



Bank Supervision as Information Production

Evidence from U.S. Bank Holding Companies

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Motivation

Banks are deliberately **opaque**: For deposits to circulate like money, depositors must *not* scrutinize the underlying assets (Dang, Gorton, Holmström & Ordoñez, AER 2017).

- **Benefit**: deposits stay “information-insensitive” ⇒ efficient liquidity creation
- **Cost**: markets cannot monitor bank risk ⇒ discipline breaks down

Supervisors replace market discipline: confidential exams, privileged access, and regulatory actions instead of price signals.

Supervision only adds value if examiners uncover information *beyond* what public data already reveal.

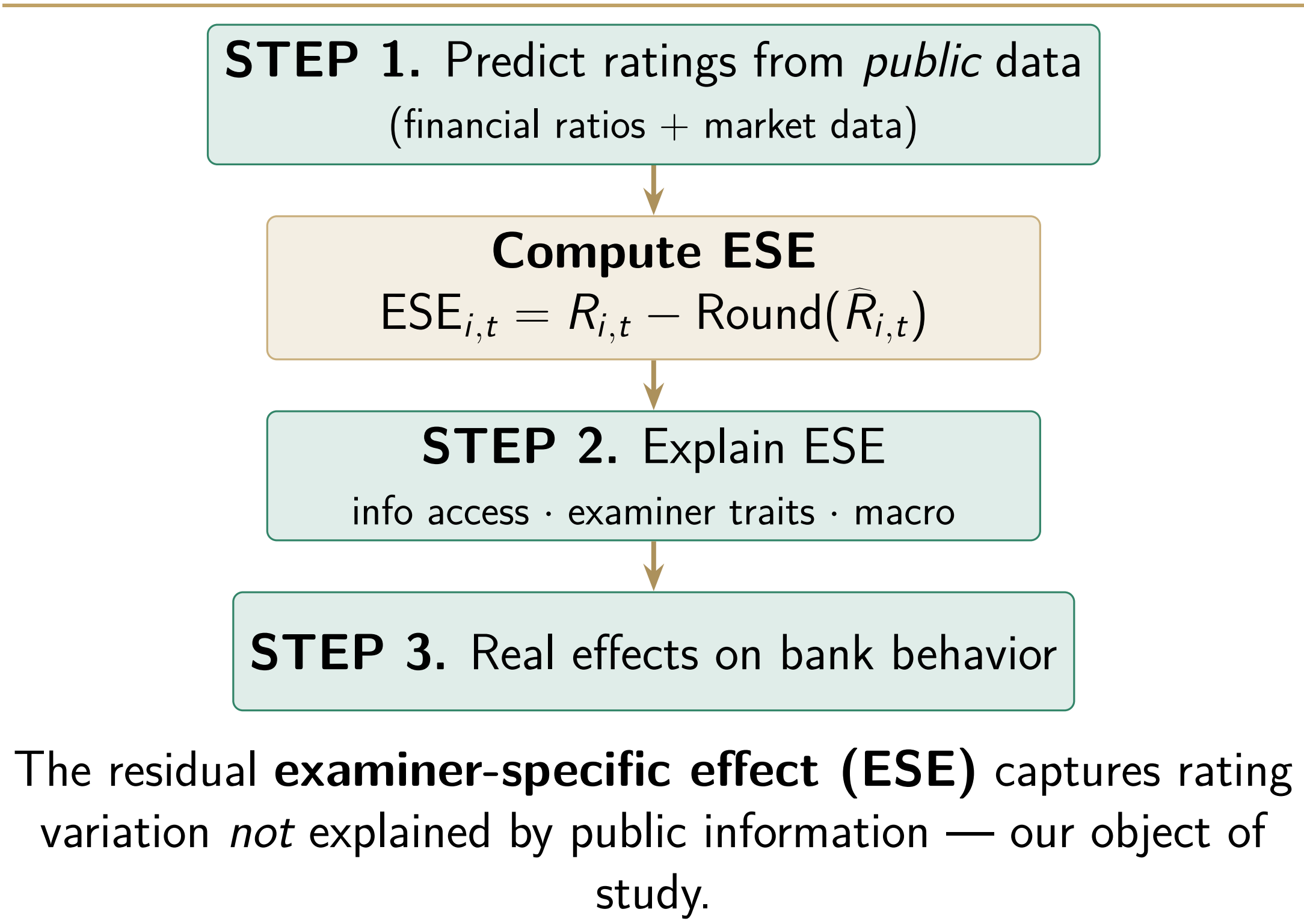
Research Questions

1. How much information does supervision add **beyond public data**?
2. What shapes examiner judgment **beyond** private information (access, traits, the cycle)?
3. Do these deviations have **real effects** on bank behavior?

Setting: Fed Supervision of BHCs

- **Bank holding company (BHC)** subsidiaries face many regulators, but the **Federal Reserve supervises every BHC** under one framework.
- Single rating system: the **RFI/C(D)** (Risk management, Financial condition, Impact, Composite — Depository institution) rating, composite since 2005, 1 (best) to 5 (worst).
- Clean identification: no cross-agency or examiner-rotation confounds.
⇒ **We study the Fed’s RFI Composite ratings from safety and soundness exams.**

Research Design

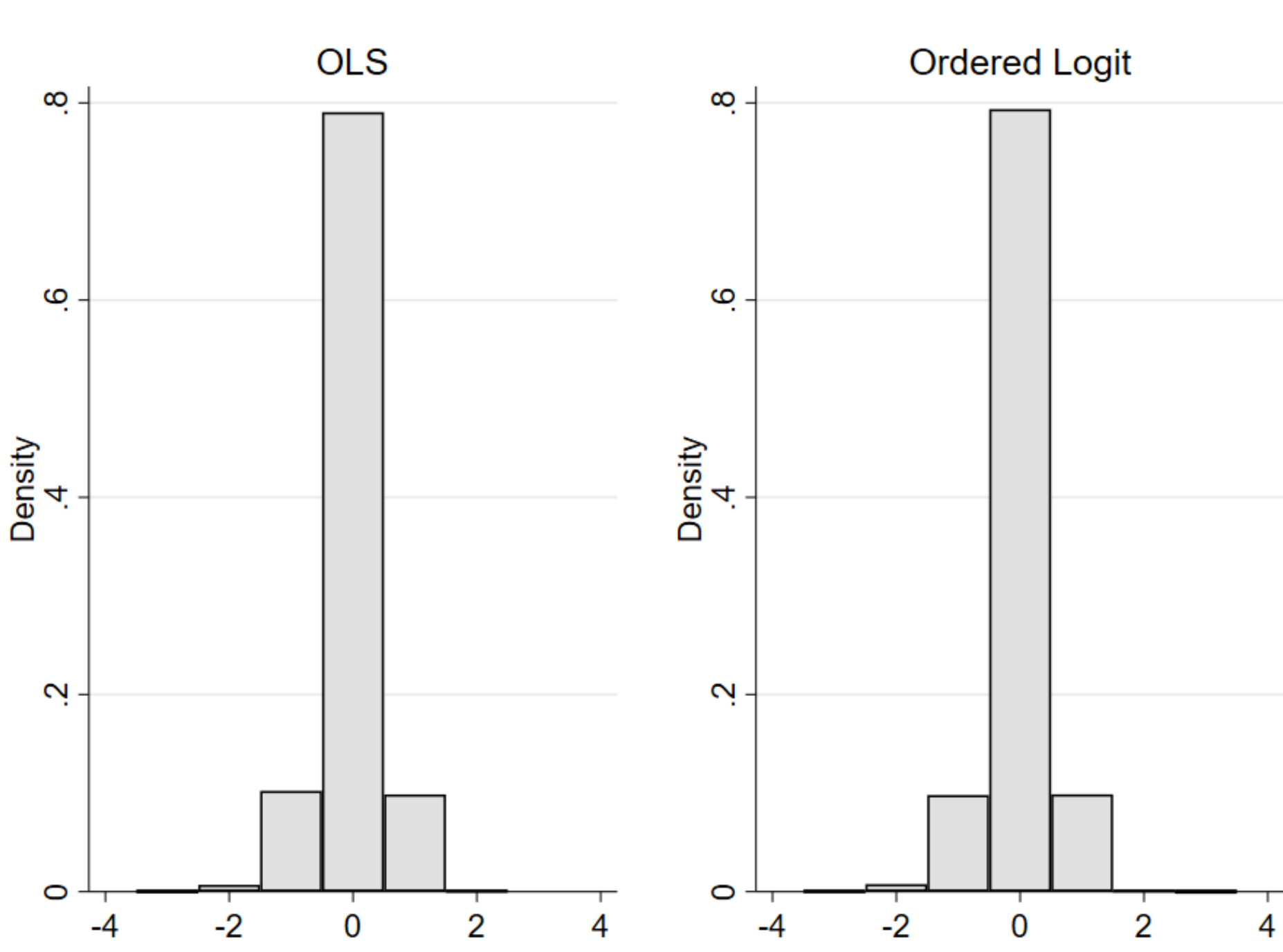


Step 1: Public Data Explain ~70% of Ratings

Model	# Vars	Obs.	Adj. R^2
Baseline (financial ratios)	6	3,419	0.676
Saturated (all FR Y-9C)	29	2,707	0.702
+ Market data (public banks)	34	2,684	0.710

Public information explains ≈70% of ratings. The remaining ≈30% — the ESE — reflects examiner-specific information and judgment.

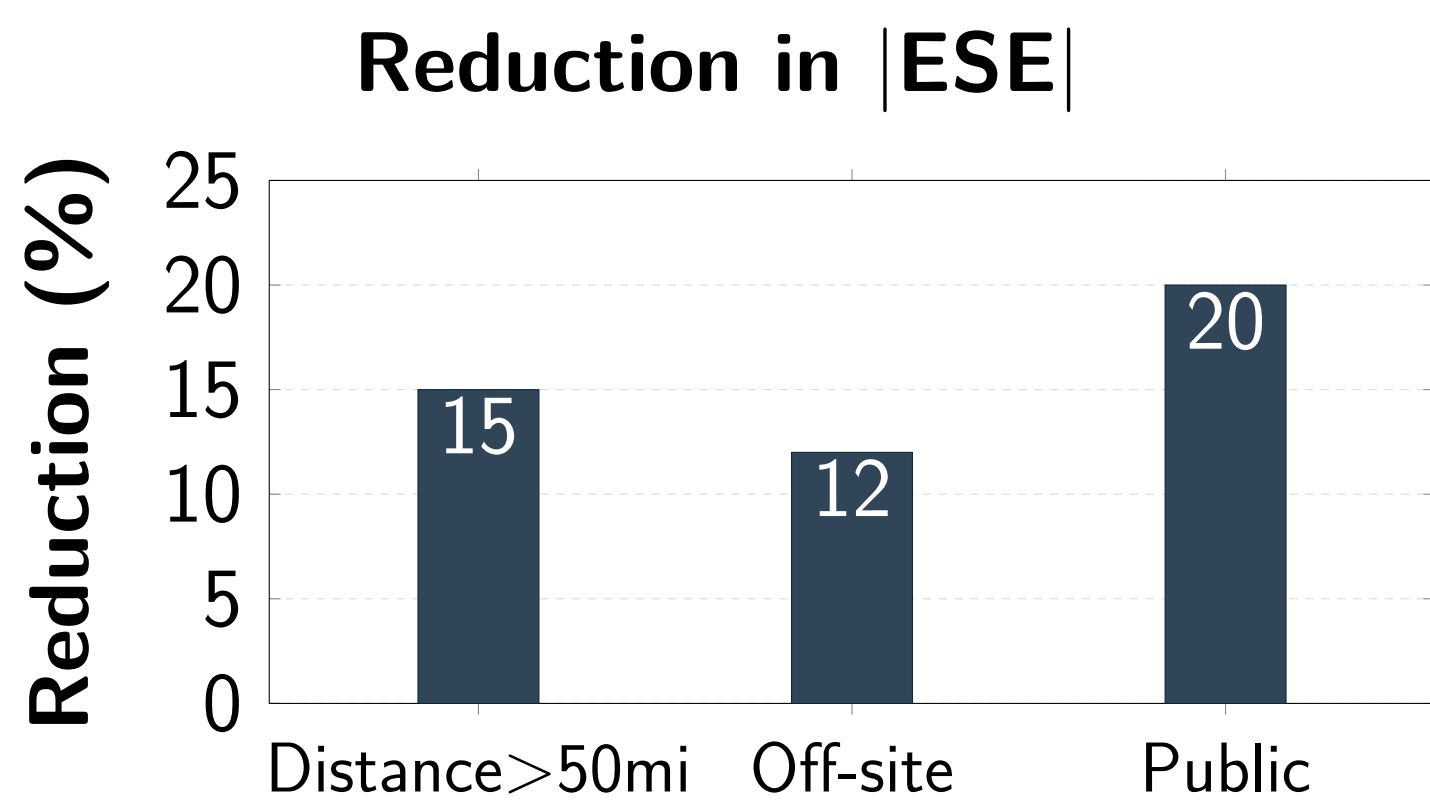
ESE Distribution



Result 1: Information Access Matters

Ratings track public predictions *more* closely when examiners have **less** private-information access:

- Greater distance (bank HQ >50mi from Fed office)
- Off-site (vs. on-site) examinations
- Publicly traded (vs. private) banks



Result 2: Examiner “Types” Persist

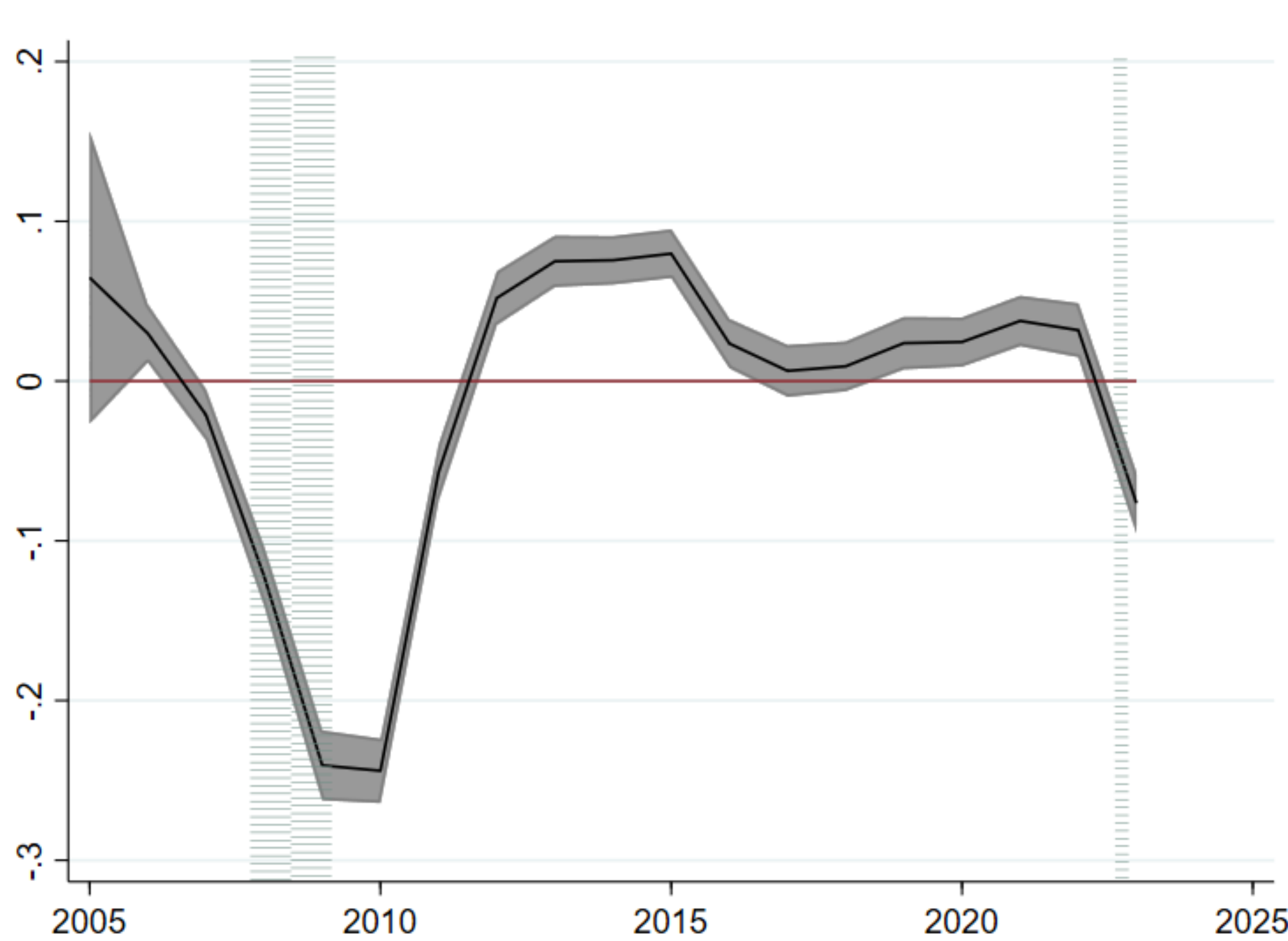
Does an examiner’s *historical* stringency predict today’s rating?

	Base	+Yr FE	+Bank FE	+Ctrls
Examiner stringency	0.558 (16.4)	0.380 (11.4)	0.384 (10.4)	0.246 (5.1)
Obs.	22,237	22,237	22,101	9,340

All coefficients significant at 1%.

An examiner 1 grade tougher historically is ≈0.25 grade tougher today.

Result 3: Supervision is Procyclical



Average ESE over time (90% CI): lenient before crises, strict after.

Result 4: Real Effects on Bank Behavior

Do unexpected rating deviations predict **year $t+1$** outcomes? Split ESE into **tougher-than-expected** (ESE^+) and **more-lenient** (ESE^-).

Outcome ($t+1$)	ESE	ESE^+	ESE^-
Log(Assets)	−0.018***	−0.059***	0.010
Loan/Assets		−0.021***	0.005
Equity/Assets		0.003***	−0.001
Tier 1		0.004***	0.001
NPL/Assets		−0.000	0.001***

*** significant at 1%. Effects persist with examiner fixed effects.

Trade-off: Stricter-than-expected supervision *lowers risk and raises capital* but *restricts credit and growth*; unexpected leniency predicts *higher future non-performing loans*.

Conclusions

- **About 20% to 30%** of rating variation is *unexplained* by public data — genuine supervisory information production.
- That residual is **systematic**: It rises with information access, carries persistent examiner traits and moves with the cycle.
- Supervision has **real effects**: It disciplines risk-taking, at a cost to credit and growth.

Supervision adds value through private information — but shows systematic variation beyond fundamentals.

Contact

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