

Long run inflation: persistence and central bank independence

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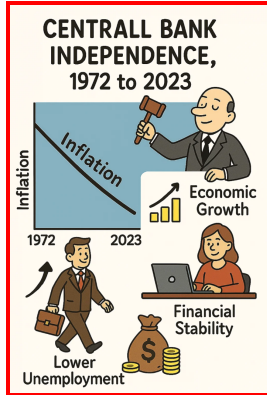
SUERF – BAFFI Centre Bocconi webinar
Rethinking Central Bank Independence: New Results and Policy Challenges
September 15, 2025

Central Bank independence: lessons from the past

Pre-Federal Reserve Act
(1913)



Today's presentation



2025



Jerome "Too Late" Powell, and his entire Board, should be ashamed of themselves for allowing this to happen to the United States. They have one of the easiest, yet most prestigious, jobs in America, and they have FAILED — And continue to do so. If they were doing their job properly, our Country would be saving Trillions of Dollars in Interest Cost. The Board just sits there and watches, so they are equally to blame. We should be paying 1% Interest, or better!



World Central Bank Rates

| | | |
|----|--------------------------|-------|
| 1 | Switzerland | 0.25% |
| 2 | Cambodia | 0.45% |
| 3 | Japan | 0.50% |
| 4 | Denmark | 1.75% |
| 5 | Seychelles | 1.75% |
| 6 | Thailand | 1.75% |
| 7 | Botswana | 1.90% |
| 8 | Barbados | 2.00% |
| 9 | Eurozone | 2.00% |
| 10 | Taiwan | 2.00% |
| 11 | Bulgaria | 2.07% |
| 12 | Cuba | 2.25% |
| 13 | Sweden | 2.25% |
| 14 | Morocco | 2.25% |
| 15 | Cabo Verde | 2.50% |
| 16 | South Korea | 2.50% |
| 17 | Algeria | 2.75% |
| 18 | Canada | 2.75% |
| 19 | Albania | 2.75% |
| 20 | Libya | 3.00% |
| 21 | Malaysia | 3.00% |
| 22 | China | 3.00% |
| 23 | New Zealand | 3.50% |
| 24 | Trinidad and Tobago | 3.50% |
| 25 | Czechia | 3.50% |
| 26 | Bolivia | 3.82% |
| 27 | Australia | 3.82% |
| 28 | Costa Rica | 4.00% |
| 29 | The Bahamas | 4.00% |
| 30 | Kuwait | 4.00% |
| 31 | Papua New Guinea | 4.00% |
| 32 | Bosnia and Herzegovina | 4.14% |
| 33 | United Kingdom | 4.25% |
| 34 | United Arab Emirates | 4.40% |
| 35 | United States of America | 4.50% |
| 36 | Cameroon | 4.50% |
| 37 | Equatorial Guinea | 4.50% |
| 38 | Gabon | 4.50% |
| 39 | Guatemala | 4.50% |
| 40 | Israel | 4.50% |
| 41 | Mauritius | 4.50% |

Outline

1. Why does central bank independence matter?
2. Measuring central bank independence
3. Long run inflation: persistence and central bank independence
4. Conclusions

Why does central bank independence (CBI) matter?



- **Central bank independence and inflation**

- ▶ **Negative short-run relationship between de jure CBI indices and inflation** mainly for advanced economies (Acemoglu et al., 2008; Klomp and de Haan, 2010; Arnone and Romelli, 2013; Bodea and Hicks, 2015)
- ▶ **Political pressure** on the Fed is **associated with lower expected rates and higher prices** with limited real gains (Bianchi et al., 2023; Drechsel, 2025)
- ▶ **Limited attention on the short and long-run effects of reforms in CBI on inflation**

How to measure central bank independence?

How to measure central bank independence?

"We're never going to be influenced by any political pressure . . . Our independence is a matter of law."

— Jerome Powell, 16 April 2025

• Classical measures of independence

1. **De jure CBI indices**: Bade & Parkin (1982); Grilli, Masciandaro & Tabellini (1991); Cukierman (1992); Cukierman, Webb & Neyapti (1992); Cukierman, Webb & Neyapti (1992).

★ *How computed*: Researchers code central bank **laws/statutes** at a point in time and score legal provisions.

2. **De facto CBI indices**: Cukierman, Webb & Neyapti (1992).

★ *How computed*: Use proxies for **actual practice/enforcement**.

★ Core proxy: **Governor turnover rate (TOR)** = number of governor changes divided by years in a window; *lower TOR \Rightarrow higher effective independence*.

De jure example: tenure, removal, and members designation

THE WHITE HOUSE
WASHINGTON

August 25, 2025

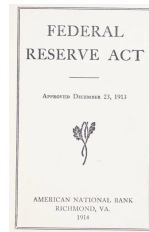
Dr. Lisa D. Cook
Member
Board of Governors
United States Federal Reserve System
20th Street & Constitution Avenue, N.W.
Washington, D.C. 20551

Dear Governor Cook:

Pursuant to my authority under Article II of the Constitution of the United States and the Federal Reserve Act of 1913, as amended, you are hereby removed from your position on the Board of Governors of the Federal Reserve, effective immediately.

The Federal Reserve Act provides that you may be removed, at my discretion, for cause. See 12 U.S.C. § 242. **I have determined that there is sufficient cause to remove you from your position.**

As set forth in the Criminal Referral dated August 15, 2025, from Mr. William J. Pulte, Director of the Federal Housing Finance Agency, to Ms. Pamela Bondi, Attorney General of the United States ("Criminal Referral") (attached to this letter as Exhibit A), there is sufficient reason to believe you may have made false statements on one or more mortgage agreements. For example, as detailed in the Criminal Referral, you signed one document attesting that a property in Michigan would be your primary residence for the next year. Two weeks later, you signed



Federal Reserve Act — Section 10, Paragraph 2

[...] each member shall hold office for a term of fourteen years from the expiration of the term of his predecessor, unless sooner removed for cause by the President. Of the persons thus appointed, 1 shall be designated by the President, by and with the advice and consent of the Senate, to serve as Chairman of the Board for a term of 4 years [...]

Data

- **The Central Bank Independence - Extended (CBIE) index:**

- ▶ 42 questions on central bank design across 6 dimensions:
 - ★ 1) Governor and Central Bank Board; 2) Monetary Policy and Conflicts Resolution; 3) Objectives; 4) Lending to the Government; 5) Financial Independence; 6) Reporting and Disclosure [▶ The index](#)
- ▶ Overall index computed as the arithmetic average of the scores across the six dimensions

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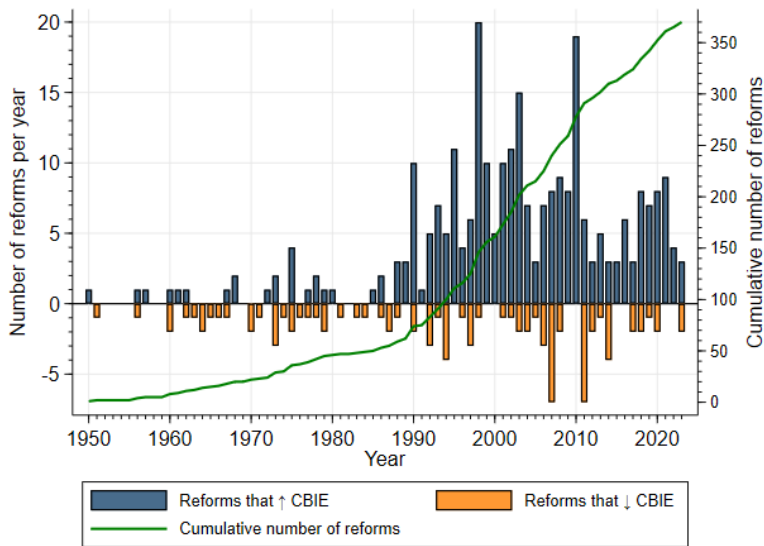
- **Data:**

- ▶ 155 countries over the period 1923-2023
- ▶ 2490 changes to central bank legislation, of which **>370 changed the degree of CBI**

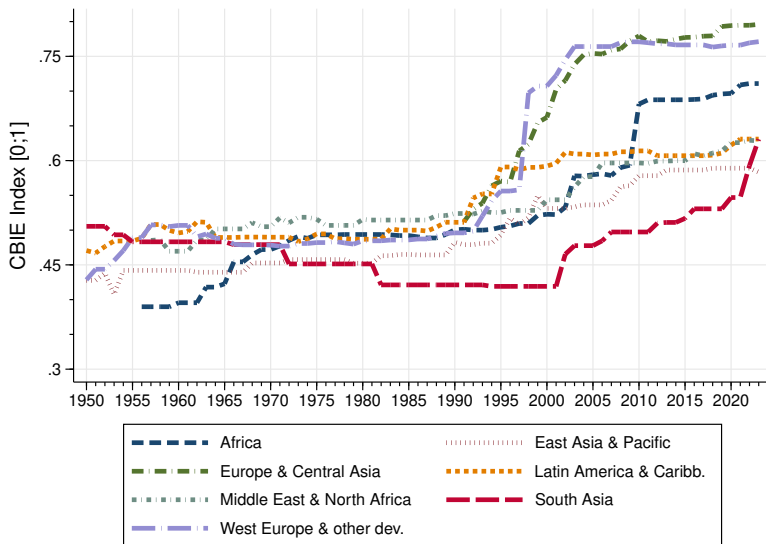
Table: Measures of Central Bank Independence and Reforms

| Paper | Index Name | Variables | Countries | Period | Nr. of reforms |
|-------------------------------|-------------|-----------|------------|------------------|----------------|
| Grilli et al. (1991) | GMT | 16 | 18 | 1989 | – |
| Cukierman et al. (1992) | CWN | 16 | 72 | 1950-1989 | 35 |
| Acemoglu et al. (2008) | CWN | 16 | 52 | 1972-2005 | 40 |
| Dincer and Eichengreen (2014) | CBIU | 24 | 85 | 1998-2010 | 44 |
| Bodea and Hicks (2015) | CWN | 16 | 83 | 1972-2010 | 108 |
| Garriga (2016) | CWN | 16 | 188 | 1970-2012 | 241 |
| Romelli (2024) | CBIE | 42 | 155 | 1923-2023 | >370 |

Central bank legislative reforms (1950-2023)



Evolution of CBI by region (1950-2023)

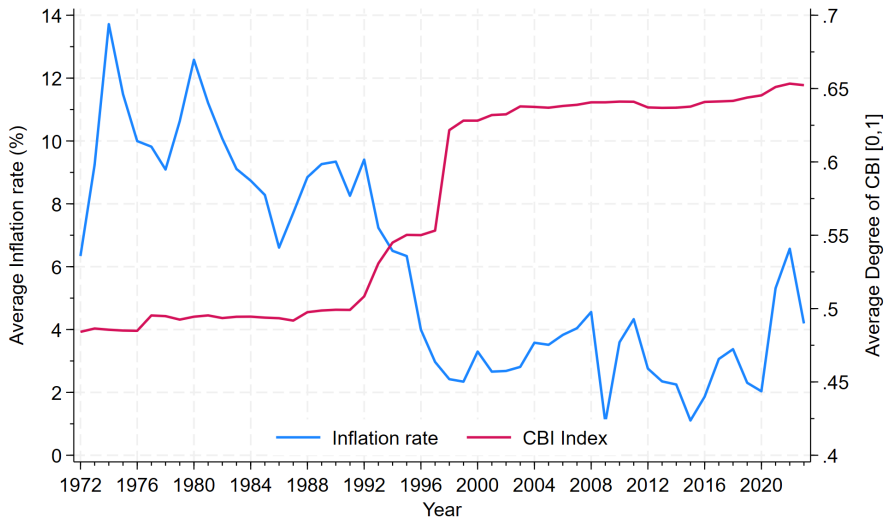


Long run inflation: persistence and central bank
independence

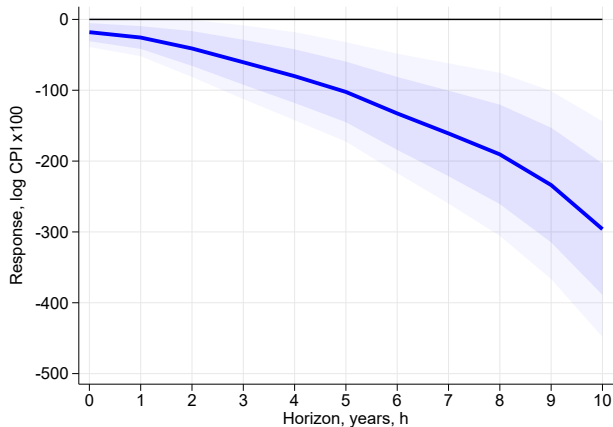
What do we do?

1. We estimate the short and long-term effects of reforms in central bank independence on inflation
 - ▶ Sample: 155 countries
 - ▶ Period: 1972-2023
 - ▶ CBI Index: baseline estimation using the CBIE Index (Romelli, 2022) and robustness with the Grilli et al. (1991) and Cukierman et al. (1992)
2. We find that central bank reforms reduce inflation mainly in the long run
 - ▶ The impact of reforms in CBI on inflation is gradual and not short-lived
 - ▶ The effect is much larger for developing countries
3. We show that reforms in central bank independence also lowers inflation persistence

The Inflation-CBI nexus

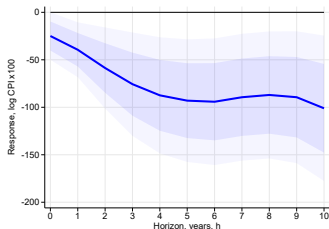


Long-run inflation and central bank independence

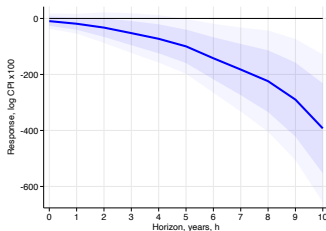


- **A representative 0.05 increase in CBI lowers the price level by about 14 log points after 10 years, equivalent to roughly -1.5% per year over a decade.**

Long-run inflation and central bank independence



Advanced economies



Developing countries

| Category | Full sample | Advanced | Developing |
|---------------|-------------|----------|------------|
| All reforms | -13.74 | -7.15 | -15.08 |
| Large reforms | -17.01 | -3.55 | -22.37 |
| Reversals | +6.32 | +2.61 | +7.17 |

Notes: Percent changes in the price level after 10 years implied by estimated coefficients and average changes in Δ CBI. Positive numbers indicate a higher price level; negative numbers indicate disinflation.

Central bank independence and inflation persistence

Key findings so far

- After reforms, countries tend to have **lower inflation on average**, especially developing countries.

On inflation persistence

- Central bank reforms contribute to lower **inflation persistence**: spikes fade **faster** than before the reform.
- This pattern appears in **advanced** economies and **developing** countries alike.

Why it matters

- Stronger independence supports **credibility** and helps **anchor expectations**, shortening inflation episodes and reinforcing the long-run disinflation benefits.

Conclusions

- **Benefits of reforms in CBI**

- ▶ *Short run*: lower inflation and less persistence (spikes fade faster).
- ▶ *Long run*: the impact of central bank reforms on inflation is gradual and not short-lived. Inflation is much lower in the long run.

- **Can we take CBI for granted?**

- ▶ No. Despite its benefits, political skepticism about CBI has been rising in recent years.

- **Future research: combine *de jure* and *de facto***

- ▶ Legal scores move only when statutes change; *de facto* pressures (appointments, public attacks, etc.) can bite even when no changes to central bank statutes take place.
- ▶ Dynamic legal coding (*de jure*) *plus de facto* measures using higher frequency data.

The background of the slide is a photograph of Trinity College Dublin, featuring the central clock tower and surrounding buildings. The entire image is covered with a semi-transparent blue filter. The text is centered over the image.

Thank you for your attention

email: romellid@tcd.ie

Data: www.cbidata.org

Institutional characteristics of the CBIE index

| Criteria | GMT | CWN | CBIE |
|--|-----|-----|------|
| Governor and Central Bank Board | | | |
| Who appoints the governor | * | * | * |
| Term of office of governor | * | * | * |
| Reappointment option for governor | | | * |
| Dismissal of governor | | * | * |
| Governor allowed to hold another office in government | | * | * |
| Qualification requirements for governor | | | * |
| Who appoints the board members | * | | * |
| Term of office of board members | * | | * |
| Reappointment option for board members | | | * |
| Dismissal of board members | | | * |
| Board Members allowed to hold another office in government | | | * |
| Qualification requirements for board members | | | * |
| Staggering term of office for board members | | | * |
| Government representatives in the board | * | | * |
| Monetary Policy and Conflicts Resolution | | | |
| Who formulates monetary policy | * | * | * |
| Central bank responsible to fix key policy rates | * | | * |
| Banking sector supervision | * | | * |
| Central bank role in government's budget and/or debt | * | | * |
| Final authority in monetary policy | * | * | * |
| Objectives | | | |
| Central bank's statutory goals | * | * | * |

Institutional characteristics of the CBIE index

| Criteria | GMT | CWN | CBIE |
|---|-----|-----|------|
| Lending to the Government | | | |
| Direct credit: not automatic | * | * | * |
| Direct credit: market of lending | | * | * |
| Who decides financing conditions to government | | * | * |
| Beneficiaries of central bank lending | | * | * |
| Direct credit: type of limit | * | * | * |
| Direct credit: maturity of loans | * | * | * |
| Direct credit: interest rates | * | * | * |
| Prohibition from buying government securities in primary market | * | * | * |
| Financial Independence | | | |
| Payment of the initial capital of the central bank | | | * |
| Authorized capital of the central bank | | | * |
| Central bank financial autonomy | | | * |
| Arrangements for automatic recapitalization | | | * |
| Transfers of money from the treasury | | | * |
| Central bank approves its annual budget | | | * |
| Central bank adopt its annual balance sheet | | | * |
| Auditing agency | | | * |
| Allocation of the net profits | | | * |
| Allocation of profits to the general reserve fund | | | * |
| Partial payments of dividends before the end of the fiscal year | | | * |
| Unrealized profits included in the calculation of distributable profits | | | * |
| Central Bank Reporting and Disclosure | | | |
| Central bank reporting | | | * |
| Central bank financial statements | | | * |