03)	0.155*** (0.03)
Achieved price stability in past		0.001 (0.02)		-0.025 (0.02)	
Technocratic		0.092*** (0.03)		0.072** (0.03)	
Provides sufficient information		-0.034 (0.03)		-0.027 (0.03)	
Integrity		0.016 (0.02)		0.023 (0.02)	
Honest communication		-0.017 (0.03)		-0.006 (0.03)	
Accounts for overall picture		0.069** (0.03)		0.043 (0.03)	
Acts on broader concern		-0.070*** (0.02)		-0.066*** (0.02)	
Value-oriented factor			-0.104* (0.06)		-0.075 (0.06)
Competence-oriented factor			0.260*** (0.07)		0.135* (0.07)
Find it easy to trust others		0.052** (0.02)	0.053** (0.02)	0.044* (0.02)	0.044* (0.02)
Constant	-7.220*** (0.35)	-7.538*** (0.38)	-7.111*** (0.35)	-7.415*** (0.38)	-7.265*** (0.36)
Observations	3654	3654	3654	3654	3654
R^2 adj.	0.160	0.154	0.153	0.163	0.161

Notes: See notes to Table 4, specifications (1)-(9). Credibility is defined as $-abs(\pi^e - 2)$, where π^e denotes either 3-year or 5 year-ahead inflation expectations and 2% is the ECB's inflation target. The factors were rotated with the varimax method.

Finally, Factor 2 (competence) remains highly significant, while Factor 1 (values) is only marginally so, reinforcing the importance of perceived technical competence for credibility.

We further find that the competence-oriented factor is highly significant, while the value-oriented factor is only marginally significant. The coefficient on interpersonal trust is positive and significant. When we include trust in the ECB in the regression model (specifications (18) and (19)), we find that the association between trustworthiness of the ECB and credibility—both for competence and value-based factors—is attenuated.

In summary, many of the factors that shape trust in central banks also influence monetary policy credibility. However, values such as integrity and honest communication appear to matter less for credibility than for trust. This is not surprising, as credibility—particularly in the context of inflation—is tied more closely to technical forecasts and quantitative expectations, whereas trust has relational and affective dimensions. Still, the lesser role of values in determining credibility does not diminish their importance. Integrity and transparency remain essential for central banks, not only for anchoring expectations but also for sustaining legitimacy and institutional independence.

6 Discussion and policy implications

Our analysis examines whether factors beyond conventional central banking considerations are relevant for trust in the ECB. This research was partly inspired by recent statistics showing that fewer than 50% of European citizens currently express trust in the ECB, a level broadly comparable to trust in other political institutions. We find, perhaps unsurprisingly, that respondents who value positive outcomes such as price stability and technocratic decision-making tend to exhibit greater trust in the ECB. By contrast, respondents who report that values such as integrity, transparent communication, and broader societal concern are crucial for their trust in the ECB tend to express lower levels of trust in the institution. An interpretation of this finding is that individuals who strongly endorse such values perceive the ECB as falling short in these respects. Trust in the ECB also hinges on trust in political institutions more generally. Moreover, respondents with lower levels of interpersonal trust exhibit significantly lower trust in the ECB.

The key policy takeaway is that strengthening public trust in the ECB may require moving beyond a purely technocratic approach. Two avenues are particularly promising: reinforcing fundamental values, and integrating the central bank more closely into the broader social

and political landscape. The remainder of this section discusses these two avenues.

As to the first, solely focusing on the ECB’s primary objective and strict adherence to scientific principles, rules, analyses, and facts may not be enough to bolster public trust in the institution. Instead, the ECB could place greater emphasis on core values it shares with the public, alongside its efforts and performance in achieving price stability and adherence to technical standards, which follows from Figure 3.³⁵

In our view, there may be even greater leverage in emphasizing values rather than competence. While this does not follow directly from the empirical analysis, it is reasonable to argue that central banks have largely mastered their technical capabilities and that the relative emphasis on values versus competence is less malleable, while the public’s capacity to absorb technical details may have reached its limits.³⁶ Economists within central banks (and beyond) can support this change by integrating insights from diverse disciplines such as political science, humanistic psychology, and systems theory into their analytical toolkits. The finding that values matter for respondents also carries implications for central bank communication. Central banks recognize that their previous, largely technical, communication resonates differently across people depending on income, gender, education, and other characteristics. Currently, there is a growing effort to tailor communication to different groups. One way to address this complexity may be by conveying and embodying values that are universally internalized, even if not always consciously. This approach could ultimately simplify communication.

Some questions still need to be addressed. First, what are the specific values and mindsets under consideration? While we have explored some (such as integrity, transparency including honesty, broad concern and scope), and in this way have already expanded beyond the typical central bank focus on integrity and transparency in the communication about economic conditions and central bank actions, other values and qualities like authenticity, kindness, empathy, presence, resonance, and care might also be relevant. Second, how consistently do central banks uphold these values, how can they further improve, and what strategies can be employed to effectively communicate that central banks adhere to these values to the

³⁵There may be heterogeneity in personal preferences among people and among ECB board members. But from a humanistic psychological perspective, deeper dimensions of being reflect universal aspects of human experience and give rise to shared values to which all board members should ideally be committed.

³⁶Binetti et al. [2024] recently suggest that households have limited understanding of the technicalities surrounding inflation and monetary policy, *despite* central banks’ efforts to enhance households’ technical knowledge. Similarly, Brouwer and De Haan [2022] find that increasing public awareness of the ECB’s available instruments does not enhance their trust in the institution.

public? While central bankers devote significant effort to enhancing their technical expertise and factual knowledge, incorporating mindfulness and self-reflection into their training can equip them with additional skills.³⁷ Third, how do individuals who prioritize competence react when a central bank emphasizes values? In the short term, this group may report a decline in their trust. However, over time, as they have positive experiences with central bankers acting with integrity, showing concern for the common good, and communicating honestly, they are likely to resonate more strongly with these values. Fourth, the discrepancy between respondents’ perceptions of integrity and the formal independence of central banks warrants further investigation. Despite legal safeguards for central bank independence, recent research suggests that even formally independent central banks may succumb to political pressure (Bianchi et al. 2023, Drechsel 2023) or may stray from their mandates for ideological reasons (Dentler 2019). This underscores the need for a deeper understanding of how to preserve integrity within central banking institutions, beyond legal frameworks alone.³⁸ Fifth, exploring the relationship between central banks and other political institutions further would be valuable. Do findings differ across institutions? What are the channels and causal links? Finally, it would be interesting for future research to examine whether our key findings—that both competence and values matter for public trust in the ECB, and that those who report that values matter have lower trust in the ECB—also hold in a low-inflation environment and in other countries. After all, Germans may have a particularly strong preference for competence-based legitimacy (stable prices and technocratic policymaking), reflecting the historical experience of hyperinflation and the Bundesbank’s stability tradition. It would therefore be worthwhile to investigate whether this finding and our other results generalize beyond the German context.

As a second policy implication, central bank trust cannot be viewed in isolation from broader societal and political trust. One question is whether and how central banks can and should influence individuals’ broader trust. As key political players, central banks can engage in a broader societal discourse on the underlying factors contributing to the ongoing political crisis, which extends beyond central banks. Even central banks and trust in central banks will ultimately not remain unaffected by phenomena such as polarization, populism, or social

³⁷For example, between November 2024 and April 2025, a series of nine experience-based workshops on “Holistic Central Bank Communication” took place in the Deutsche Bundesbank. These workshops allowed employees to explore topics such as consciousness and perspective-taking, listening, resonance, non-violent communication, the role of narratives and identity, and more.

³⁸Lack of integrity can manifest in various forms, beyond fraud and bribery, and including decisions influenced by vested interests, or actions driven by fear, which can to a large extent even be unconscious. Investigating what people perceive as a lack of integrity would certainly be valuable, and understanding how it can be addressed as well.

unrest and resulting effects on trust in political institutions in general. While some argue that central banks can distinguish themselves through technocratic policymaking, our results do not support this. An alternative approach may be to uphold the highest ethical standards and, in doing so, serve as a model for other institutions. There remain open questions about the most effective strategies for central banks to navigate these challenges and maintain public trust in an increasingly complex political landscape.

Embracing a more holistic approach to the analysis of public trust—one that fosters values and genuine connections between policymakers and citizens—can unlock untapped possibilities. It is important to note that advocating for values and introspection does not mean sidelining science, rules, or facts. Indeed, technocratic policymaking has played a crucial role in bolstering trust in central banks. A robust framework that integrates rules, science, and data, coupled with safeguards for central bank independence and inclusive decision-making processes, is essential to mitigate the effects of human imperfections. By embracing diversity in perspectives, fostering shared responsibilities, and upholding transparency, such an approach can forestall undesirable outcomes. In essence, our paper advocates for a comprehensive view of central bank trust—one that encompasses all facets.

References

- Monetary Policy Framework Renewal — December 2021. *Bank of Canada*, 2021.
- A. Al Gore. This is the moment to take on the climate crisis. Ted talk, 2022.
- A. Alesina and E. La Ferrara. Who Trusts Others? *Journal of Public Economics*, (2): 207–234, 2002.
- H. Almaas. *Elements of the Real in Man, Diamond Heart, Book One*. Shambala Publications, Boston, MA, 1987.
- S. Angino and S. Secola. Instinctive versus reflective trust in the European Central Bank. *ECB Working Paper*, (2660), 2022.
- Dimitrios Argyroulis and Nikolaos Vagdotis. Revisiting ecb’s technocratic legitimacy: No longer fit-for-purpose? *Politics and Governance*, 13, 2025. doi: 10.17645/pag.9094.
- E. Baranyai, P.P. Kolozsi, G. Neszveda, K. Lehmann, and A. Banai. The impact of the green direction in central banking on the general public’s trust: Evidence from Hungary. *International Review of Financial Analysis*, 97(C), 2025.
- N. Berggren, S. Daunfeldt, and J. Hellström. Social trust and central-bank independence. *European Journal of Political Economy*, 34:425–439, 2014.
- B. Bernanke. Inaugurating a new blog. <https://www.brookings.edu/blog/ben-bernanke/2015/03/30/inaugurating-a-new-blog/?msclkid=303c5319d0f511ec94095001a638b34b>, 2015.
- D. Bholat, N. Broughton, Ter Meer J., and E. Walczak. Enhancing central bank communication using simple and relatable information. *Journal of Monetary Economics*, 108:1–15, 2019.
- F. Bianchi, T. Gomez-Cramb, T. Kindc, and H. Kung. Threats to central bank independence: High-frequency identification with twitter. *Journal of Monetary Economics*, 135:37–54, 2023.
- A. Binetti, F. Nuzzi, and S. Stantcheva. People’s Understanding of Inflation. *NBER Working Paper*, 32497, 2024.
- A.S. Blinder, M. Ehrmann, J. De Haan, and D.-J. Jansen. Central bank communication with the general public: Promise or false hope? *Journal of Economic Literature*, 62(2): 425–457, 2024.

- BOP-HH. Bundesbank Online Panel – Households (BOP-HH), Summary document. *Deutsche Bundesbank, Research Centre*, March, 2024.
- S. Bowles and W. Carlin. Shrinking capitalism. *AEA Papers and Proceedings*, 110:372–77, May 2020.
- M. Brezzi, S. Gonzalez, and M. Nguyen, D. an Prats. An updated OECD framework on drivers of trust in public institutions to meet current and future challenges. *OECD Working Papers on Public Governance*, (48), 2021.
- N. Brouwer and J. de Haan. Trust in the ECB: Drivers and Consequences. *European Journal of Political Economy*, 74:102262, 2022.
- N. Brouwer and J. De Haan. The impact of providing information about the ECB’s instruments on inflation expectations and trust in the ECB: Experimental evidence. *Journal of Macroeconomics*, 73:103430, 2022.
- D. Bui and B. Hayo. Drawbacks of Household Panel Data on Inflation Perceptions and Expectations: Non-Representativeness and Selectivity. *MAGKS Joint Discussion Paper Series in Economics*, (14-2025), 2025.
- M. Bulutay. Consumer beliefs about central bank inflation forecasts. *Available at SSRN*, 2025.
- W.R. Campbell. The sources of institutional trust in East and West Germany: civic culture or economic performance? *German Politics*, 13(3):401–418, 2004.
- W.R. Campbell. Values, trust and democracy in Germany: Still in search of ‘inner unity’? *European Journal of Political Research*, 51:646–670, 2012.
- C. Campos-Castillo, B.W. Woodson, E. Theiss-Morse, T. Sacks, M. Fleig-Palmer, and M.E. Peek. Examining the relationship between interpersonal and institutional trust in political and health care contexts. In Shockley, E. et al., editor, *Interdisciplinary Perspectives on Trust*, pages 99–115. Springer International Publishing Switzerland, 2016.
- M. Carney. *Value(s): Building a Better World for All*. William Collins, Dublin, 2021.
- A. Carstens. The value of trust. *Speech at Award ceremony, King of Spain Prize in Economics, Madrid, Spain, 6 March*, 2023.

- A. Carstensen. Digital currencies and the soul of money. *Speech, Goethe University's Institute for Law and Finance (ILF) conference on "Data, Digitalization, the New Finance and Central Bank Digital Currencies: The Future of Banking and Money"*, 18 January 2022, 2022.
- C. Castelfranchi and R. Falcone. *Trust Theory: A Sociocognitive and Computational Model*, volume 18. John Wiley & Sons, 2010.
- I. Christelis, D. Georgarakos, T. Jappelli, and M. van Rooij. Trust in the central bank and inflation expectation. *International Journal of Central Banking*, 16(6):1–37, 2020.
- J. Coleman. *Foundations of Social Theory*. The Belknap Press of Harvard University Press, 1990.
- S. Cook-Greuter. Ego development: A full-spectrum theory of vertical growth and meaning making. *mimeo, Wayland*, 2014.
- F. D'Acunto, U. Malmendier, and M. Weber. Gender roles produce divergent economic expectations. *Proceedings of the National Academy of Sciences*, 118(21), 2021.
- A. Dentler. Did the fed raise interest rates before elections? *Public Choice*, 181:239–273, 2019.
- P. T. Dinesen, K. M. Sønderskov, J. Sohlberg, and P. Esaiasson. Close (causally connected) cousins? Evidence on the causal relationship between political trust and social trust. *Public Opinion Quarterly*, 86(3):708–721, 2022.
- M. Draghi. Verbatim of the remarks made by mario draghi. *Speech by Mario Draghi, President of the European Central Bank at the Global Investment Conference in London 26 July 2012*, 2012.
- T. Drechsel. Estimating the Effects of Political Pressure on the Fed: A Narrative Approach with New Data. *CEPR Discussion Paper*, 18612, 2023.
- M. Ehrmann. Trust in central banks. *Journal of Economic Surveys*, 2025.
- M. Ehrmann, M. Soudan, and L. Stracca. Explaining European Union citizens' trust in the European Central Bank in normal and crisis times. *The Scandinavian Journal of Economics*, 115(3):781–807, 2013.

- M. Ehrmann, S. Holton, D. Kedan, and G. Phelan. Monetary Policy Communication: Perspectives from Former Policymakers at the ECB. *Journal of Money, Credit and Banking*, 56(4):837–864, 2024.
- S. Eickmeier. Value, Values, and the Role of Awareness. *CEPR Discussion Paper*, 19948, 2025.
- Sandra Eickmeier and Luba Petersen. The ecb’s climate activities and public trust. *European Economic Review*, page 105319, 2026.
- E. Farvaque, M.A. Hayat, and A. Mihailov. Who Supports the ECB? Evidence from Eurobarometer Survey Data. *The World Economy*, 40(4):654–677, 2017.
- E. Fehr. On the economics and biology of trust. *Journal of the European Economic Association*, Apr.-May, 2009, 7(2/3):235–266, 2009.
- M. Fratzscher. Die EZB riskiert mit aggressiver Kommunikation ihre Glaubwürdigkeit. *Handelsblatt, Gastkommentar*, 9 Sept. 2022, 2022.
- G. Gloeckler and S. Mee. A plain-speaking central bank: contradiction in terms? *ECB blog*, 13 October, 2022.
- A. Haldane and M. McMahon. Central Bank Communications and the General Public. *AEA Papers and Proceedings*, 108:578–583, 2018.
- L.P. Hansen. Central banking challenges posed by uncertain climate change and natural disasters. *Journal of Monetary Economics*, 125:1–15, 2022.
- Y.N. Harari. When I say that Bitcoin is a currency of distrust, I’m just repeating what Bitcoin fans themselves say (Video), <https://www.facebook.com/Prof.Yuval.Noah.Harari/posts/986601726156007/>. *Faceook*, May 2024.
- B. Hayo and E. Neuenkirch. The German public and its trust in the ECB: The role of knowledge and information search. *Journal of International Money and Finance*, 47:286–303, 2014.
- B Hayo and F. Neumeier. Public knowledge about and attitudes towards central bank independence in New Zealand. *Journal of Banking & Finance*, 113:105737, 2020.

- Bernd Hayo and Florian Neumeier. Explaining central bank trust in an inflation-targeting country: the case of the Reserve Bank of New Zealand. *Oxford Economic Papers*, 73(1): 27–48, 2021.
- I.D. Hwang, T. Lustenberger, and E. Rossi. Central bank communication and public trust: The case of ECB speeches? *Journal of International Money and Finance*, 137(102916), 2023.
- O. Issing. Should we have faith in central banks? *Speech, St. Edmund’s College Millenium Year Lecture*, 2000.
- D. Jansen, M. Fratzscher, J. de Haan, M. Ehrmann, and A. Blinder. What we know and what we would like to know about central bank communication. *VOXEU.org*, 15 May, 2008.
- D. Kahneman. *Thinking, Fast and Slow*. Farrar, Straus and Giroux, 2011.
- R. Kegan. *In over our heads. The mental demands of modern life*. Harvard University Press, Cambridge Massachusetts, 1994.
- Z. Kril, D. Leiser, and A. Spivak. What determines the credibility of the central bank of Israel in the public eye? *International Journal of Central Banking*, 12(1):67–93, 2016.
- O. Kryvtsov and L. Petersen. Central bank communication that works: Lessons from lab experiments. *Journal of Monetary Economics*, 117:760–780, 2021.
- C. Lagarde. Opening Statement by Christine Lagarde to the Economic and Monetary Affairs Committee of the European Parliament, September 4. 2019.
- P. Louie, C. Wu, F.V. Shahidi, and A. Siddiqi. Inflation hardship, gender, and mental health. *SSM - Population Health*, 23:101452, 2023.
- G. Majone. Europe’s “Democratic Deficit”: The Question of Standards. *European Law Journal*, 4(1):5–28, 1998.
- M. Malmendier and J. Wachter. *Memory of Past Experiences and Economic Decisions*. M. Kahana and A. Wagner (eds.), Handbook of Human Memory, Oxford University Press, 2023.
- U. Malmendier. Exposure, experience, and expertise: why personal histories matter in economics. *Journal of the European Economic Association*, 19(6):2857–2894, 2021.

- U. Malmendier and S. Nagel. Learning from inflation experiences. *The Quarterly Journal of Economics*, 131(1):53–87, 2016.
- U. Malmendier and L. Sheng. Scarred Consumption. *American Economic Journal: Macroeconomics*, 2023.
- A.H. Maslow. *Toward a psychology of being (German Version: Psychologie des Seins - Ein Entwurf)*. Litton Educational Publishing, Inc / Kindler Verlag GmbH, München, German edition from 1973, 1968.
- M. Mazzucato. *The value of everything – making and taking in the global economy*. Hachette Book Group, New York, 2018.
- S. Mcleod. Humanistic approach in psychology (humanism): Definition & examples. <https://simplypsychology.org/humanistic.html>, 2023.
- S. Mellina and T. Schmidt. The Role of Central Bank Knowledge and Trust for the Public’s Inflation Expectations. *Deutsche Bundesbank Discussion Papier*, 32, 2018.
- S. Mochhoury. Central Bank Communication and Trust: An Experimental Study on the European Central Bank and the General Public. *ECB Working Paper*, 2824, 2023.
- F. Murtin, L. Fleischer, V. Siegerink, A. Aassve, Y. Algan, R. Boarini, S. Gonzalez, Z. Lonti, G. Grimalda, R. Hortala Vallve, S. Kim, D. Lee, L. Putterman, and C. Smith. Trust and its determinants: Evidence from the Trustlab experiment. *OECD Statistics Working Paper*, (2018/02), 2018.
- OECD. OECD Guidelines on Measuring Trust. 2017.
- OECD. Building trust to reinforce democracy - Main findings from the 2021 OECD survey on drivers of trust in public institutions. 2022.
- D. Pollack. Trust in institutions and the urge to be different: On attitudinal change in eastern Germany. *German Politics*, 8(3):81–102, 2007.
- J.H. Powell. Statement from Federal Reserve Chair Jerome H. Powell. <https://www.federalreserve.gov/newsevents/speech/powell20260111a.htm>, 2026.
- R.D. Putnam. *Bowling alone: The collapse and revival of American community*. Simon and Schuster, 2000.
- L. Reiche. That’s what she said: an empirical investigation on the gender gap in inflation expectations. 2023.

- C. Rogers. *On becoming a person*. Houghton Mifflin Company, Boston, second ed. 1977, 1961.
- R. Rohrschneider and R. Schmitt-Beck. Trust in Democratic Institutions in Germany: Theory and Evidence Ten Years After Unification. *German Politics*, 11(3):34–58, 2002.
- I. Salle, Y. Gorodnichenko, and O. Coibion. Lifetime Memories of Inflation: Evidence from Surveys and the Lab. *NBER Working Paper*, 31996, 2024.
- M. J. Sandel. *What Money Can't Buy: The Moral Limits of Markets*. Macmillan USA, 2012.
- Fritz W. Scharpf. *Governing in Europe: Effective and Democratic?* Oxford University Press, Oxford, 1999.
- V.A. Schmidt. Democracy and Legitimacy in the European Union Revisited: Input, Output and “Throughput”. *Political Studies*, 61(1):2–22, 2013. doi: 10.1111/j.1467-9248.2012.00962.x.
- I. Schnabel. The importance of trust for the ECB’s monetary policy. *Speech given as part of the seminar series “Havarie Europa. Zur Pathogenese europäischer Gegenwart” at the Hamburg Institute for Social Research (Hamburger Institut für Sozialforschung)*, 2020.
- D. Siegel. *The Developing Mind*. The Guilford Press, third ed., New York, 2020.
- D. Siegel. Comprehensive interpersonal neurobiology course. Mindsight Institute. <https://www.mindsightinstitute.com>, 2022.
- P. Singer. Ethics - Philosophy. *Encyclopedia Britannica*, <https://www.britannica.com/topic/ethics-philosophy>, 2023.
- R. Smith. Shapes of mind: The 10 stages of consciousness. <https://integrallife.com/ten-stages-consciousness/>, 2017.
- S Stancheva. Why do we dislike inflation? *Brookings Papers on Economic Activity*, 1-46 (Sprin), 2024.
- E.M. Uslaner. *The moral foundations of trust*. Cambridge University Press, 2002.
- E.M. Uslaner. *The Oxford Handbook of Social and Political Trust*. Oxford Handbooks, 2018.
- C. van der Cruijssen and A. Samarina. Drivers of trust in the ECB during the pandemic. *Applied Economics*, 55(13):1454–1476, 2023.

- C. van der Cruijsen, J. de Haan, and M. van Rooij. The association of high perceived inflation with trust in national politics and central banks. *Journal of Banking & Finance*, 171:107368, 2025.
- B. Van der Kolk. *Verkoerperter Schrecken: Traumaspuren in Gehirn, Geist und Koerper und wie man sie heilen kann [The body keeps the score: mind, brain and body in the transformation of trauma]*. Probst Verlag, Lichtenau/Westf., 2018/2015.

Appendix

A.1 Beyond conventional and behavioural approaches to trust

This appendix explores additional definitions of trust, which are also relevant for how central bankers relate to the public and for social values. We rely on deep (humanistic) psychology (e.g. [Rogers 1961](#), [Maslow 1968](#)), which emerged from the limitations of behavioural psychology,³⁹ and the interdisciplinary InterPersonal NeuroBiology (IPNB) framework which draws on insights from psychology, neuroscience, physics and systems theory, proposed by psychiatrist [Siegel \[2020\]](#). Both approaches have a very different understanding of the human mind, compared to modern economics (rational individuals with fixed preferences) or behavioural psychology (the mind being conditionable through external stimuli).

In humanistic psychology, trust is a multifaceted concept involving not only trust in others, but also self-trust, trust in the world, and trust in the process of growth and development ([Rogers 1961](#), [Maslow 1968](#)). Interpersonal trust, according to [Rogers \[1961\]](#), emerges as a natural outcome of genuine human connection and empathic understanding (pp. 283-284). Congruence, i.e., the ability to be transparent, and authentic in interactions⁴⁰, is essential for establishing trust as well, as it creates a safe and supportive environment where individuals feel understood, accepted, and valued. [Maslow \[1968\]](#) suggests that as a pre-requisite of trust (and self-actualization) safety needs must be met (pp. 102, 107). [Almaas \[1987, pp. 96-106\]](#) defines trust as “allowing things to emerge”. He emphasizes trust in oneself, in somebody else and in a situation (or life itself, as it is or as it unfolds). He emphasizes a sense of safety (and absence of fear) as a factor driving trust. He further distinguishes three levels of trust: the first, most superficial one being the knowledge that “the person is not going to hurt you”; the second, deeper one, is trust that “the person wants what is best for you” (tied to the qualities compassion and kindness); and the third, even deeper one, is trust

³⁹Humanistic psychology (based on Rogers, Maslow, also Frankl, May, Yalom etc.) emerged in the late-1950s as the third wave of psychology, following the first two waves, psychoanalysis and behavioural psychology. Humanistic psychology expanded its influence in the 1970s and 1980s ([Mcleod 2023](#)). It looks at the whole person, assumes that each individual is unique, that people have free will (and agency) and, hence, behaviour is not exclusively determined by past conditioning or the environment. Humanistic psychologists are interested in being, becoming, meaning. People aim at self-actualizing (which, according to Maslow, requires satisfaction of basic needs first) and at realizing their human potential (or human nature). It is further recognized that humans are innately good, active and creative. Humanistic psychology offers a new understanding of human nature and human conditions.

⁴⁰Rogers defines someone’s congruence as “the extent to which his words matched his feelings” (p. 49), “feelings [that person] is experiencing are available to him, available to his awareness, and he is able to live these feelings, be them, and able to communicate them if appropriate” (p. 61), and he emphasizes congruence between self and one’s ideal (p. 236).

“because of what the person is”, e.g. “that the person has integrity, which has nothing to do with you”, or truthfulness, which can imply that one gets hurt.

Siegel embraces a systems view of the brain and social groups, where the mind emerges from neural interactions and interpersonal relations. He defines trust as “the state which arises when there is presence, attunement and resonance” (Siegel 2020, pp. 200-201). Presence entails openness, receptivity, and the capacity to embrace uncertainty. Attunement involves focusing attention on the internal experience of another, beneath behavioural signals. Resonance describes how we connect with another, enabling us to feel felt, become part of the system, and we can change with the encounter. Siegel also posits that trust manifests as the absence of fear.

These definitions of trust acknowledge our inherent capacity as trusting and connected beings. Importantly, trust in these approaches is a *state of being*. It involves the being (or existential) levels, which lie underneath behaviour, thoughts, emotions or primary impulses, and beyond preferences and expectations.⁴¹ Trust can be eroded through negative experiences in relations (interpersonal or with institutions)⁴², but it can also be restored through positive new experiences that overwrite the old, negative ones. Neuroplasticity, the brain’s adaptability throughout adulthood, is a key factor in this transformation. The relevance of these insights lies in how political institutions shape the environment individuals are having experiences in. Policymakers can foster positive interactions, promoting trust-building experiences. Humanistic psychology and the IPNB framework suggest that this can occur when they are with integrity, authentic (or congruent), empathic and kind, able to be present (and open), to attune and to resonate, and when they care for people’s safety, beyond mere technical competence. Consequently, political institutions not only have the potential to en-

⁴¹The being levels are typically disregarded in modern science. But they have been emphasized by philosophers including some pioneers in economics such as Aquinas, Aristotle, Augustine, Fromm, Hegel, Marx, Mill, Plato, Rousseau, Smith, Sokrates, Spinoza.

⁴²Early interactions (and experiences) with primary caregivers exert particularly profound influence. Childhood trauma and insecure attachment are prevalent phenomena contributing to this erosion of trust. As children we depend on our caregivers for our survival, and our brains are still growing. 35%-45% of the US population exhibits insecure (avoidant and ambivalent) attachment to a primary caregiver (where children do not feel seen, soothed or safe) (Siegel 2022), 2/3 with at least one adverse childhood experience (i.e. physical or emotional abuse or neglect, violence in the household, addiction by at least one parent) (psychiatrist Van der Kolk 2018/2015, pp. 175-179), which can lead to developmental trauma. There is also collective trauma, which is overlapping with attachment issues. Individuals with such experiences often struggle to feel safe and may lose trust, along with the capacity to be present, resonate, and attune, particularly when triggered by stressful situations reminiscent of the original event, or even habitually. Traumatic experiences get stored in implicit memory, inaccessible to conscious awareness. Consequently, individuals may struggle to differentiate between present and past, and may even mistrust those who are trustworthy.

hance their own trustworthiness, but they also can influence individuals' capacity for trust. Of course, they bear only part of the responsibility for individuals' ability to trust.

These new dimensions of trust are also interconnected with trust in individuals or institutions due to shared values, as discussed in the main text. Values do not fall from the sky. They must be internalized and embodied. Otherwise, they are merely empty statements. It is important to understand that values are a reflection of people's mindsets.

A.2 Correlation between trustworthiness measures

In [Table F1](#) we consider variables associated with perceived trustworthiness one by one. The signs of the previously negative coefficients (of "Integrity", "Honest communication", "Acts on broader concern" as well as "Provides sufficient information") switch to positive, and all variables are highly significant. This is not a sign of multicollinearity which would imply that coefficients turn insignificant, but not from significantly negative to significantly positive. [Table F2](#) shows that the measures of trustworthiness as perceived by respondents are mildly positively correlated, with correlation coefficients between 0.47 and 0.7. Variance inflation factors (VIF) are all below 3, and only two are above 2.5, i.e. the VIF associated with "Honest communication" is at 2.98, and that associated with "Accounts for broader picture" is at 2.65. This confirms mild correlations only.

What explains the switching of some of the signs? In specification (14) of [Table 5](#), we explicitly capture the "common latent attitude" by including a mean term (i.e., a common factor) alongside the demeaned variables. The results show that the common mean enters with a positive coefficient, while the demeaned variables enter negatively. This pattern suggests that, in univariate specifications, the common factor dominates, leading to positive coefficients. In contrast, in the multivariate specification, the shared factor is absorbed by the set of covariates, allowing the negative idiosyncratic association to emerge.

Table F1: Regression analysis II: varying measures associated with perceived trustworthiness of the ECB

<i>Trust</i>	(a.1)	(a.2)	(a.3)	(a.4)	(a.5)	(a.6)	(a.7)
Expected economic growth	0.495*** (0.04)	0.508*** (0.04)	0.528*** (0.04)	0.529*** (0.04)	0.524*** (0.04)	0.493*** (0.04)	0.521*** (0.04)
Female	0.186*** (0.06)	0.226*** (0.06)	0.207*** (0.07)	0.226*** (0.07)	0.218*** (0.07)	0.175*** (0.07)	0.206*** (0.07)
Age	0.011*** (0.00)	0.012*** (0.00)	0.011*** (0.00)	0.010*** (0.00)	0.012*** (0.00)	0.011*** (0.00)	0.011*** (0.00)
Income	0.030** (0.01)	0.028** (0.01)	0.036*** (0.01)	0.034** (0.01)	0.032** (0.01)	0.025* (0.01)	0.035** (0.01)
Education	0.011 (0.02)	-0.000 (0.02)	0.012 (0.02)	0.012 (0.02)	0.011 (0.02)	0.005 (0.02)	0.013 (0.02)
Trust in political institutions	0.440*** (0.01)	0.440*** (0.01)	0.473*** (0.01)	0.476*** (0.01)	0.475*** (0.01)	0.452*** (0.01)	0.471*** (0.01)
Find it easy to trust others	0.061*** (0.02)	0.065*** (0.02)	0.068*** (0.02)	0.067*** (0.02)	0.066*** (0.02)	0.059*** (0.02)	0.066*** (0.02)
Achieved price stability in past	0.222*** (0.02)						
Technocratic		0.201*** (0.01)					
Provides sufficient information			0.087*** (0.01)				
Integrity				0.065*** (0.01)			
Honesty communication					0.092*** (0.01)		
Accounts for overall picture						0.204*** (0.01)	
Acts on broader concern							0.093*** (0.01)
Constant	-0.573*** (0.20)	-0.622*** (0.21)	-0.005 (0.21)	0.151 (0.21)	-0.103 (0.22)	-0.552*** (0.20)	-0.007 (0.21)
Observations	3793	3793	3793	3793	3793	3793	3793
R^2 adj.	0.451	0.441	0.415	0.412	0.416	0.444	0.417

Notes: See notes to [Table 4](#), specifications (1)-(9).

Table F2: Correlation between measures of perceived trustworthiness of the ECB

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Achieved price stability in past (a)	1						
Technocratic (b)	0.554	1					
Provides sufficient information (c)	0.473	0.573	1				
Integrity (d)	0.429	0.548	0.609	1			
Honest communication (e)	0.504	0.635	0.661	0.703	1		
Accounts for overall picture (f)	0.557	0.685	0.607	0.591	0.674	1	
Acts on broader concern (g)	0.486	0.551	0.608	0.596	0.654	0.629	1

A.3 Investigating further into interpersonal trust

In this appendix, we aim to enrich our understanding of “interpersonal trust”. “Find it easy to trust others” (statement (h)) served as our core measure of people’s ability to trust, and we now compare it with other related measures. These additional measures encompass trust in life, self-trust, fears, and compensation mechanisms which serve to avoid these fears (and uncertainty and relations) and which prevent trust. Rooted in humanistic psychology and a systems perspective of the mind, these concepts offer complementary insights into the multifaceted nature of trust, and they may equally influence trust in political institutions including central banks, see Appendix A.1. We anticipate that participants’ responses may vary based on their interpretations, personal experiences, and willingness to acknowledge these nuanced aspects of (lack of) trust. Through this exploratory analysis, we aim to shed light on the broader landscape of trust and respondents’ capacity to trust.

We presented participants from Wave 42 of the survey with the following question:

People’s ability to trust / interpersonal trust. “On a scale from 0 to 10, to what extent do the following statements describes you?” where 0 refers to “Not at all” and 10 refers to “Fully”.

(j) I take things as they come. **Take things as they come**

(k) I tend to rely on my own intuition. **Rely on my own intuition**

(l) I normally like to plan and be in control of the situation. **Like to plan and be in control**

(m) I tend to rely on statistics or scientific knowledge. **Rely on statistics or science**

(n) I tend to consider myself an anxious person. **Consider myself an anxious person**

(j) reflects the ability to trust in life in general,⁴³ as it is or as it unfolds, and (k) the ability to trust oneself. On the other hand, (n) captures fear (or anxiety, which we use here synonymously) which is incompatible with trust. (l) represents mechanisms aimed at avoiding uncertainty (and making ourselves vulnerable). One mechanism is to control, and a way to control is by making plans. There is nothing wrong with making plans. However, when plans are made primarily to exert control, especially in excess, it often indicates a deficiency in trust. Moreover, we may turn to statistics and scientific data (m) when we anticipate that they will aid us in forming a more accurate assessment of the trustworthiness of households or institutions. However, excessive reliance on factual information and technical data can also signify a lack of trust, serving as a compensatory mechanism.⁴⁴ The underlying motivation for people to utilize (or abstain from using) statistics and science is not clear *a priori*. The sign of the correlation with “Find it easy to trust others” is also ambiguous for (k). Some respondents may realize that a strong trust in themselves (or their intuition) correlates with a robust trust in others and life in general. The other part might interpret the statement as: “I better rely on myself, rather than on others.”⁴⁵ Consequently, we anticipate an unequivocally positive correlation between (j) and respondents’ capacity to trust, including our core measure (h). Conversely, (l) and (m) are likely to exhibit negative correlations. The relationships for (k) and (m) remain uncertain and contingent upon individual experiences and perspectives.

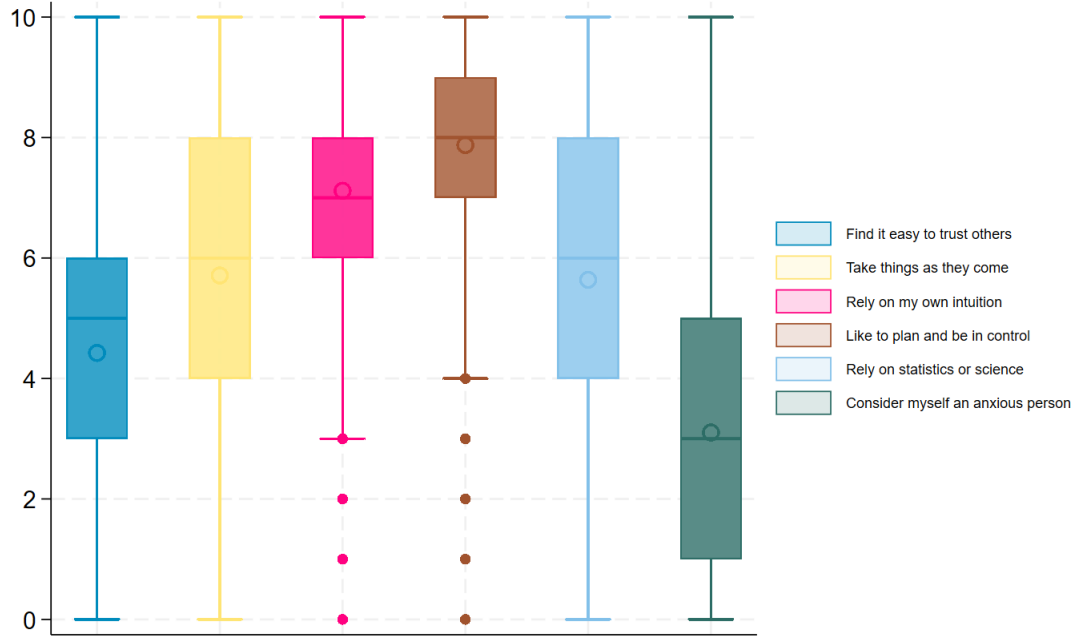
In [Figure 4](#) we present moments of additional interpersonal trust measures, along with our baseline measure (“Find it easy to trust others”). The picture across measures is somewhat inconclusive. We find highest values for “Like to plan and be in control” and lowest values for “Consider myself an anxious person”, which is perhaps most difficult to admit (to others and oneself). Correlations among measures are quite low, see [Table F3](#). Lack of a clarity is an important finding by itself.

⁴³When [Issing \[2000\]](#), in his statement which we cited in Section ??, referred to “trust in the future”, he may have meant something similar.

⁴⁴This dynamic can be understood as follows: “the less confident I feel in my ability to trust another person (not necessarily due to their lack of trustworthiness, but perhaps because I am unable to resonate, attune or be present), the more inclined I am to seek out factual information and data about them. Subsequently, I will base my decision on whether I get vulnerable and trust or not on this gathered information.”

⁴⁵This tendency often reflects avoidant attachment, a pattern stemming from a caregiver’s physical or emotional absence. In such cases, the child learns to fend for themselves, projecting an illusion of independence to their environment (and themselves). This inclination suggests a reduced propensity for trust in general. Individuals who have undergone such experiences often fail to recognize that, deep down, they lack trust in themselves. Instead, they assert unwavering self-reliance, masking the suppression of painful emotions stemming from difficult early experiences. These emotions become enshrined in their implicit memory, shielded from conscious awareness. Consequently, what they report may diverge from their true feelings, as they may either be unaware of their inner discord or conform to societal expectations.

Figure 4: Factors related to people's ability to trust



Note: The figure shows medians (lines), means (circles), interquartile ranges, minima and maxima as well as outliers (dots) of the variables. Outliers are defined as observations exceeding 1.5 times the interquartile range.

Table F3: Correlations between measures of the ability to trust

	(a)	(b)	(c)	(d)	(e)	(f)
Find it easy to trust others (a)	1					
Take things as they come (b)	0.207	1				
Rely on my own intuition (c)	0.001	0.171	1			
Like to plan and be in control (d)	-0.095	-0.082	0.233	1		
Rely on statistics or science (e)	0.309	0.071	-0.161	0.063	1	
Consider myself an anxious person (f)	-0.022	-0.062	0.141	-0.004	0.050	1

Table F4: Regression analysis IV: varying measures associated with people's ability to trust

<i>Trust</i>	(A1)	(A2)	(A3)	(A4)	(A5)	(A6)
Expected economic growth	0.472*** (0.04)	0.475*** (0.04)	0.470*** (0.04)	0.472*** (0.04)	0.476*** (0.04)	0.461*** (0.04)
Female	0.208*** (0.06)	0.243*** (0.06)	0.210*** (0.06)	0.205*** (0.06)	0.208*** (0.06)	0.240*** (0.06)
Age	0.012*** (0.00)	0.013*** (0.00)	0.012*** (0.00)	0.012*** (0.00)	0.012*** (0.00)	0.015*** (0.00)
Income	0.026** (0.01)	0.025* (0.01)	0.028** (0.01)	0.027** (0.01)	0.027** (0.01)	0.024* (0.01)
Education	-0.002 (0.01)	-0.018 (0.02)	-0.008 (0.01)	-0.002 (0.01)	-0.004 (0.01)	-0.020 (0.02)
Trust in political institutions	0.434*** (0.01)	0.408*** (0.02)	0.432*** (0.01)	0.432*** (0.01)	0.435*** (0.01)	0.387*** (0.02)
Achieved price stability in past	0.173*** (0.02)	0.175*** (0.02)	0.173*** (0.02)	0.171*** (0.02)	0.172*** (0.02)	0.176*** (0.02)
Technocratic	0.122*** (0.02)	0.103*** (0.02)	0.119*** (0.02)	0.120*** (0.02)	0.121*** (0.02)	0.103*** (0.02)
Provides sufficient information	-0.048*** (0.02)	-0.048*** (0.02)	-0.047** (0.02)	-0.047** (0.02)	-0.048*** (0.02)	-0.044** (0.02)
Integrity	-0.047*** (0.02)	-0.046*** (0.02)	-0.046*** (0.02)	-0.047*** (0.02)	-0.047*** (0.02)	-0.045*** (0.02)
Honest communication	-0.062*** (0.02)	-0.063*** (0.02)	-0.063*** (0.02)	-0.064*** (0.02)	-0.063*** (0.02)	-0.063*** (0.02)
Accounts for overall picture	0.168*** (0.02)	0.166*** (0.02)	0.169*** (0.02)	0.169*** (0.02)	0.169*** (0.02)	0.164*** (0.02)
Acts on broader concern	-0.027 (0.02)	-0.022 (0.02)	-0.027 (0.02)	-0.026 (0.02)	-0.026 (0.02)	-0.023 (0.02)
Find it easy to trust others						0.049*** (0.02)
Like to plan and be in control	-0.033* (0.02)					-0.020 (0.02)
Rely on statistics or science		0.069*** (0.02)				0.064*** (0.02)
Rely on my own intuition			-0.044*** (0.02)			-0.047*** (0.02)
Take things as they come				0.030** (0.01)		0.028** (0.01)
Consider myself an anxious person					-0.001 (0.01)	-0.005 (0.01)
Constant	-0.396 (0.24)	-0.854*** (0.21)	-0.306 (0.24)	-0.809*** (0.22)	-0.623*** (0.21)	-0.638*** (0.28)
Observations	3793	3793	3793	3793	3793	3793
R^2 adj.	0.471	0.474	0.471	0.471	0.470	0.477

Notes: See notes to [Table 4](#), specifications (1)-(9).

Subsequently, we substitute “Find it easy to trust others” with each of these supplementary measures in our baseline regression (5), [Table 4](#). Notably, “Like to plan and be in control” and “Take things as they come” exhibit significant entries into the regression, with negative and positive coefficients, respectively ([Table F4](#)). Hence, there is some consistency across these measures, including our core interpersonal trust measure. However, “Consider myself an anxious person” proves insignificant, possibly due to hesitance to admit anxiety among respondents. “Rely on my own intuition” yields a highly significant negative coefficient, implying a predisposition towards self-reliance, indicative of an avoidant attachment pattern or an emphasis on autonomy (falsely called “liberal” by some). Furthermore, respondents who indicate a propensity to rely on statistics or science demonstrate elevated trust in the ECB, aligning with the positive regression coefficient of “Technocratic.” This result suggests that respondents employ statistical and scientific analysis to assess trustworthiness, reaffirming the importance of technical competence. Finally, we incorporate all variables associated with trust capability simultaneously into the regression ([Table F4](#), specification (A6)). While the overall findings are largely upheld, there is some attenuation in significance.

How large is the group of respondents who are able to trust in general *and* provide answers that are consistent across measures? And who are they? We consider two groups. We define “High ability to trust 1” as: “Like to plan and be in control”, “Consider myself an anxious person” smaller than or equal to 5 and “Find it easy to trust others”, “Take things as they come” greater than or equal to 5. And we define “High ability to trust 2” as: “Like to plan and be in control”, “Consider myself an anxious person” smaller than or equal to 4 and “Find it easy to trust others”, “Take things as they come” greater than or equal to 6. There is only a relatively small share of respondents who consistently report a high ability to trust. 208 respondents or 5% of the sample of respondents has a “High ability to trust 1”, and 43 respondents or 1% of all respondents has a “High ability to trust 2”. These low numbers are broadly in line with findings by development psychologists for “mature (or integral) consciousness” which would imply high trust (in oneself, life and each other), ability to deal with uncertainty, high consciousness, absence of fears or at least awareness of fears, of trust issues and of the attachment background etc. (see [Cook-Greuter 2014](#), [Kegan 1994](#), p. 195, [Smith 2017](#)).

Who are those? [Table F5](#) shows that the middle-aged respondents are disproportionately reporting a higher ability to trust, while the opposite is true for the older respondents. This is different from the literature, which typically finds that interpersonal trust in OECD countries rises with age ([Murtin et al. 2018](#)). This observation may be linked to the historical context

of the survey participants, who primarily hail from Germany. Many older respondents have firsthand experiences or are descendants of those who experienced significant upheavals such as World War II (or even World War I). Such traumatic experiences can be transmitted across generations but tend to attenuate over time, unless re-traumatization takes place. The finding is also not inconsistent with the increase in interpersonal trust in Germany due to a decline in the proportion of respondents with direct experiences of World War II, as shown in [Figure 1](#). Additional factors such as overall economic and political stability, social cohesion and Germany’s cultural emphasis on honesty, reliability, and social responsibility may have played a role as well. Scholars such as [Alesina and La Ferrara \[2002\]](#), [Putnam \[2000\]](#), and [Uslaner \[2002\]](#) have shown that such factors matter for interpersonal trust. It still is remarkable that the older have relatively high trust in the ECB, even though more generally, they trust less. Finally, there is a (very small) group of highly educated respondents that have very high and consistent ability to trust (“High ability to trust 2”).

Overall, our findings reveal a diverse and multifaceted understanding of trust among surveyed respondents, underscoring its complexity and the limited depth of comprehension by the respondents—an interesting finding in itself. One explanation of this observation is the prevailing mechanical (Newtonian) worldview. In particular, there remains a significant gap among respondents in understanding the interplay between trust in others, trust in life, trust in oneself, and the defense mechanisms used to avoid uncertainty and interpersonal connections. Future research effort could focus on gaining a deeper insight into the various dimension of interpersonal trust and the perspectives respondents might hold (stemming from their past experiences) regarding trust. It would be interesting to not only explore how these views interact with institutional trust, but also how they can be effectively elicited within surveys.

Table F5: Shares of observations in those with high ability to trust, in %

	Total	High ability to trust 1	High ability to trust 2
Female	37.1	36.5	34.9
Male	62.9	63.5	65.1
Age (16-24 years)	2.3	2.4	2.3
Age (25-60 years)	53.1	66.4	69.8
Age (> 60 years)	44.6	31.3	27.9
Income (< 2,500 Euros)	11.6	10.5	11.6
Income (2,500-6,000 Euros)	62.0	60.0	55.8
Income (> 6,000 Euros)	26.4	29.5	32.6
Education (no degree or in training)	2.5	2.9	0.0
Education (less or equal techn. or comm. college)	51.8	53.9	46.5
Education (bachelor degree)	15.4	11.5	11.6
Education (graduate degree)	30.3	31.7	41.9
East (1989)	18.0	16.0	10.8
West (1989)	82.0	84.4	89.2

Notes: Education (less or equal techn. or comm. college) refers to apprenticeship, vocational school, technical or commercial college. "High ability to trust 1" is defined as "Like to plan and be in control", "Consider myself an anxious person" smaller than or equal to 5 and "Find it easy to trust others", "Take things as they come" greater than or equal to 5; as well as "High ability to trust 2", defined as "Like to plan and be in control", "Consider myself an anxious person" smaller than or equal to 4 and "Find it easy to trust others", "Take things as they come" greater than or equal to 6.