Central Banking

Week 9: Financial Markets and Central Bank Policy

Iegor Vyshnevskyi, Ph.D.

Sogang University

April 30, 2025

Introduction

- Financial markets are essential to the implementation and transmission of central bank policy.
- Central banks influence market conditions through interest rates, asset purchases, liquidity tools, and forward guidance.
- In return, financial market responses inform central banks' assessments and strategies.
- This lecture explores:
  - How developed markets enhance monetary effectiveness
  - How market expectations react to different policy tools
  - Key lessons from emerging markets and the euro area crisis

1. Financial Markets and Central Bank Policy

Price Stability & Financial Markets

Price stability is the primary mandate of most central banks — low and predictable inflation.

Why It Matters for Markets:

- Anchors **inflation expectations** → stabilizes long-term interest rates
- Enhances **asset valuation certainty** (esp. bonds, equities)
- Reduces **risk premiums** across markets

Price Stability & Financial Markets (cont'd)

When Price Stability Holds:

- Bond markets: Lower volatility in yields
- FX markets: Currency more stable → lower hedging costs
- Credit markets: Predictable inflation boosts lending

When It Breaks:

- Inflation surge → real returns fall → sell-offs
- Unanchored expectations → yield curve steepens
- Capital flight in EMEs → FX & equity shocks

> "Stable prices are a precondition for deep and efficient financial markets."

Financial Stability & Financial Markets

- **Financial stability mandate** emerged as a core function post-2008.
- Stability depends on **resilient financial markets** — well-capitalized banks, liquid bond markets, functional repo & FX markets.

Financial Stability & Financial Markets (cont'd)

Key Instruments:

- Macroprudential tools:
  - Countercyclical capital buffers
  - Loan-to-value (LTV) ratios
  - Debt service-to-income limits
- Market-wide surveillance:
  - Stress tests
  - Asset price monitoring

Financial Market Role:

- Signal systemic stress (e.g., credit spreads, repo rates)
- Amplify or absorb shocks
- Transmit policy signals or distort them (e.g., herding)

Financial Stability & Financial Markets (cont'd)

Trade-off:

- **Liquidity support** vs. **moral hazard**
- **Market correction** vs. **disorderly unwinding**

> “Modern central banks must act pre-emptively and communicate clearly to maintain trust.”

Central Banks as Supervisors & Financial Markets

Central banks often serve as **prudential supervisors** of banks and financial institutions.

Why This Matters for Markets:

- **Supervisory oversight** affects investor confidence.
- Markets watch **central bank reports, stress tests, and regulatory actions** for signals.

Central Banks as Supervisors & Financial Markets (cont'd)

Supervisory Roles:

- Ensure solvency of major institutions
- Monitor systemic risk and contagion channels
- Oversee liquidity and capital buffers
- Implement Basel III / macroprudential rules

Impact on Markets:

- Positive: Transparency boosts investor trust
- Negative: Supervisory lapses → crises (e.g., SVB 2023)
- Surprise interventions can move equity/bond markets

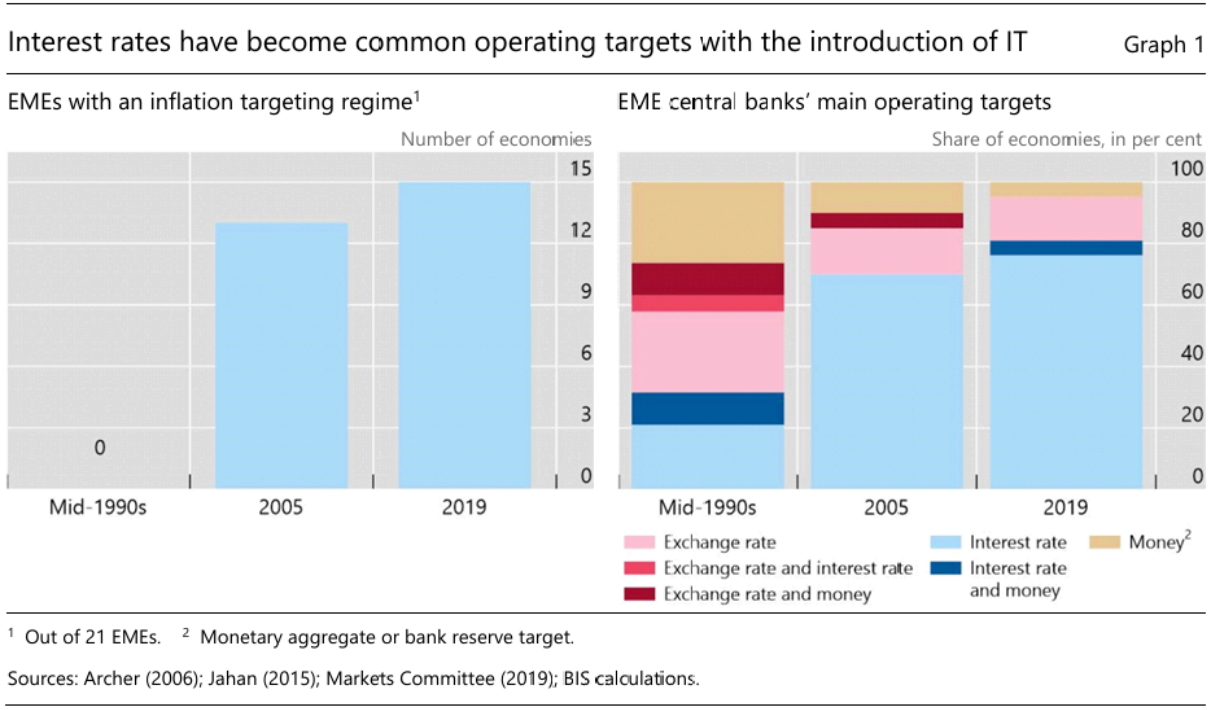
> "Effective supervision reduces market uncertainty and enhances financial stability."

Financial Market Development (FMD)

- FMD improves monetary policy transmission.
- Deeper repo, bond, and interbank markets => better interest rate pass-through.
- FMD includes:
  - Repo market growth
  - Local bond markets deepening
  - Shift from money targeting → interest rate targeting

Financial Market Development (FMD) (cont'd)

Figure:
Interest rate as main monetary target



Key Source: Mehrotra & Schanz (2020)

Policy Implementation and Market Development

- Central banks in EMEs used their tools not only to steer the economy but also to foster financial markets.
- **Key tools**:
  - Liquidity management (e.g., repos, reverse repos)
  - Asset purchases (e.g., government bonds, corporate bonds)
  - Forward guidance
- Instruments like repos or central bank securities helped develop:
  - Yield curves
  - Liquidity benchmarks
  - Collateralized funding options

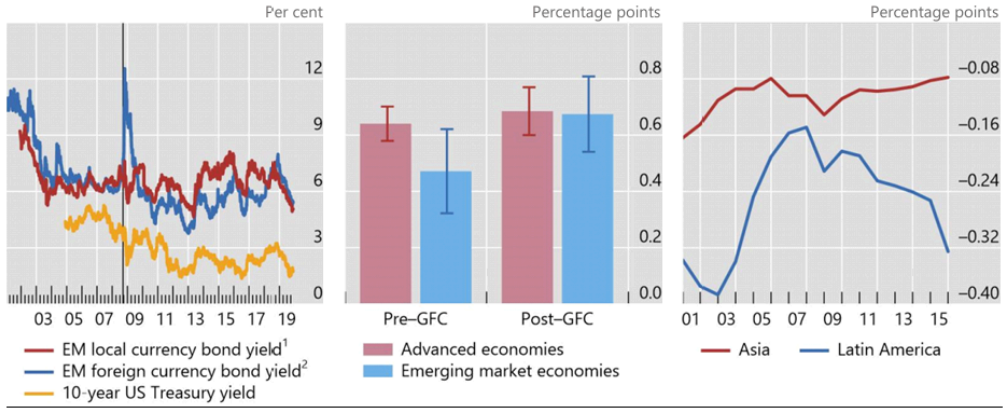
Monetary Transmission Channels

1. **Interest Rate Channel**: Stronger when bond markets are deep.
2. **Expectations Channel**: Enhanced by liquid and transparent markets.
3. **Balance Sheet Channel**: More effective when households/firms are indebted.
4. **Financial Accelerator**: Risk-taking and credit access amplify policy effects.

Global Financial Integration

- FMD leads to **greater sensitivity to global interest rates**.
- Spillover from U.S. yields to EMEs:
  - Pre-GFC: ~0.47
  - Post-GFC: ~0.67

External factors affect domestic monetary conditions — Graph 5



[1] JP Morgan Government Bond Index – Emerging Markets (GBI-EM), seven to 10 years. [2] JP Morgan Emerging Market Bond Index (EMBI), seven to 10 years. [3] The panel shows the response of the local currency 10-year yield to a 1 percentage point increase in the US 10-year yield, using monthly data and the specification in Mehrotra et al (2019). The lines show the two-standard error confidence intervals. Pre-GFC period covers M1 2001 to M6 2008; post-GFC includes M1 2010 to M9 2017. The sample of AEs includes AU, CA, CH, DK, NO, NZ and SE; the one for EMEs covers 21 EMEs. [4] The graph shows the impact of a 10% depreciation in the debt-weighted exchange rate on the ratio of capex to total assets in the following year, for a firm at mean net FX leverage. EM Asia includes CN, ID, IN and KR; Latin America includes BR, CL and MX. Based on the specification in Banerjee et al (2020).

Sources: Banerjee et al (2020); Bloomberg; Datastream; JP Morgan Chase; national data.

Case: Euro Crisis – ECB and Market Reactions

- ECB deployed varied tools: SMP (Securities Markets Programme), LTRO (Long-Term Refinancing Operations), OMT (Outright Monetary Transactions).
- **Only OMT** had strong expansionary effects.
- Euro liquidity (e.g., LTRO) had limited impact.

Source: Mody & Nedeljkovic (2024)

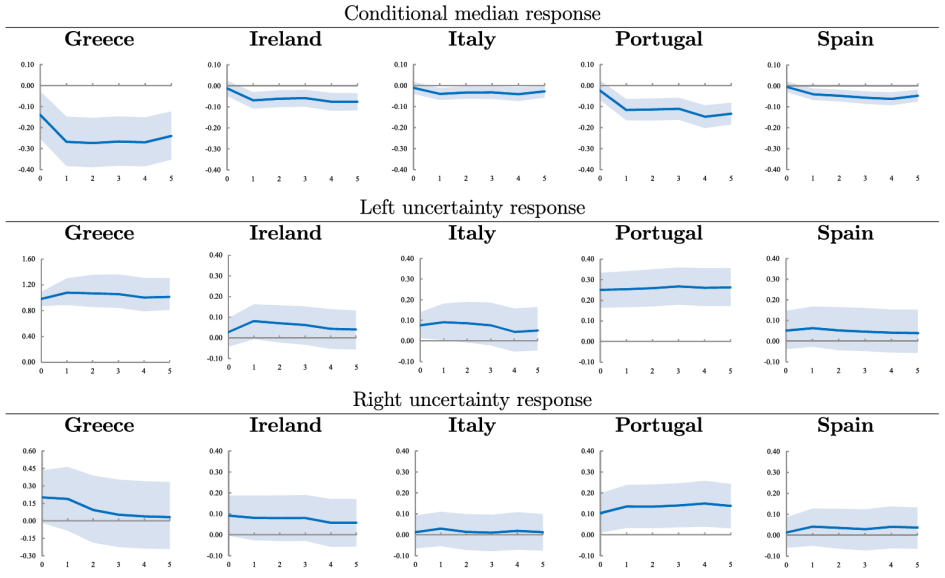


Fig. 4. Dollar liquidity intervention: 10 year government bond spreads (percentage points):
Notes: The figure reports daily cumulative conditional median (top row), left (middle row) and right uncertainty (bottom row) response of the change in 10Y sovereign bond spread vis-à-vis Germany to the dollar liquidity intervention that increases the three month euro-dollar swap basis by 1.2 basis points. Left (right) uncertainty is the difference between the 50th and the 10th (90th and 50th) conditional quantile. The shaded areas are 68% confidence intervals. T=720.

Lessons from ECB Policy

- Markets prefer **unambiguous policy**.
- SMP & LTRO: Increased uncertainty.
- OMT: Reduced risk premiums, improved equity performance.

Clear communication matters as much as the policy itself.

Central Bank Policy and Equity Markets

- QE, forward guidance, and liquidity programs influence:
  - Credit spreads
  - Corporate bond pricing
  - Stock indices

Example:

- ECB bond purchases lowered periphery yields.
- But only OMT improved equity returns significantly.

FMD and Market-Based Indicators

- With FMD, CBs can extract info from:
  - Bond yields
  - Breakeven inflation
  - FX swaps and repo spreads

But beware of:

- Liquidity premiums
- Self-reinforcing signaling

Summary of Key Takeaways

- Developed financial markets are critical for effective monetary policy.
  - Financial market depth and structure strongly influence how monetary policy transmits through the economy.
- Financial markets react asymmetrically to central bank tools.
  - Market expectations can amplify or weaken the impact of central bank interventions.
  - Clarity, credibility, and consistency are critical in maintaining stable market expectations.
- Clear, consistent communication enhances effectiveness.
  - Central banks must adapt their tools and communication depending on market maturity and context.
- Euro crisis shows: **Ambiguity leads to volatility**, **clarity restores credibility**.

Discussion Questions

1. Why do some central bank tools (e.g., OMT) have stronger market effects than others (e.g., SMP or LTRO)?

2. How can central banks balance the need to act quickly in crises with the need to maintain clear, transparent communication?

3. In developing countries with shallow markets, what strategies can central banks use to improve monetary transmission?

4. How can central banks ensure their signals are clearly understood by markets?

5. What risks come from relying too much on financial market signals for policymaking?

References

- Mehrotra, A., & Schanz, J. (2020). *Financial market development and monetary policy*. BIS Papers No 113.
- Mody, A., & Nedeljkovic, M. (2024). *Central bank policies and financial markets: Lessons from the euro crisis*. Journal of Banking & Finance.

2. In-class Group Activity

Any QUESTIONS?

Thank You!

Next Class

-(May 7) Climate Change and Central Banking

- The readings will be posted on the Cyber Campus website.