### Central Banking

Week 4: Central Banking and Financial Stability

legor Vyshnevskyi, Ph.D.

Sogang University

March 26, 2025

#### Introduction

- The Global Financial Crisis (GFC) highlighted the need for macroprudential surveillance
- Central banks play a key role in system-wide risk monitoring and financial regulation
- Today's topic: How central banks contribute to financial stability, with a focus on Asian economies

### Agenda for Today

- 1. Central Banking and Financial Stability
- 2. Guest speaker from the National Bank of Ukraine
- 3. In-class group activity

1. Central Banking and Financial Stability

### What is Financial Stability?

- Financial stability refers to a stable financial system that can withstand economic shocks.
- Key components:
  - Resilience: Ability to withstand / absorb shocks without disruption.
  - Robustness: Soundness of financial institutions and markets.
  - Smooth functioning: Efficient allocation of resources.
  - Sustainability: Long-term stability and growth.

#### Financial stability

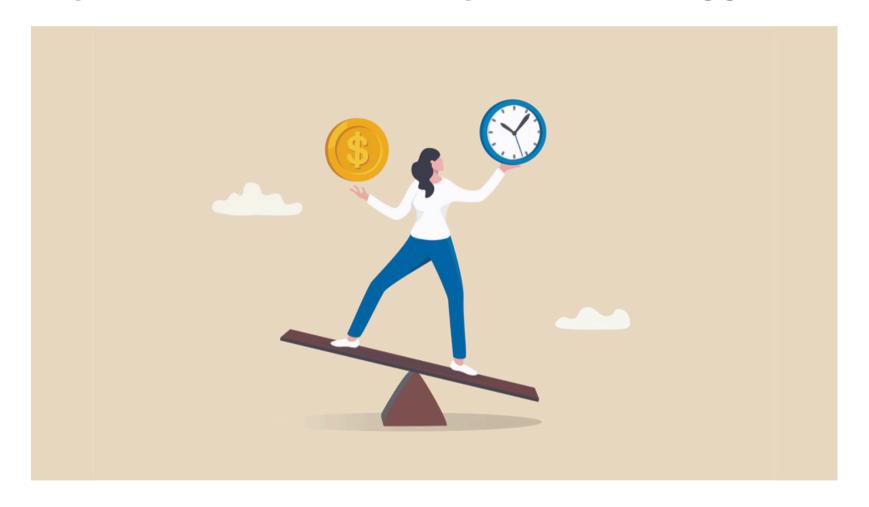
Financial stability can be defined as a condition in which the financial system – which comprises financial intermediaries, markets and market infrastructures – is capable of withstanding shocks and the unravelling of financial imbalances.

This mitigates the prospect of disruptions in the financial intermediation process that are severe enough to adversely impact real economic activity.

Source: ECB

Why is financial stability important?

## You can picture financial stability as a three-legged stool:



### Systemic Risk & Macroprudential Policy

- Systemic Risk: Disruption to financial services causing serious harm to the economy
- Macroprudential Policy aims to:
  - Limit procyclicality
  - Address interconnectedness
  - Increase system-wide resilience

### Why is This Relevant in Asia?

- Asia's emerging markets:
  - Vulnerable to volatile capital flows
  - Still developing institutional capacity
  - History of 1997 Asian crisis & 2008 GFC

### Central Banks & Financial Stability

#### Traditional vs Financial Stability Mandates

Mandate	Description
Price Stability	Control inflation (e.g. CPI targets)
Financial Stability	Prevent asset bubbles, systemic failures
Dual Mandate	Balance price and financial stability
Multiple Mandates	Include growth, employment, etc.

Key challenge: Trade-offs between mandates

• Debate: Do the two goals conflict?

### Tools of Central Banks for Financial Stability

#### Macroprudential Policy and Tools

- Macroprudential policy regulation of the financial system as a whole to prevent systemic risk and stabilize the economy / the financial system.
- Examples:
  - Capital requirements (e.g., Basel III) to ensure banks have enough capital to absorb losses
  - Leverage ratios to limit excessive borrowing
  - Liquidity requirements (e.g., LCR and NSFR) to ensure banks can meet obligations
  - Stress tests to assess resilience to shocks
  - Countercyclical buffers to build up capital in good times
  - Loan-to-value ratios (LTV) to limit excessive lending
  - Loan-to-income ratios (LTI) to limit excessive borrowing
  - Debt-service-to-income ratios (DTI, aka DSTI) to limit excessive borrowing

### Asia's Experience

### **Examples of Macroprudential Tools**

Country	Tool
Korea	LTV cap, FX derivative limits
China	LTV + DTI ratios
Thailand Reserve requirements, capital controls	

#### Institutional Architecture

### **Options for Financial Stability Regulation**

- 1. Central bank-led (e.g., Bank of England)
- 2. Financial stability council (e.g., US FSOC)
- 3. Hybrid model (e.g., Japan, Korea)
  - Key requirement: coordination across agencies

### Regional Cooperation

- Volatile capital flows call for cross-border dialogue
- Asian Financial Stability Dialogue (AFSD) proposed
- Potential roles:
  - Risk surveillance
  - Coordinated responses
  - Sharing resolution frameworks

### Financial Stability and Climate Change

- Climate change poses physical, transition and liquidity risks to the financial system
- Central banks integrate climate into:
  - Macroprudential stress testing
  - Capital requirements (under consideration)
  - Capital buffers (under consideration)
  - Disclosure standards (e.g., TCFD)
  - Supporting green finance and sustainable investment
  - Network for Greening the Financial System (NGFS)
- Asian central banks (e.g., MAS, BoK, PBoC) increasingly participate in NGFS

### Financial Stability and New Technologies

- FinTech: Innovation in payments, lending, and digital assets
  - Potential for faster services, but increased cyber and operational risk
- AI/ML: Enhancing credit assessment, fraud detection, but may amplify biases or risk clustering
- RegTech: Automates compliance, improves data transparency
- SupTech: Supervisory tech used by regulators to monitor risk in real time
- Challenge: Regulate innovation without stifling it; sandbox environments are key

### Current Challenges to Financial Stability

- Geopolitical risks: Conflicts, trade tensions, and sanctions affecting capital flows
- High debt levels: Public and private sector leverage post-COVID
- Inflation shocks: Tightening cycles exposing vulnerabilities in debt markets
- Financial market volatility: Repricing of risk due to interest rate hikes
- Shadow banking: Growth of non-bank financial intermediaries
- Cybersecurity threats: Increasing digitalization exposes system to operational risks
- Climate-related shocks: More frequent natural disasters and transitional financial risks

#### Discussion

- Should central banks target asset prices?
- Is "leaning against the wind" always preferable to "cleaning" after?
- What tools are more effective: macroprudential or monetary?
- How can climate and digital finance be incorporated into regulation?

### Summary

- Financial stability is essential for long-term macroeconomic health
- Central banks need flexible tools and clear mandates
- Asia's experience offers valuable lessons for EMEs globally
- New risks from climate and technology must be integrated into frameworks

### References

- Kawai, M. & Morgan, P. (2012). Central Banking for Financial Stability in Asia
- BIS (2011), ECB (2012), IMF Reports

# Any QUESTIONS?

Thank You!

### **Next Class**

#### -(April 2) Economic Growth and Central Banks

- The readings will be posted on the course website.