

Central Banking

Week 6: Exchange Rate Regimes and Currency Stability

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Introduction

- Welcome to today's lecture on **Exchange Rate Regimes and Currency Stability** — an essential topic in understanding the broader role of central banks.
- Exchange rates impact inflation, trade competitiveness, financial stability, and capital flows — all of which shape a country's macroeconomic environment.
- Today we'll explore how central banks intervene in foreign exchange markets, the rationale behind their actions, and how they design strategies and choose instruments to maintain currency stability.
- This lecture draws on the BIS Paper by Patel & Cavallino (2019) and incorporates real-world practices from advanced and emerging market economies.

Why Exchange Rate Stability Matters

- Vital for price stability, financial stability, external balance
- Especially important for **emerging market economies (EMEs)**
- Volatile capital flows and terms of trade create policy tension

Objectives

- Understand exchange rate regimes
- Explore FX intervention goals and strategies
- Evaluate effectiveness and transmission channels
- Discuss central banks' tactics and tools
- Reflect on modern challenges and policy trade-offs

Agenda for Today

1. Exchange Rate Regimes and Currency Stability
2. In-class group activity

1. Exchange Rate Regimes and Currency Stability

Are Exchange Rates Within the Realm of Central Banks?

Question for Discussion:

- To what extent should central banks influence or control exchange rates?

Considerations:

- Central banks' mandates often include price stability, full employment, and economic growth.
- Exchange rate stability can impact inflation, trade balances, and financial stability.

Historical Example - The Bank of England and Black Wednesday (1992)

Context:

- In 1992, the UK was part of the European Exchange Rate Mechanism (ERM), aiming to maintain currency stability among European nations.

Central Bank Action:

- The Bank of England intervened by spending billions of pounds in an attempt to prop up the depreciating pound and keep it within the ERM limits.

Outcome:

- Despite the intervention, the pound couldn't be maintained within the ERM bands, leading to the UK's exit from the mechanism on September 16, 1992, known as "Black Wednesday."

Historical Example - Swiss National Bank's Currency Cap (2011-2015)

Context:

- Post-2008 financial crisis, the Swiss franc appreciated significantly due to its safe-haven status.

Central Bank Action:

- In 2011, the Swiss National Bank (SNB) set a minimum exchange rate of 1.20 CHF per euro to curb the franc's overvaluation and protect the economy.

Outcome:

- The SNB maintained this cap until 2015, when it was abruptly removed, leading to a sharp appreciation of the franc.

Current Example - Bank of Japan's Interest Rate Policies (2024)

Context:

- In response to prolonged low inflation and economic stagnation, the Bank of Japan (BOJ) maintained low-interest rates.

Central Bank Action:

- In July 2024, the BOJ raised interest rates to 0.25%, aiming to strengthen the yen and control inflation.

Outcome:

- The yen strengthened sharply in subsequent days, illustrating the impact of central bank policies on exchange rates.

Current Example - Central Bank of Brazil's Dollar Intervention (December 2024)

Context:

- Facing significant currency depreciation pressures, Brazil's central bank intervened in the foreign exchange market.

Central Bank Action:

- In December 2024, the Central Bank of Brazil sold \$21.57 billion in the spot market, marking its largest monthly intervention since adopting a floating exchange rate in 1999.

Outcome:

- The intervention aimed to stabilize the Brazilian real amidst substantial dollar outflows.

Conclusion

- Central banks play a pivotal role in influencing exchange rates through various interventions and policy decisions.
- Historical and current examples illustrate the complexities and impacts of such actions on national and global economies.

Types of Exchange Rate Regimes

Regime Type	Example	Central Bank Role
Fixed / Pegged	Hong Kong, Saudi Arabia	Maintain parity using reserves
Managed Float	India, Indonesia	Intervene as needed
Free Float	US, Eurozone	Market-determined

Central Bank Goals for FX Intervention

- Price Stability
- Curb Speculation
- Build Reserves
- Smooth Capital Flows
- Financial Stability
- External Competitiveness

More than half of EM central banks intervene to support price stability
— Patel & Cavallino (2019)

Intermediate Objectives

- Limit **exchange rate volatility**
- Provide **liquidity** in thin FX markets
- Influence **trend path** of exchange rates
- Smooth **capital flow pressures**

Effectiveness of FX Intervention

- Mostly short-term (under 1 month)
- Medium-term effects if repeated
- Long-term effectiveness is limited

FX intervention affects expectations via **signaling** and **portfolio balance** channels.

Transmission Channels

Portfolio Balance

- Assets not perfect substitutes
- Reserve changes shift demand

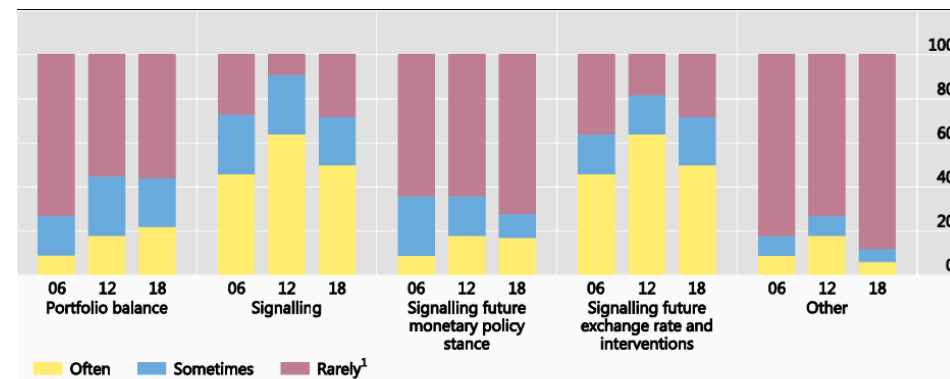
Signaling

- Interventions signal future policy
- Impact expectations and behavior

Signalling remains most important channel of FX intervention

As a percentage of respondents

Graph 3



2006: corresponds to the "Up to 2007" period in the 2012 survey, based on the responses of 11 central banks. 2012: corresponds to the "After 2008" period in the 2012 survey, based on the responses of 11 central banks. 2018: based on the responses of 18 central banks.

¹ Central banks which did not provide an answer for a channel category but did fill out at least one other category are assumed as "Rarely".

Source: BIS surveys in 2012 and 2018.

Instruments of Intervention

- Spot market (most common)
- FX **swaps, forwards, options**
- Onshore vs offshore

Recent trends:

- Greater use of derivatives
- Preference for discretion over rules

Sterilization Techniques

- Central bank securities (most common)
- Reserve requirements (less frequent)
- Government deposits

| Market-based tools are also seen as aiding **market development**

Communication Strategies

- Most interventions are **not pre-announced**
- Latin America more transparent than Asia
- Some interventions use **rules**, but most are discretionary

Central Banks' Strategic Choices

- **Timing:** reactive vs preemptive
- **Transparency:** signal vs surprise
- **Objectives:** reserves, stability, signaling, liquidity

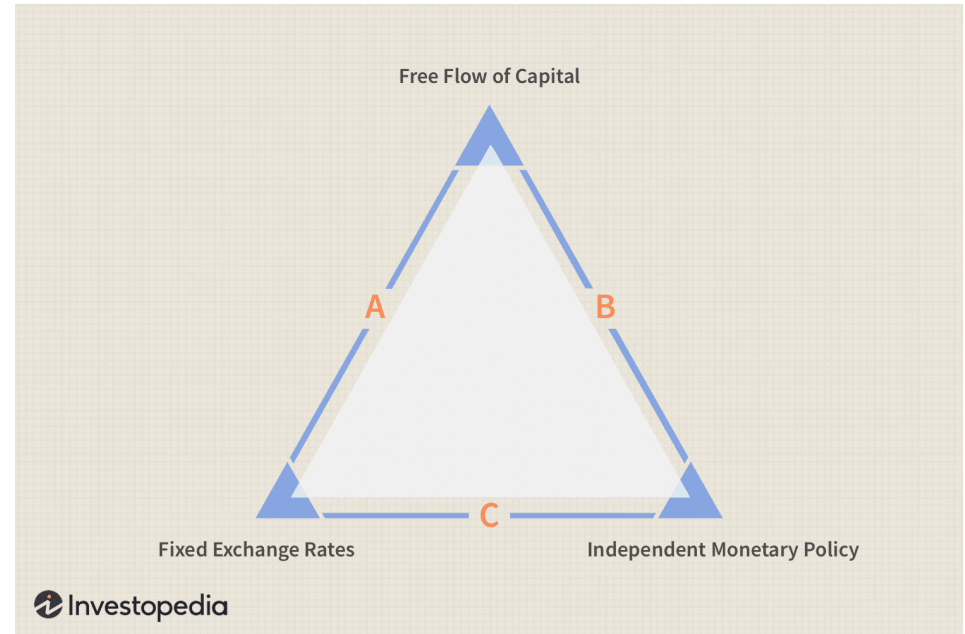
Trade-offs in Exchange Rate Policy

Stability vs Flexibility

- Intervening too much can distort markets
- Too little can allow volatility to damage stability

Growth vs Inflation

- FX moves can impact both



The "Impossible Trinity" or Trilemma

Mini Case: Bank Indonesia (2018)

- Tight global financial conditions
- Rupiah depreciation pressure
- Used FX intervention to stabilize markets
- Conducted NDFs to deepen local hedging market

Discussion Points

- Should FX interventions always be sterilized?
- What is the role of communication in FX interventions?
- How can central banks judge the **right** time to intervene?

Key Takeaways

- Exchange rate regimes shape CB behavior
- FX interventions serve **multiple goals**
- Effectiveness is often **short-term**
- Tools and transparency matter
- Trade-offs must be managed wisely

References

- Patel, N. & Cavallino, P. (2019). *FX intervention: goals, strategies and tactics*. BIS Papers No. 104.
- Sarno & Taylor (2001), *Official FX Intervention*
- Fratzscher et al. (2019), *Effectiveness of FX Intervention*
- Bank of England and Black Wednesday
- Swiss National Bank's Currency Cap
- Bank of Japan's Interest Rate Policies
- Central Bank of Brazil's Dollar Intervention

2. In-class Group Activity

Any QUESTIONS?

Thank You!

Next Class

-(April 16) Central Bank Communication and Transparency / Data Analysis

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