

Central Bank Independence

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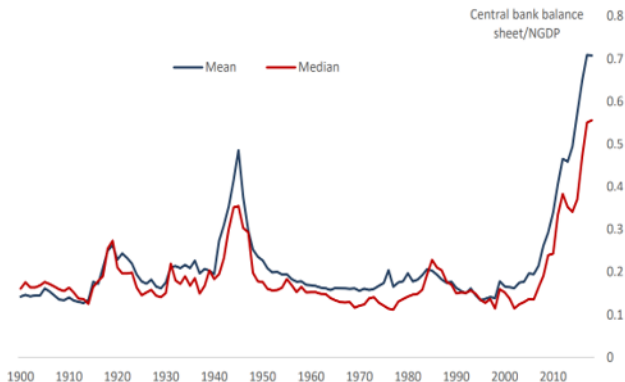
Banca d'Italia
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Motivation

- Central banks' primary responsibility is ensuring **monetary stability**.
- Many also have mandates for **financial stability**.
- Post-GFC, financial stability **powers expanded**:
 - E.g., QE, stress tests, and macroprudential tools (LTV ratios, liquidity requirements, dynamic provisions, capital buffers).

Central Banks' Balance Sheets

- Central banks' balance sheets **larger** than ever before.



- Not only larger, but also **riskier**.

Motivation (Cont'd)

- Their powers are expected to expand as they develop policies on **digital currencies** and **climate-related risks**.
- The expanded powers, coupled with global rise in **populism** and **geopolitical uncertainty**, threaten central bank independence.
- Thread **no longer hypothetical** – US President Donald Trump's public attacks on the FED are a stark example.

Motivation (Cont'd)

- Their powers are expected to expand as they develop policies on **digital currencies** and **climate-related risks**.
- The expanded powers, coupled with global rise in **populism** and **geopolitical uncertainty**, threaten central bank independence.
- Thread **no longer hypothetical** – US President Donald Trump's public attacks on the FED are a stark example.
- Important to understand **how far** do past reforms insulate central banks and their agents from political interference.
- Which **frictions** and **design features** matter?

Central Bank Independence (CBI)

Lets set the background first:

- Why do we care about central bank independence?
- What do we mean with central bank independence?

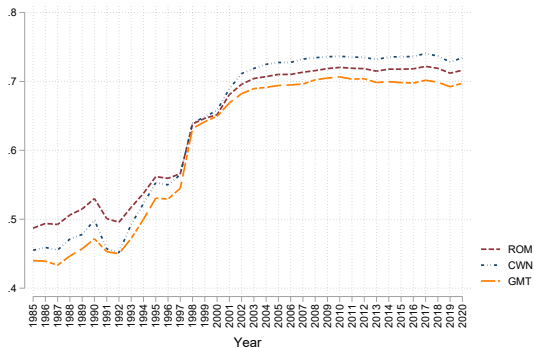
"A multi-faceted and often misunderstood concept" (Haldane, 2020)

The Case for Independence

- In late 1980s, CBI emerged as an institutional solution to time inconsistency problem (Kydland and Prescott, 1977; Calvo, 1978):
 - Shift control of MP away from elected politicians, whose re-election concerns could generate either **inflation bias** or **political cycles** (Barro and Gordon, 1983; Alesina and Roubini, 1992) to unelected **technocrats** or a conservative central banker caring only about inflation.
- This monetary stability argument was used successfully around the world: starting from mid-1990s many countries began reforming the institutional framework governing their central banks to protect them from undue political interference (*de jure* CBI).
- Parallel argument for **financial stability**.

The Rise of *de jure* CBI

- The rise of *de jure* CBI has been documented by several studies.



ROM: Romelli (2022); CWN: Cuckierman et al. (1992); GMT: Grilli et al. (1991).

Definition of de jure CBI

- “*Independence is very rarely **absolute** or **binary** in any domain of public policy... almost always subject to **constraints**... ex-ante and **accountability**... ex-post.*” (Haldane, 2020)

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- *“Independence is very rarely **absolute** or **binary** in any domain of public policy... almost always subject to **constraints**... ex-ante and **accountability**... ex-post.”* (Haldane, 2020)
- Legally, CBI can be framed into 4 pillars (Lastra, 2015):
 - **Quasi-constitutional** independence (e.g., through a Treaty)
 - **Institutional** independence (e.g., legal remits and safeguards to perform tasks)
 - Target vs. instrument independence
 - Instrument independence \approx operational independence
 - **Financial & economic** independence (e.g., restrictions on monetizing government debt, sufficient resources)
 - **Personal** independence (e.g., appointment procedures, legal protection to decision-making agents)

But..

De jure CBI \neq De facto CBI

- Laws are incomplete.
- Actual practice may deviate.
- Reforms may give rise to a 'seesaw effect' (Acemoglu et al., 2008) as political process has 'status quo bias' (Fernandez and Rodrik, 1991).

de jure CBI vs. de facto CBI

The 4 pillars of *de jure* CBI:

- Quasi-constitutional independence
- Institutional independence
- Financial & economic independence → Goncharov, Ioannidou, Schmalz (2023)
- Personal independence → Ioannidou, Kokas, Lambert, Michaelides (2025)

Financial Independence

(Why) do central banks care about their profits?
Goncharov, Ioannidou, Schmalz (2023 JF)

This Paper

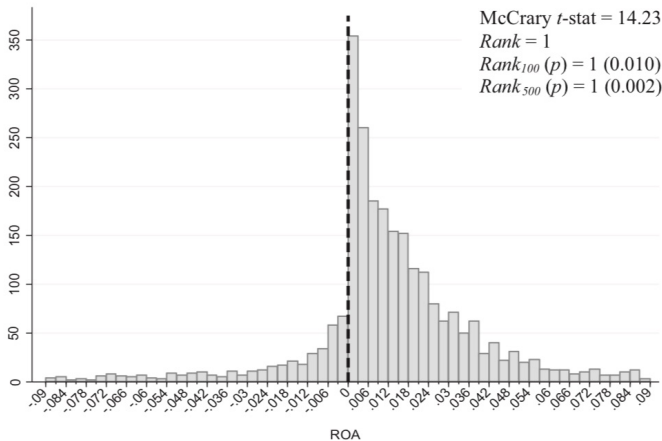
- This paper offers a first systematic analysis of whether central banks are concerned about the **level** or **sign** of their **accounting profits**.
- And if so, what are the **drivers** & **consequences** of such concerns.
- Context:
 - 1 **Absent frictions, CB accounting doesn't matter** (Ricardo, 1821; Barro, 1974; Wallace, 1981; Hall and Reis, 2015).
 - 2 **In theory, profit concerns lead to credibility problems and deviations in policy** (Barriel and Bhattarai, 2009; Beningo and Nistico, 2016; Del Negro and Sims, 2015).
 - 3 **Profit concerns can also serve as a commitment device** (Jeanne and Svensson, 2007; Mendes and Barriel, 2015).

What do we DO?

- **Challenge:** How to measure preference for profits?
 - What is the *counterfactual* profit level?
- **Idea:** Check for a discontinuity in profit distribution at 0.
 - 1 Is there a discontinuity?
 - 2 Which factors drive the discontinuity?
 - Cross-sectional variation in size of discontinuity
 - 3 Is it just accounting, or does it relate to policy?

1. Is there a discontinuity?

Panel A. Distribution of central bank profits



2. Which factors drive the discontinuity? (Summary)

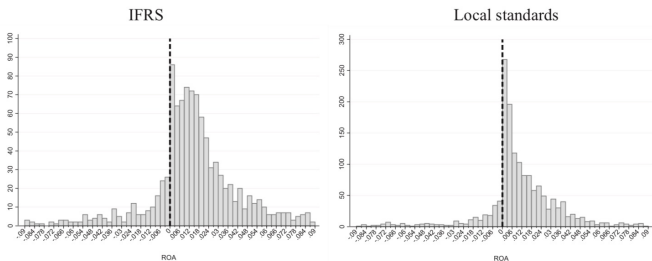
The **size** of the discontinuity varies predictably with central banks' **ability** to their control reported income & **incentives** to avoid losses.

- Ability:
 - Accounting rules (e.g., IFRS vs. local standards).
- Incentives:
 - Populism (e.g., extreme parties).
 - Agency problems (e.g., governor re-appointable).
 - Divided distribution rules (e.g., intertemporal smoothing).

These relations are **unique** to the zero-profit threshold.

Ability: Accounting rules

- Discontinuity greater when **accounting** allows for **more discretion**.
- (IFRS less discretion: no general purpose provisions + mark-to-market).



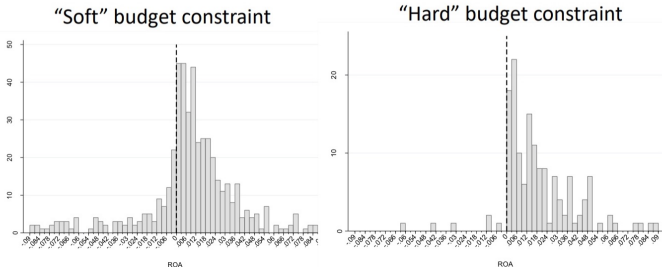
OLS regression for zero-profit threshold

Simulated estimates for placebo thresholds

| N | Constant | Coefficient | Mean | Mean | Rank of | Percentile | | Percentile | |
|-----|----------|-------------|----------|-------------|---------|------------|-------|------------|-------|
| | | | constant | coefficient | t-stat. | Rank | rank | Rank | rank |
| | | | | | | (100) | (100) | (500) | (500) |
| 421 | 0.768*** | 0.099** | 0.487 | 0.007 | 2 | 3 | 0.030 | 10 | 0.020 |
| | (0.040) | (0.044) | (0.017) | (0.024) | | | | | |

Incentives: Financial Independence

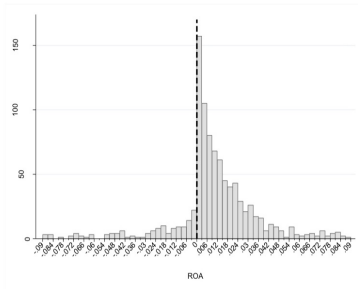
- Discontinuity greater when **dividend distribution rules** do not allow for **intertemporal smoothing** of the CB's budget constraint.



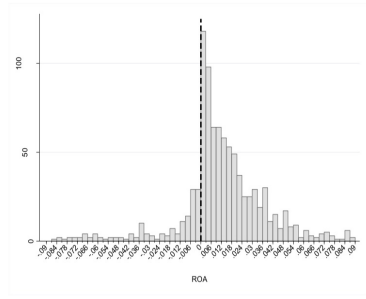
| | | | | Rank of | | | | | | |
|-----------------------------|----|---------------------|---------------------|------------------|-------------------|--------------------|---------------|--------------------------|---------------|--------------------------|
| Prevailing incentives | N | Constant | Coefficient | Constant | Coefficient | the test t-stat | Rank (100) | Percentile rank (100) | Rank (500) | Percentile rank (500) |
| Dividend distribution rules | 85 | 0.672*** (0.058) | 0.328*** (0.058) | 0.497 (0.026) | -0.045 (0.084) | 1 | 2 | 0.020 | 4 | 0.009 |

De jure CBI doesn't fix it! (more on this later)

Above median



Below median



| | N | Constant | Coefficient | Rank of the test | | | | Rank (100) | Percentile rank (100) | Rank (500) | Percentile rank (500) |
|-----------------------------------|-----|---------------------|-------------------|------------------|------------------|--------|--|------------|-----------------------|------------|-----------------------|
| | | | | Constant | Coefficient | t-stat | | | | | |
| Prevailing incentives | | | | | | | | | | | |
| Central bank de jure independence | 326 | 0.803*** (0.033) | 0.074* (0.041) | 0.452 (0.044) | 0.035 (0.039) | 1 | | 4 | 0.040 | 14 | 0.028 |

3. Is this just accounting, or does it relate to policy?

In theory, profit concerns create incentives to **avoid** or **delay** interest rate increases harmful to profitability, leading to higher inflation.

- Bhattarai et al. (2015); Del Negro & Sims (2015); Mendes & Barriel (2015).
- Other non-accounting options: FX interventions, don't bail out banks...

What do we **do**?

- Study **inflation rates** around the 0 profit threshold
 - in absolute terms, relative to targets, relative to professional forecasts.
- Study **interest rates** around the 0 profit threshold.
 - Level of interest rates, controlling for inflation and output gap in Taylor rule type regressions.

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What do we **do**? **Find?**

- Study **inflation rates** around 0 profit threshold – **Higher (1.4 pp)**
 - in absolute terms, relative to targets, relative to professional forecasts.
- Study **interest rates** around 0 profit threshold. – **Lower (50 bp)**
 - Level of interest rates, controlling for inflation and output gap in Taylor rule type regressions.

Key Takeaways

In theory, non-traditional (and traditional) central banking sustainable **IFF** central banks **disregard profits**, feel free to make losses.

Our results suggests that **they don't!**

Discontinuity suggests that losses are **not** (perceived to be) frictionless.

Profit concerns **not independent** of their policy inputs and outputs.

Personal Independence

(In)dependent central banks

Ioannidou, Kokas, Lambert, Michaelides (2025)

This paper

De jure CBI \neq De facto CBI

- One way politicians may seek to retain control is by getting “**their own people**” into the top jobs.
 - “Leaders matter” (Jones and Olken, 2005; Funke et al 2021).
 - “Managers matter” (Bertrand and Schoar, 2003).
 - Preferences and career concerns (Chang, 2006; Adolph, 2013)
- Incentives to do so may be **greater** as *de jure* CBI increases.

Anecdotal evidence is plentiful



*"President Donald Trump has demanded that interest rates should be slashed, speculated about firing the boss of the Federal Reserve... India's government has replaced a capable central-bank chief with a **pliant insider** who has cut rates ahead of an election... Rather than **win by force** of argument, they are seeking an edge by getting their **own people** into the top jobs." — The Economist (Apr. 2019)*

This paper

- Have central bank governor appointments become **more** or **less political** following central bank independence reforms?
 - **Narrative 1:** (+) correlation
 - **Narrative 2:** (-) correlation
- A **politically-motivated appointment** is one skewed towards candidates more loyal to the executive making the appointment rather than their mandate.
- **Research Questions:**
 - 1 What of these narratives better describes the data?
 - 2 Is this description constant across countries and over time?
 - 3 Does this relate to their policy outcomes?

Paper summary

- **Data & Sample:**

- Bio, Press, Experts → **governor independence (GI) index.**
- 316 governor appointments in 57 countries 1985-2020.

Paper summary

- **Data & Sample:**

- Bio, Press, Experts → **governor independence (GI) index.**
- 316 governor appointments in 57 countries 1985-2020.

- **Results:**

- 1 Institutional reforms to improve central bank independence are **not** followed by more independent governor appointments ...
- 2 ... if anything appointments have become **more political** as central bank independence increased.
- 3 Political appointments correlate positively with measures of **de facto CBI** (experts & early dismissals).
- 4 Political appointments correlate positively with **inflation rates, sovereign debt crises, and bond yields** ↑.

GI Index

1 Biographical

- Employment ties (e.g., Minister of Finance)
- Ideological ties (e.g., party membership)
- Personal ties (e.g., family, friendship)

2 Press

- Factiva search
- All major English-speaking newspapers
- 3 months around appointment
- Overall tone of the press: Yes/No

3 Experts

- Specialization in Macro or Finance
- Affiliation with a university, national research and policy institution (not a central bank)
- With >2 decades of experience
- With or without Anglo-Saxon training
- RePEc database & lists of NBER and CEPR
- Sent to 587 academics (on average 10 per country)
- 289 responses (3 to 8 per country)

Experts: Survey

- Each academic received a survey specific of their country of origin.
- Same 2 questions for each governor:
 - In your opinion, at the **time of the appointment**, was [...] a politically independent central bank governor?
 - In your opinion, **with the benefit of hindsight**, was [...] a politically independent central bank governor?
- **Answers:** “Yes”, “No”, or “I do not know” (+ comment).
- Construction of balance statistic $[-1,1]$ to determine political interference (Pesaran and Weale, 2006).

Baseline GI index

The 3 criteria are combined as:

$$GI_{i,t} = \frac{1}{n} \sum_{j=1}^n C_{i,t}^j,$$

$C_{i,t}^j$ equals 1 if appointment i at t is independent according to criterion j (out of n) and 0 otherwise.

Higher values \rightarrow higher independence.

| | N | Mean | SD |
|---------------------|-----|-------|-------|
| Criteria | | | |
| Executive ties | 292 | 0.442 | 0.497 |
| International press | 316 | 0.630 | 0.480 |
| Independent experts | 293 | 0.611 | 0.488 |
| Index | | | |
| GI index | 257 | 0.499 | 0.252 |

Alternatives:

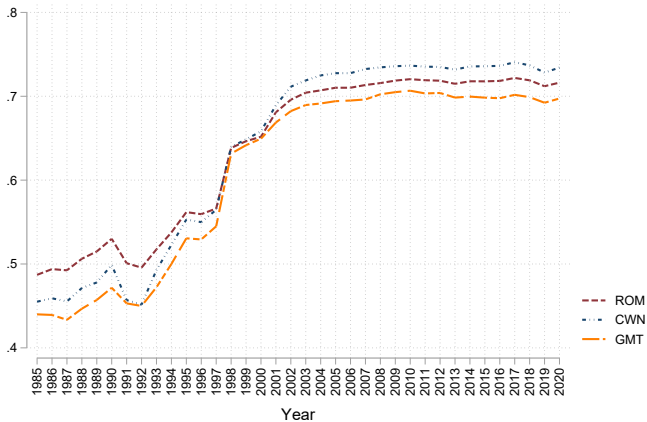
- **GI Lexi** = 1 if executive ties, succession, press, and experts **all** = 1 (Bade and Parkin, 1988; Adrian, Khan, and Menand, 2024, for de jure).
- **GI PCA** = principal component of underlying criteria.

Results roadmap

- 1 Have governor appointments become less political as *de jure* CBI ↑?
- 2 Are political appointees associated with worse policy outcomes?

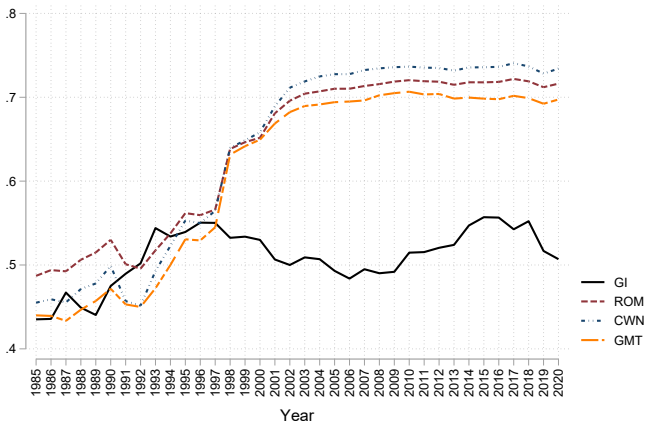
De jure CBI & GI: Visual illustration

● De jure CBI ↑



De jure CBI & GI: Unconditional

- De jure CBI \uparrow , but GI does not follow, if anything \downarrow until GFC



De jure CBI & GI: Conditional

No relation btwn *de jure* CBI & GI or any of its components.

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|--|---------------------------|---------------------------|-------------------------|-------------------------|---------------------------|-------------------------|-------------------------|-------------------------|
| | | GI index | | Executive Ties | Press | Experts | GI Lexi | GI PCA |
| De Jure CBI | -0.135 [-0.857] | -0.237 [-1.474] | 0.063 [0.313] | 0.111 [0.445] | -0.014 [-0.063] | 0.093 [0.360] | 0.062 [0.217] | 0.005 [0.038] |
| Other governor & country characteristics | | YES | YES | YES | YES | YES | YES | YES |
| Country FE | | | YES | YES | YES | YES | YES | YES |
| Observations | 251 | 223 | 222 | 222 | 222 | 222 | 255 | 221 |
| R-squared | 0.005 | 0.122 | 0.468 | 0.397 | 0.441 | 0.567 | 0.359 | 0.443 |

Personal Independence

Same also wrt reforms that safeguard **personal independence**.

| Dependent variable: | (1) GI | (2) GI Lexi | (3) GI PCA |
|--|--------------------------------|--------------------------------|----------------------------------|
| De Jure CBI_Governance | 0.050 [0.257] | 0.179 [0.694] | -0.049 [-0.400] |
| Other governor & country characteristics | YES | YES | YES |
| Country FE | YES | YES | YES |
| Observations | 222 | 255 | 221 |
| R-squared | 0.468 | 0.361 | 0.443 |

A “Seesaw effect”

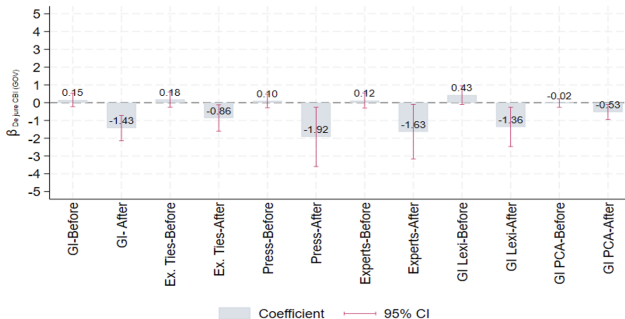
Incentives to “undo” independence with political appointees ↑ as CBs & decision-making agents insulated from political pressure.

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--|------------------------------|-------------------------------|------------------------------|------------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|----------------------------|
| | GI Index | | | | Executive Ties | Press | Experts | GI Lexi | GI PCA |
| Policy Independence | 1.014*** [4.585] | 0.746*** [11.345] | 1.105*** [7.210] | 0.625** [2.151] | 0.087 [0.284] | 1.264* [1.794] | 0.613 [0.869] | 0.613 [1.222] | 0.139 [0.821] |
| De jure CBI_Governance x Policy Independence | -1.874*** [-7.052] | -1.680*** [-29.545] | -2.274*** [-9.530] | -1.584*** [-3.597] | -1.039** [-2.360] | -2.025** [-2.060] | -1.751* [-1.910] | -1.791** [-2.601] | -0.508* [-1.869] |
| De jure CBI_Governance | 0.170 [0.975] | 0.269 [1.327] | 0.265 [1.174] | 0.152 [0.671] | 0.178 [0.696] | 0.102 [0.443] | 0.117 [0.463] | 0.428 [1.355] | -0.018 [-0.125] |
| Country FE | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Other governor & country characteristics | | YES | YES | YES | YES | YES | YES | YES | YES |
| Observations | 250 | 226 | 226 | 222 | 242 | 255 | 234 | 255 | 221 |
| R-squared | 0.397 | 0.406 | 0.426 | 0.503 | 0.449 | 0.453 | 0.568 | 0.396 | 0.461 |

External constraints (IMF & EU accession) mitigate.

A “Seesaw effect”: Visual

Relationship btwn de jure CBI & GI becomes **strongly negative** after CB given operational independence.



Results roadmap

- 1 Have governor appointments become less political as *de jure* CBI ↑?
- 2 Are political appointees associated with worse policy outcomes?

Inflation during tenure

- GI has more explanatory power than *de jure* CBI.
- GI retains significance even after we control for other governor characteristics (i.e., education, experience).

| | Average Inflation During Tenure (log) | | | | | |
|--------------------------------|---------------------------------------|-----------------------------|------------------------------|-----------------------------|-----------------------------|-----------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| GI Index | -0.711** [-2.068] | -0.752** [-2.156] | -0.877*** [-2.629] | -0.734** [-2.159] | -0.934** [-2.195] | -1.017** [-2.086] |
| De jure CBI | | -1.562*** [-2.731] | -0.638 [-1.241] | -0.589 [-1.121] | -0.736 [-1.293] | 0.557 [0.800] |
| Government stability | | | -0.304*** [-4.542] | -0.274*** [-4.076] | -0.274*** [-4.107] | -0.268*** [-4.065] |
| Predecessor early departure | | | 0.933*** [4.339] | 0.844*** [3.870] | 0.827*** [3.794] | 0.625*** [2.842] |
| IMF program | | | -0.206 [-0.635] | -0.498 [-1.635] | -0.280 [-0.784] | -0.419 [-1.212] |
| GI Index*Inflation Target | | | | | 1.031* [1.659] | 1.192* [1.837] |
| Inflation Target | | | | | -0.947** [-2.297] | -1.370*** [-3.118] |
| GI Index*Eurozone | | | | | | 0.458 [0.656] |
| Eurozone | | | | | | -1.886*** [-3.241] |
| Decade FE | | | YES | YES | YES | YES |
| Other governor characteristics | | | | YES | YES | YES |
| Obs | 266 | 243 | 219 | 215 | 215 | 215 |
| R-square | 0.021 | 0.052 | 0.223 | 0.283 | 0.296 | 0.363 |

Other outcomes & market expectations

- More independent appointees are less likely to experience a **sovereign debt crisis** during their tenure.
- **No difference** wrt to banking crises or currency crises.
- **GI** $\uparrow \rightarrow$ **Bond Prices** \uparrow
 - [-5,+5] days window.
 - 2-year government bonds.

Key Takeaway

- Our results indicate that incentives to **“undo”** CBI through **political appointments** increase as *de jure* CBI increases.
- These incentives **not independent** of key **policy outcomes**.

Conclusions

- **Legal independence isn't enough** — practice often deviates.
- **Profit concerns matter** — affecting policy decisions.
- **Appointments remain political** — even after reforms.
- **Political influence persists** — through backdoor channels.