Influencing public trust in central banks: Identifying who is open to new information

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Introduction

- Over the last thirty years, central bank independence (CBI) was adopted by many countries.

  - But it may come at the expense of democratic accountability (Stiglitz, 1998).

  - Thus, CBI requires trust from 'principals', i.e. citizens.

  - Arguably, due to the complexity of monetary policy, it is taxing citizens' trust.

- The 2008 financial crisis spurred a wave of criticisms of CBI from academic economists,

  - e.g., Stiglitz (2010), Alesina and Stella (2011), and Benati and Goodhart (2011).

  - survey of academics by Blinder et al. (2017).

Introduction

- Possibly more threatening to CBI are verbal attacks by politicians.

- Examples:

    - Donald Trump wanted 'to audit the Federal Reserve' (Trump 2016).

    - Jacob Rees-Mogg demanded that the Governor of the Bank of England 'be fired for the way he has behaved in office' (Huffpost 2016).

    - Lorenzo Fontana, Deputy Federal Secretary of Italy's Lega Nord party, heavily criticised the European Central Bank (ECB) (Express 2018): 'The euro is wrong!'.

Introduction

- Sometimes words translate into actions reducing CBI, e.g.,

    - Turkish President Erdogan claimed for himself the power to appoint central bankers who set interest rates in line with his preferences (Bloomberg 2018).

    - New Zealand, where, since December 2018, the Minister of Finance now determines the operational objectives of monetary policy (Hayo and Neumeier 2020).

Introduction

- Attacks on CBI may undermine the support of central banks by the general public.

- Central banks are delegated tasks that laypeople typically cannot see, monitor, or evaluate, which requires trust by citizens.

- Ehrmann et al. (2013) argue that CBI can only be sustained if citizens trust that their central bank will deliver on its stated goals.

- If the public trusts the central bank and values CBI, it may help the central bank resist government attempts to influence monetary policy (Berger and de Haan, 1999).

Introduction

- The ECB is an excellent case to study as it

  - is the culmination of the trend towards CB independence (Hayo & Hefeker, 2002),

  - lacks accountability, which may affect its own legitimacy (Kaltenthaler et al., 2010),

  - is a supranational institution that may affect the legitimacy of the process of European integration (Rohrschneider, 2002),

  - experienced a decline in trust after the 2009 crisis (Roth, 2009, Gros & Roth, 2009), suggesting that trust is not immune to the economic environment.

- Could citizens' trust be a hedge against the erosion of CBI?

Introduction

- Determinants of trust in the ECB have been investigated.

- At the aggregate level

  - bond yields and financial market turbulences (Wälti, 2012)

  - unemployment (Roth et al., 2014)

- At the individual level

  - satisfaction with democracy (Kaltenthaler et al., 2010)

  - 2009 crisis (Ehrmann et al., 2013)

  - knowledge about monetary policy (Hayo & Neuenkirch, 2014)

  - sociodemographics (Farvaque et al. 2017)

- But what can be done about it?

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Introduction

- We test if providing information on the performance of the ECB affects trust in the ECB.

  - an RCT / survey experiment (Binder and Rodrigue, 2018, Coibion et al., 2019, Brouwer and de Haan, 2021a, Coibion et al., forthcoming)

  - we provide factual information

  - causal interpretation

  - we condition the effect on party preferences

- Our results

  - information does not affect people's trust *on average*

  - but it increases it in a specific group: respondents who identify with no party

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Theoretical considerations

- Factual information may be used by the ECB as a policy instrument to increase public trust (Ehrmann et al., 2013, Hayo & Neuenkirch, 2014).

- However,
  - information unlikely changes deep-rooted beliefs
  - Preliminary evidence: on average it doesn't (Brouwer and De Haan, 2021a)

- Only people with shallower beliefs may react
  - Beliefs relate to political preferences (Ehrmann et al., 2013, Bursian and Fürth, 2015, Farvaque et al., 2017, Brouwer and De Haan, 2021b)
  - Political views are hard to uproot (Mullainathan and Washington, 2009).

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Theoretical considerations

- We hypothesise that people with entrenched political views are unlikely going to react in terms of trust to our information treatment.

- We base this conjecture on two considerations:

1. Trust in the ECB is robustly associated with political ideology.
   - Evidence is provided by Ehrmann et al. (2013), Bursian and Fürth (2015), Farvaque et al. (2017), and Brouwer and De Haan (2021b).

2. Behavioural mechanisms may mute the effect of the information treatment on respondents with clear political preferences.

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Theoretical considerations

- *Cognitive dissonance*: people will try to avoid internal inconsistencies in their views and they will, often unconsciously, adjust their current attitudes so that it matches past decisions or actions (Festinger, 1957).

- Induces voters to stick to their previous choices and, hence, past voting behaviour may affect current behaviour.

- Once political preferences have been established, they tend to become entrenched.

- Beasley and Joslyn (2001) provide empirical evidence supporting such an entrenchment of views.
  - Perception of candidates who ran in a US presidential election is more dispersed among citizens who voted in the election than among those who did not.

Theoretical considerations

- Mullainathan and Washington (2009) show that the effect of the act of voting on the polarisation of the assessment of presidents and senators is causal and lasts at least four years.

    - They use the fact that turnout is higher in congressional elections that take place in the same year as a presidential election.

- We apply such a behavioural mechanism to the case of citizens' trust in the ECB.

    - We conjecture that those favouring a specific political party should report a level of trust in the ECB, which is consistent with this party's view of the ECB and European integration in general and be reluctant to change their opinion after being informed about the ECB's inflation performance.

Theoretical considerations

- Such a confirmation bias, defined as 'seeking or interpreting of evidence in ways that are partial to existing beliefs' (Nickerson, 1998), is one of the mechanisms used to cope with inconsistencies.

    - Empirical and experimental evidence shows that this bias applies to partisan beliefs too (Taber and Lodge, 2006, Jerit and Barabas, 2012).

- Thus, people easily agree with information that is in line with their political views, while overlooking or taking issue with information that contradict them.

- In our case, the confirmation bias would prompt respondents with *a priori* strong views on the central bank to ignore the information conveyed by the treatment or to interpret it in a way that reinforces their priors.

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Theoretical considerations

- As trust in the central bank correlates with partisan identification, only respondents who do not identify with a party may neutrally process the information provided by our treatment.

- Testable hypothesis:
    - Mainly respondents without clearly defined political preferences should react to the inflation information treatment.

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Theoretical considerations

- Empirical test based on conditioning the treatment effect on:

  - the party for which respondents declare that they would vote if there was an election.

    - → Respondents with entrenched views, little reaction to treatment

  - Some respondents report no party at all.

    - → Respondents with potentially open views, may react to treatment

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The survey

- Representative survey for the German population

- Conducted on our behalf by Gesellschaft für Konsumforschung
  - private research company
  - specialising in market research and public opinion surveys

- Data collected from 6 February to 2 March 2018

- > 2000 usable questionnaires

- The survey covers various topics
  - inflation and monetary policy
  - sociodemographic and psychological indicators
  - 2 experiments

The experiment

- The trust question

To what extent do you trust the European Central Bank (ECB)?

Value 1 means that you very much trust. Value 5 means that you have no trust at all. You may grade your trust with the values in between.

   (1) Very much trust
    (2)
    (3)
    (4)
    (5) No trust at all

The experiment

- The treatment

Please take a look at the following graph showing the development of the inflation rate in the euro area. The ECB's objective is to keep the inflation rate below, but close to, 2% over the medium term. In the graph, this objective is shown by a red horizontal line.

Annual inflation rate in the euro area
(in %, 1999-2017)
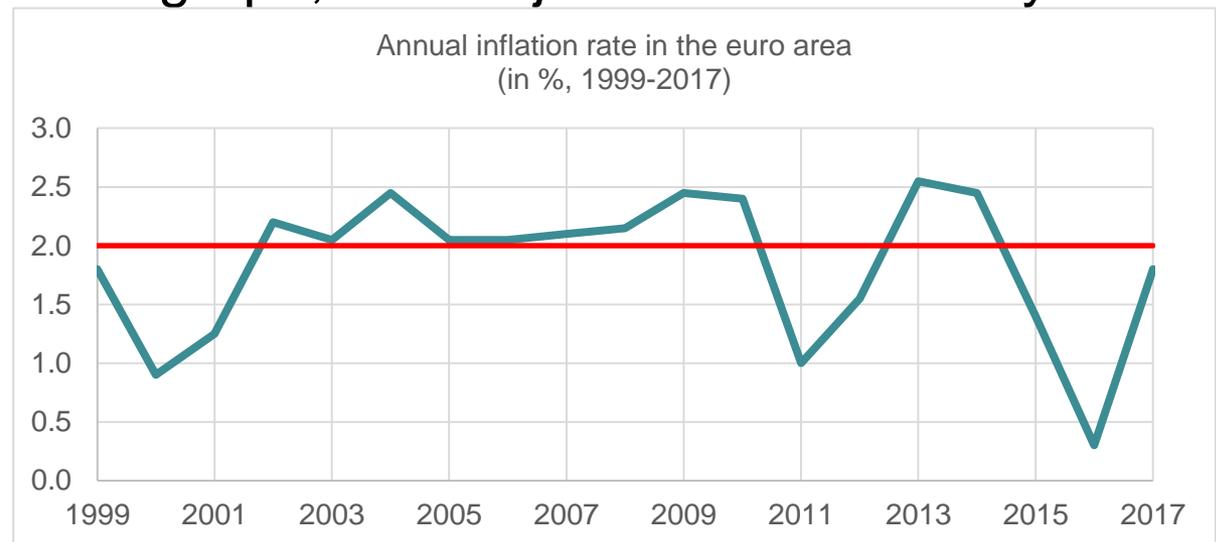
Please take into account your impression of the inflation development in the euro area when answering the next question.

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Estimation

- A bivariate ordered logit

$$Prob(Trust = a) = F(graph) + u_i$$

- *Trust* is an ordered variable

- $a \in [1; 5]$ and increases with trust

- *graph* = 1 if the respondent has seen the graph

- As the treatment is *random* and *balanced* over nearly all individual characteristics, the estimate should be unbiased.

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Baseline results

	(1)
	All
Graph	0.09
	(1.06)
Obs.	2,015

- The treatment

  - ✓ Has no effect on average

Baseline results

	(1) All	(2) CDU/CSU	(3) SPD	(4) AfD	(5) FDP	(6) Left	(7) Greens	(8) Other
Graph	0.09 (1.06)	-0.03 (-0.18)	0.02 (0.07)	-0.24 (-0.96)	0.37 (1.11)	0.28 (0.97)	-0.24 (-0.90)	0.48 (1.30)
Obs.	2,015	480	339	213	132	161	207	118

- The treatment

  - ✓ Has no effect on average

  - ✓ Has no effect on respondents who know for which party they would vote

Baseline results

	(1) All	(2) CDU/CSU	(3) SPD	(4) AfD	(5) FDP	(6) Left	(7) Greens	(8) Other	(9) No vote
Graph	0.09	-0.03	0.02	-0.24	0.37	0.28	-0.24	0.48	0.48
	(1.06)	(-0.18)	(0.07)	(-0.96)	(1.11)	(0.97)	(-0.90)	(1.30)	(2.49)**
Obs.	2,015	480	339	213	132	161	207	118	365

- The treatment

  - ✓ Has no effect on average

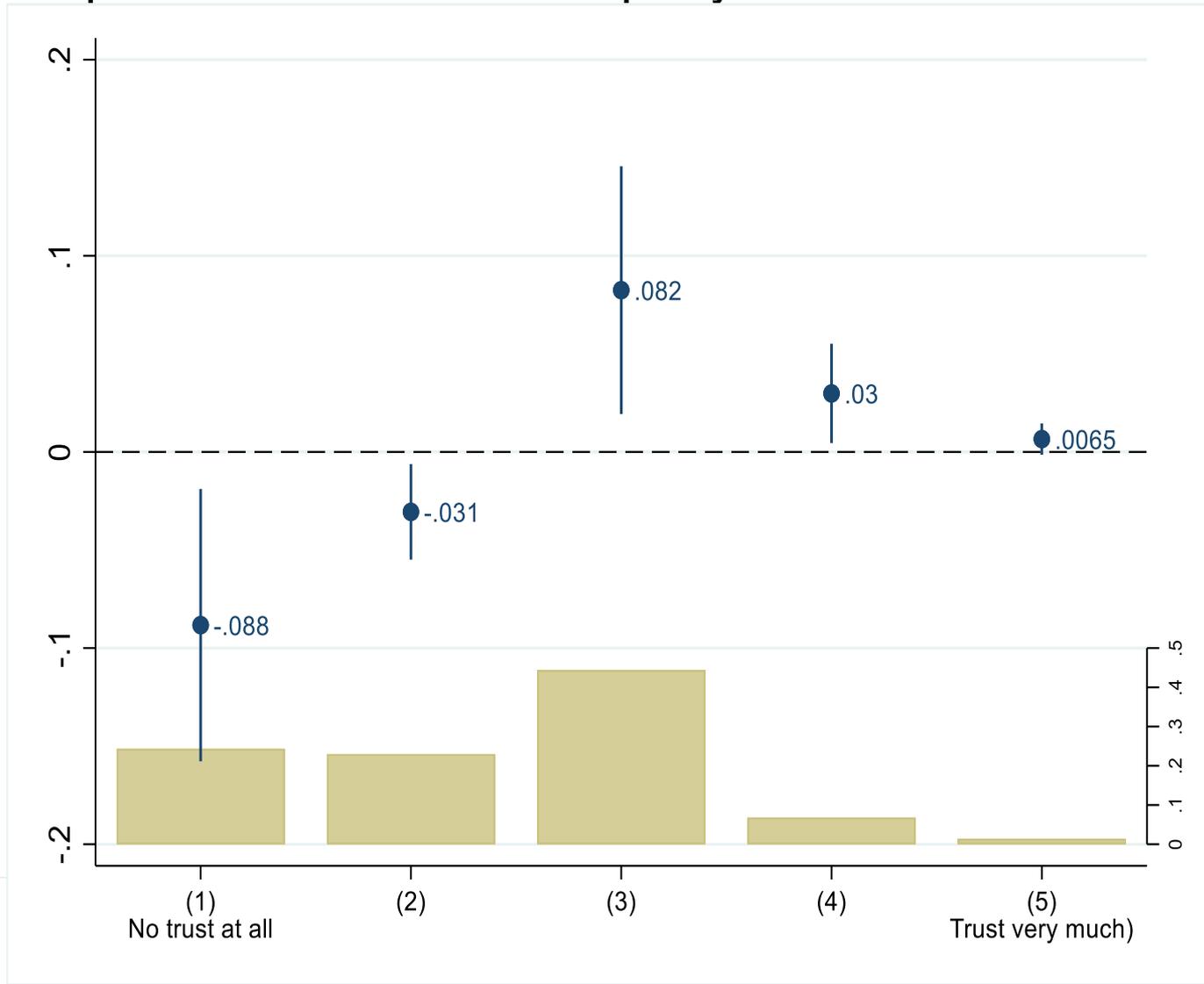 - ✓ Has no effect on respondents who know for which party they would vote

  - ✓ Increases trust among those who state no party

Baseline results

- Marginal effect of the treatment on each level of trust for respondents who state no party

Baseline results

- Magnitude of effect

  - Treating people who do not have entrenched political views

    - decreases the likelihood of stating 'no trust at all' by 9 percentage points (pp).

    - decreases the likelihood of choosing the second lowest trust category by 3 pp.

    - increases the likelihood of choosing the middle trust category by 8 pp.

    - increases the likelihood of choosing the second highest trust category by 3 pp.

    - No impact on highest category (but few observations).

What's in the treatment: past inflation

- Question on inflation

  - *"Do you remember, roughly, what Germany's rate of inflation was in 2017?"*

  - Correct if the respondent picks [1;2]

	(1) Correct	(2) Wrong	(3) Doesn't know
Graph shown	-0.34 (-0.69)	1.31 (3.23)***	0.38 (1.48)
Observations	58	87	220

- No effect on those who were correct

- Positive effect for respondents who were wrong

- No effect on those who did not know the answer

What's in the treatment: the ECB's main objective

- [Question](#) on the objective of the ECB

  - *"Which of the following do you think is the main objective of the ECB? The main objective of the ECB is to …"*

  - Correct choice 'Maintain price stability in the euro area'

	(1) Correct	(2) Wrong	(3) Doesn't know'
Graph shown	0.89 (2.68)***	0.42 (1.04)	0.04 (0.12)
Observations	133	92	140

- Positive effect for respondents who knew the correct objective

- No effect on others

=> Together with previous finding, this one implies that the *treatment was the inflation record of the ECB*

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Familiarity with the ECB: *subjective* knowledge

Question: *The monetary policy of all countries in the euro area is managed by the European Central Bank (ECB). How do you rate your own knowledge about the ECB?*

Subjective knowledge	(1) Very bad	(2)	(3)	(4)	(5) Very good
Graph	0.74 (2.39)**	0.84 (2.15)**	0.21 (0.52)	0.67 (0.76)	
Observations	148	94	102	20	1

- Positive effect for respondents with bad or very bad subjective knowledge

- No effect above intermediate knowledge

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Familiarity with the ECB: *objective* knowledge

Four questions about the ECB and its monetary policy

=> objective knowledge indicator ranges from 0 to 4

Objective knowledge	(1) Very bad	(2)	(3)	(4)	(5) Very good
Graph	0.31	0.73	0.33	0.06	2.30
	(1.03)	(1.93)*	(0.74)	(0.08)	(1.32)
Observations	159	107	69	21	9

- No effect for those with very bad knowledge
- Positive effect for respondents with rather bad objective knowledge
- No effect above intermediate knowledge

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Robustness

- We condition the treatment on a large number of control variables.

Sex	Lives in former GDR	Opinion of the municipal budget
Age	No internet access	Time preference
Education	Trade union member	Discounting
Family status	Type of work	Risk preferences
Number of children	Full-time/part-time	Saver/borrower
Community size	Unemployed	Economic satisfaction
Household p.c. income	Property ownership	

- No impact on treatment effect.

Conclusions

- Showing the past inflation performance of the ECB relative to the inflation target does *not* affect trust in the ECB *on average*.

- But it increases trust from respondents whose views are not too strong.
  - Those who do not know for which party they would vote
  - Among them, those who were wrong about the inflation rate
  - Among them, those who knew the ECB's inflation target
  - Among them, those with limited subjective knowledge
  - Among them, those with limited objective knowledge

Conclusions

- Policy conclusions:

  - Using different information treatments, Brouwer and De Haan's (2021a) and our analysis come to the same conclusion: General information provision by the ECB may not be very helpful in terms of raising the population's trust in it.

  - Arguably, this is due to behavioural mechanisms such as cognitive dissonance, which makes it hard to change people's views by providing factual information.

  - Instead, our research suggests to focus on targeting the right audience, that is, people whose views are not politically entrenched.

  - However, in Germany, this group of people makes up less than 20% of the population, which limits the ability of the ECB to increase public trust by a lot.

Thank you for your attention!

For questions and comments, please contact:
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Knowledge of the objective of the ECB

1. Which of the following do you think is the main objective of the ECB? The main objective of the ECB is to …

   - Promote growth in the euro area.

   - Fight unemployment in the euro area.

   -Maintain price stability in the euro area.

   - Provide credit to European Union member states.

   - Control the euro/US dollar exchange rate.

   -Don't know.

   Link: What's in the treatment: the ECB's main objective

Gauging objective knowledge

2. In the euro area, commercial banks (e.g., Deutsche Bank, Commerzbank, Sparkassen, Volksbanken, etc.) borrow money from the European Central Bank (ECB) at a given interest rate (Main Refinancing Rate). The commercial banks then lend this money at a higher interest rate to households and firms. Do you know, roughly, the interest rate that the ECB charges the commercial banks?

    - Please write the percentage

    - Don't know.

Gauging objective knowledge

3. Private banks borrow liquidity from the European Central Bank (ECB) at a given interest rate. Assume that prices in the euro area are expected to increase strongly. How do you think the interest rate should be set?

   - Decrease interest rate.

   - Keep interest rate constant.

   - Increase interest rate..

   - Don't know.

4. Who is responsible for setting this interest rate?

   - The ECB, independently of euro area governments.

   - The ECB; euro area governments have to agree afterward.

   - The ECB together with euro area governments.

   - The euro area governments, with the ECB executing the decisions.

   - Don't know.

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The role of gender

	(1)	(2)
Gender	Women	Men
Graph	0.20	0.93
	(0.81)	(2.94)***
Observations	223	142

- No effect on women
- Positive effect on men