



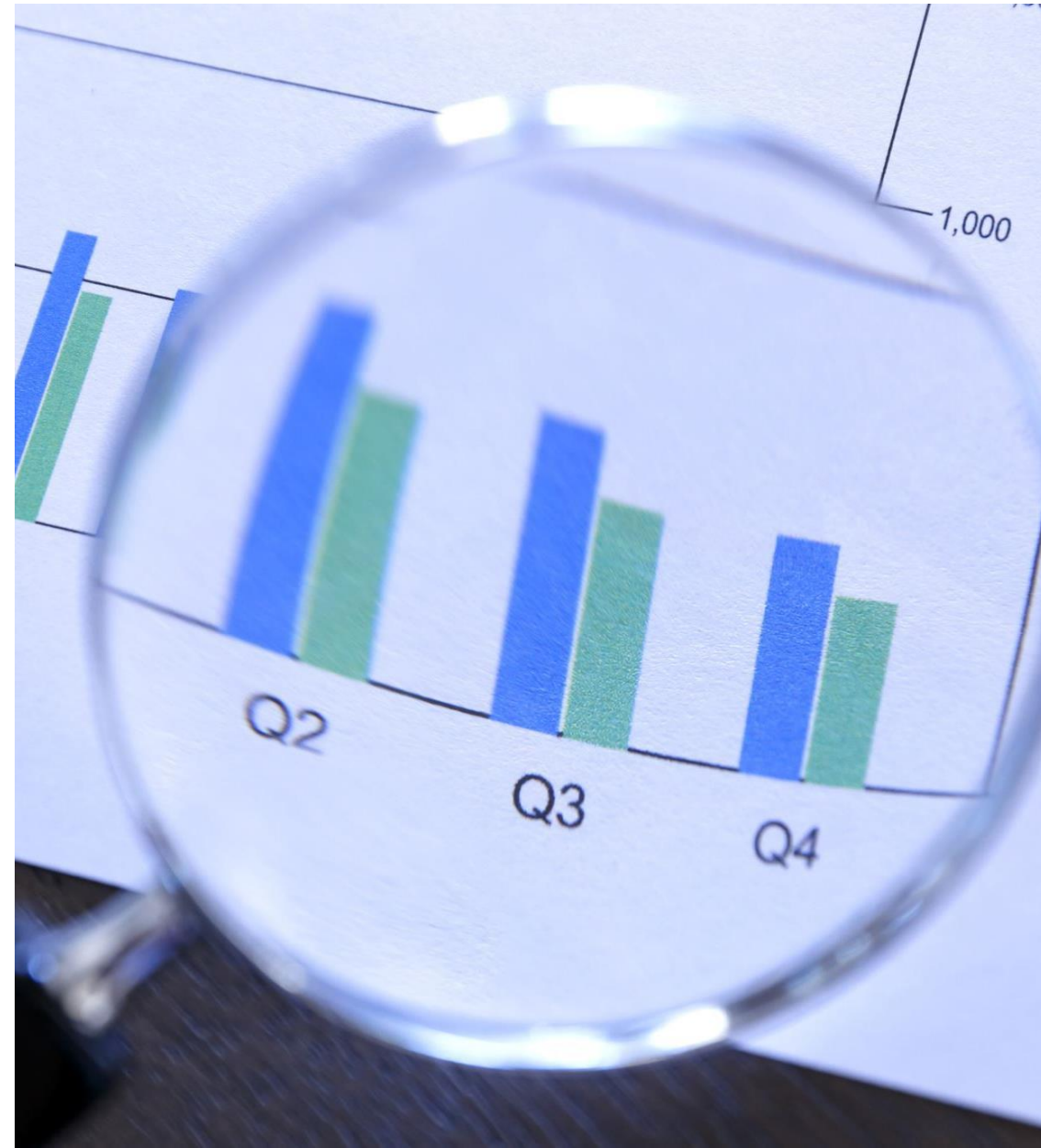
# Contemporary Issues in Finance - Lecture 8

Lesson Title: Global Economic Uncertainty and Market Volatility

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# Course Overview

In a world of increasing geopolitical tensions, frequent policy reversals, and interconnected financial markets, economic uncertainty has become a central driver of volatility in asset prices, credit markets, and exchange rates. This lesson reviews the theoretical foundations and empirical evidence on how uncertainty transmits to financial markets, examines key channels of contagion and amplification, and discusses contemporary challenges including non-bank financial institutions, high sovereign debt, algorithmic trading, and macroprudential policy. We conclude with a discussion of policy frameworks and strategies for financial institutions and regulators to manage risk under deep uncertainty.



# Course Objectives

- To provide an in-depth understanding of global economic uncertainty to financial market volatility.
- To examine the interaction between macroeconomic shocks, investor behavior, and financial market dynamics in economies.
- To analyze recent global events and structural shifts.
- To explore empirical tools and indicators used to measure uncertainty and volatility
- To evaluate the implications of heightened uncertainty for financial institutions
- To discuss risk management to mitigate volatility and strengthen financial stability.
- To encourage critical thinking and research inquiry into unresolved questions surrounding uncertainty modeling, financial contagion, and policy credibility in an interconnected world.

# Learning outcomes



By the end of this session, learners should be able to:

- Define and distinguish between risk and uncertainty
- Explain key transmission mechanisms through which global economic uncertainty
- Analyze empirical measures of uncertainty and volatility
- Evaluate the impact of contemporary drivers.
- Critically assess the role of financial institutions, regulators, and investors in mitigating volatility.
- Apply theoretical and empirical insights to recent case studies.
- Propose policy and risk management strategies that enhance market resilience.
- Identify research frontiers and open policy questions related to uncertainty measurement.

# Course Outline

- Introduction
- Theoretical Foundations
- Empirical Evidence on Uncertainty and Volatility
- Contemporary Drivers of Uncertainty and Volatility
- Implications for Financial Institutions, Investors, and Regulators
- Case Studies / Recent Episodes
- Open Issues, Research Frontiers, and Policy Dilemmas
- Conclusion

# Introduction

In recent years, markets have faced repeated episodes of sharp swings ranging from sudden equity drawdowns to bond market dislocations and FX volatility. Underlying these swings is a pervasive sense of global economic uncertainty: uncertainty about policy settings (monetary, fiscal, trade), geopolitical conflict, supply chain disruptions, and structural transformations (climate, technology, energy transitions).

This volatility complicates capital allocation, risk management, and macroeconomic policymaking. It is crucial to understand how uncertainty is transmitted to markets, what features distinguish modern volatility regimes, and how institutions and regulators should adapt.

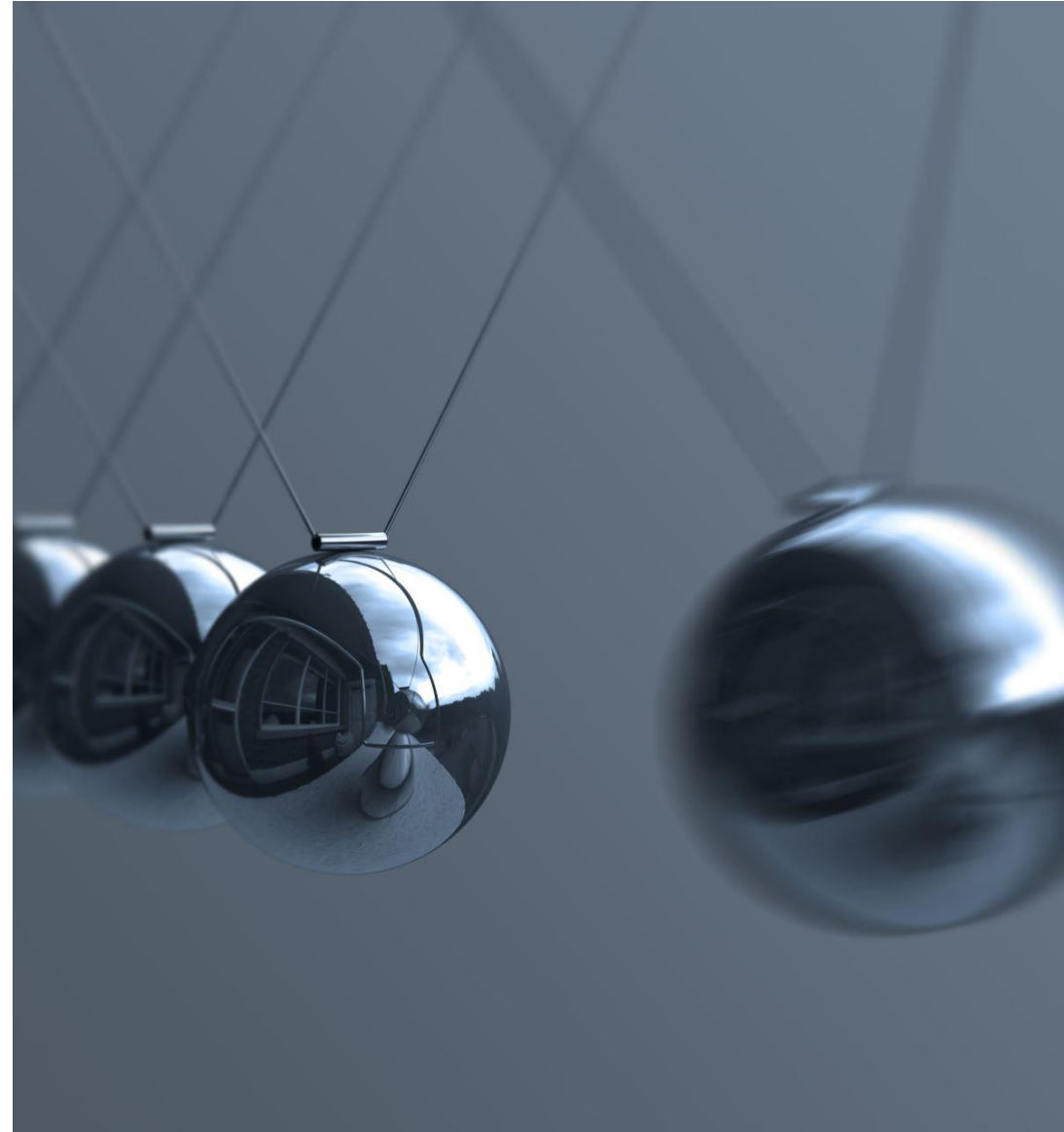
This lesson aims to (i) review theory and evidence linking uncertainty and volatility, (ii) diagnose contemporary drivers of market fragility, and (iii) assess mitigation strategies from the perspective of financial institutions and regulators.



# Theoretical Foundations

Main Elements:

- Defining Uncertainty vs. Risk
- Channels of Transmission
- Amplification Mechanisms



# Defining Uncertainty vs. Risk

Risk: Known probabilities (e.g., normal distribution of returns).

Uncertainty: Unknown or ambiguous probabilities (Knightian).

Uncertainty shocks: Sudden shifts in volatility or model parameters.

# Channels of Transmission to Financial Markets

Risk Premia Adjustments: Higher uncertainty → higher expected returns.

Volatility Channels: Higher variance of shocks.

Correlation Effects: Assets co-move more strongly.

Liquidity Effects: Wider spreads, less market depth.

Leverage Effects: Margin calls and deleveraging.

Real-Economy Feedback: Investment declines leading to credit deterioration.

# Amplification Mechanisms

Nonlinearities / Regime Shifts

Endogenous Risk (Reflexivity)

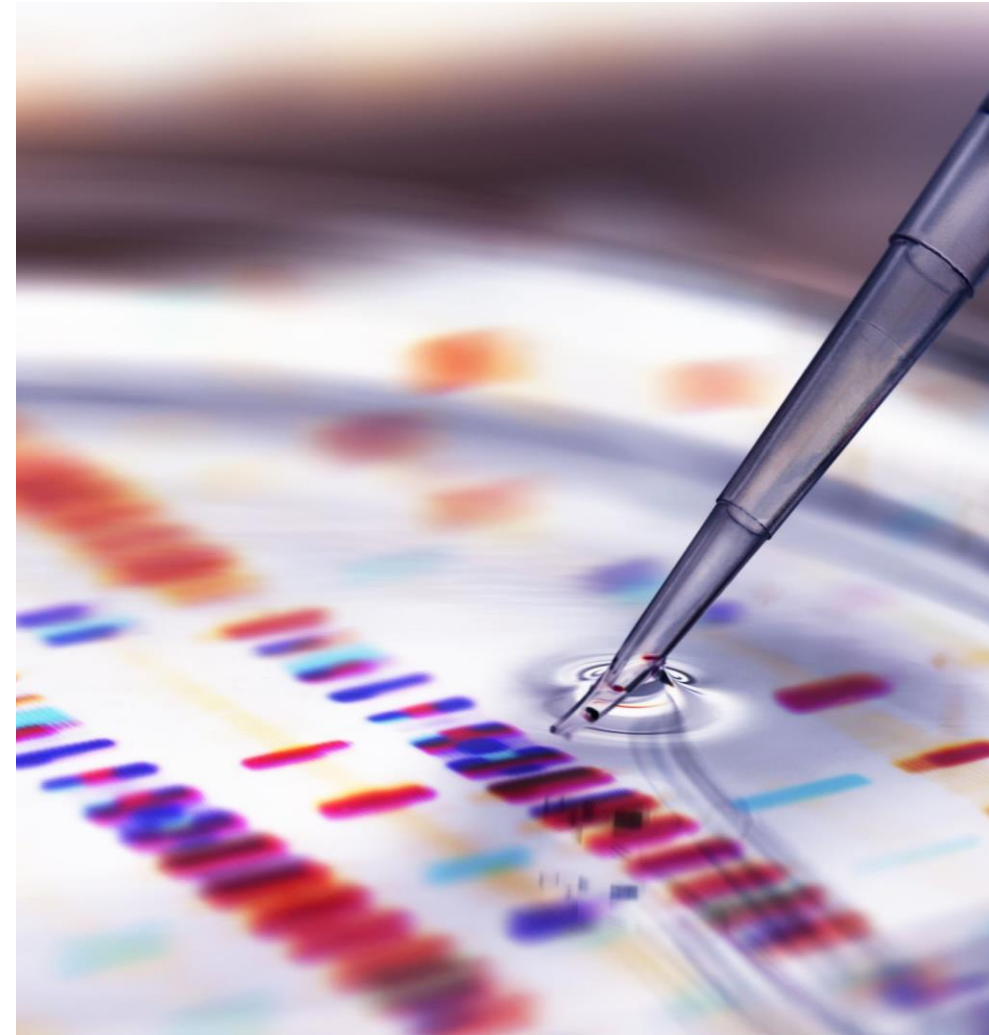
Contagion via Networks

Liquidity Spirals

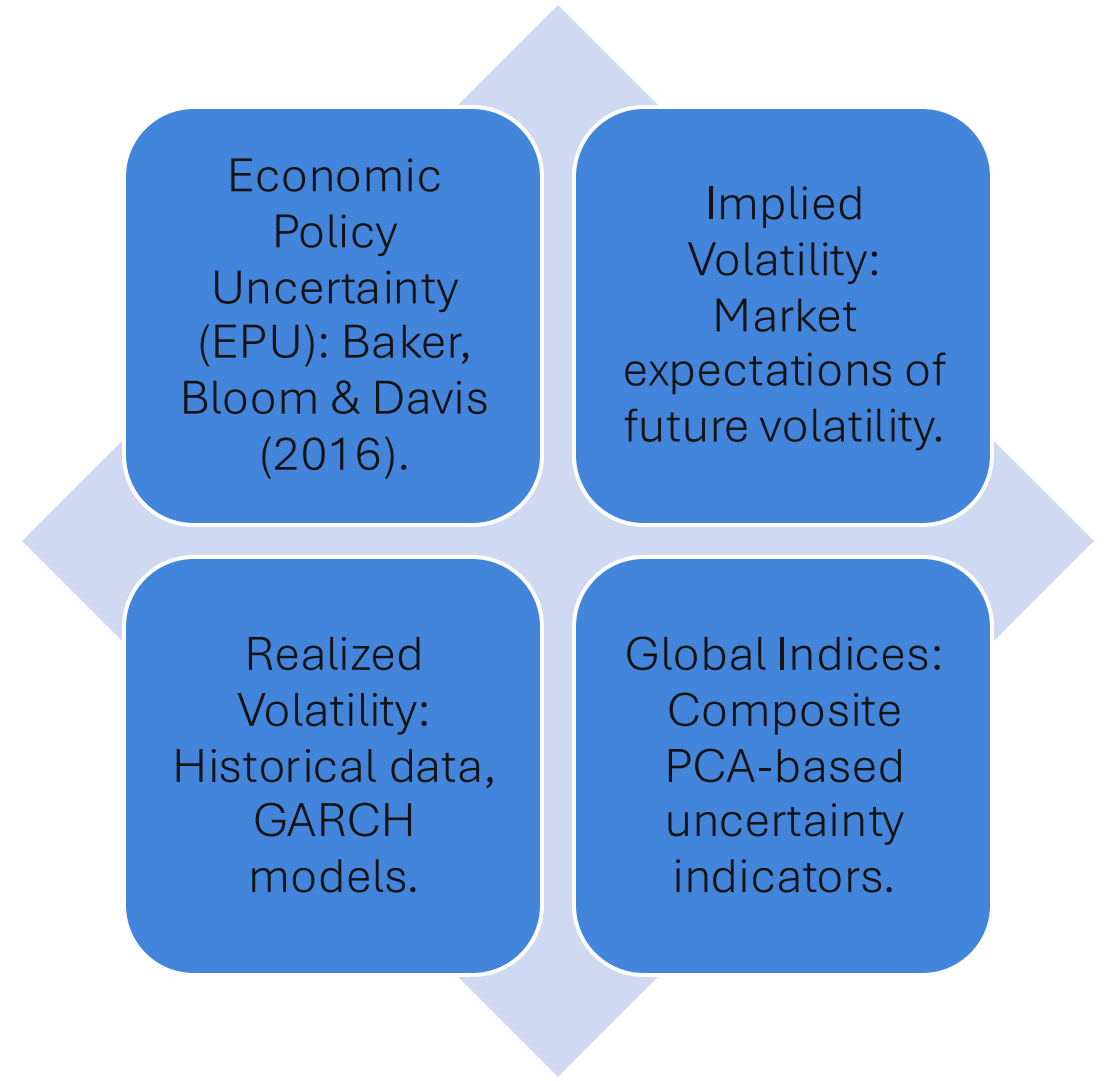
Herding and Behavioral Feedback

# Empirical Evidence on Uncertainty and Volatility

- Measures of Economic Uncertainty
- Evidence Across Asset Classes
- Nonlinearities and Thresholds



# Measures of Economic Uncertainty



## Evidence Across Asset Classes

Uncertainty raises volatility in equities, credit, FX, and bonds.

Studies show co-movement and correlation spikes.

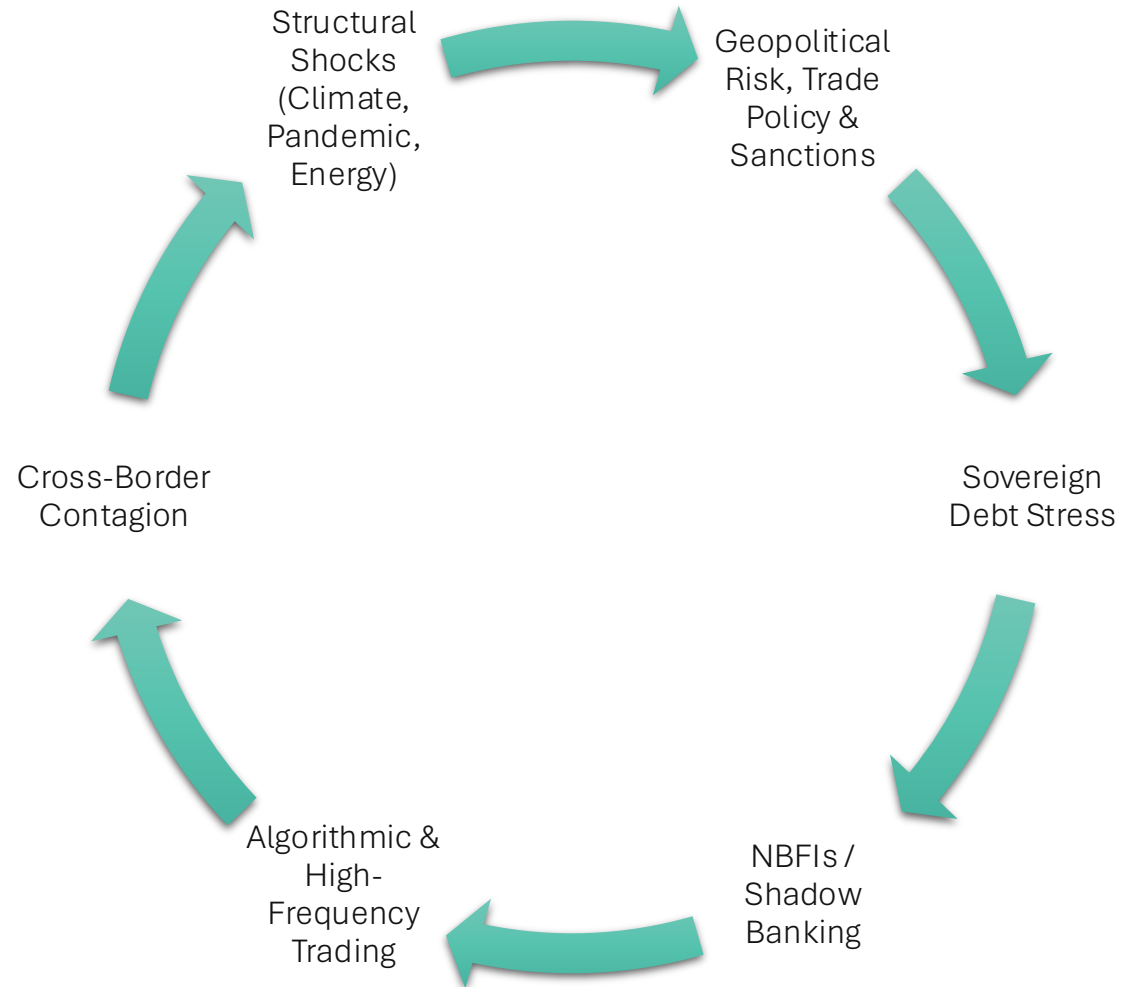
EPU spikes linked to volatility jumps (ECB, 2025).

Emerging markets highly sensitive to global shocks

# Nonlinearities, Regime Shifts, Threshold Effects

1. Effects are asymmetric: stronger during downturns.
2. Volatility clustering persists.
3. Thresholds amplify shocks once volatility exceeds critical levels.

# Contemporary Drivers



# Geopolitical Risk, Trade Policy, and Sanctions

1. Trade wars and sanctions introduce unpredictable shocks.
2. Supply chain disruptions elevate risk.
3. Example: 2025 tariff announcement leading to volatility surge.

# Sovereign Debt Stress and Fiscal Fragility

1. High debt causing rollover and interest rate risk.
2. Debt distress transmits to banks via sovereign exposure.
3. EMEs face tighter global financing conditions.

# Nonbank Financial Institutions (NBFIs)

1. Hedge funds, mutual funds, private credit systemic actors.
2. Liquidity mismatch, leverage amplify stress.
3. IMF 2025: Shadow banking can transmit shocks across systems.

# Algorithmic & High- Frequency Trading

1. Automated trading magnifies volatility during stress.
2. Liquidity withdrawal and thin order books increase price swings.
3. Flash crashes underscore fragility.

# Cross-Border Interconnectedness and Contagion

1. Global shocks propagate via funding, derivatives, and sentiment.
2. The “global financial cycle” (Rey, 2015) limits local autonomy.
3. Contagion occurs even without fundamentals.

# Structural Shocks: Climate, Pandemic, Energy

1. Climate events, pandemics, and energy volatility = structural regime shifts.
2. Unpredictability exacerbates systemic risk.
3. Traditional models fail under deep uncertainty.

# Implications for Financial Institutions & Regulators

- Risk Management Under Uncertainty
- Macroprudential Tools
- Monetary Policy & Communication
- Capital Flows and Emerging Markets
- Crisis Management and Liquidity Provision



## Risk Management Under Uncertainty

Beyond Value-at-Risk: stress VaR, scenario analysis, worst-case planning.

Portfolio design emphasizes diversification and convexity.

Recognize volatility-of-volatility and regime shifts.

## Macroprudential Tools and Stress Testing

Stress tests across correlated shocks (interest, FX, credit).



Dynamic buffers (CCyB, LCR) adjust to volatility regimes.



Monitor NBF1 exposures and contagion channels.

# Monetary Policy, Forward Guidance, and Communication

## Stable

Stable guidance builds credibility.

## Avoid

Avoid policy reversals that heighten uncertainty.

## Coexist

Flexibility and transparency must coexist.

## Capital Flows, Currency Risk, and EMEs

Volatility capital outflows,  
currency depreciation.

Maintain FX reserves,  
sound fiscal positions.

Possible use of capital  
controls during crises.

# Crisis Management, Fire Sales, and Liquidity Provision

1. Liquidity support (e.g. central bank swaps) may be essential.
2. Circuit breakers and fire-sale limits prevent spirals.
3. Design must minimize arbitrage or moral hazard.

# Case Studies

U.S. Tariff Shock (2025):  
Policy-induced volatility

COVID-19 (2020): Real-economy shock → liquidity stress

Eurozone Debt Crisis:  
Contagion via sovereign-bank linkages

Flash Crashes:  
Liquidity-driven instability

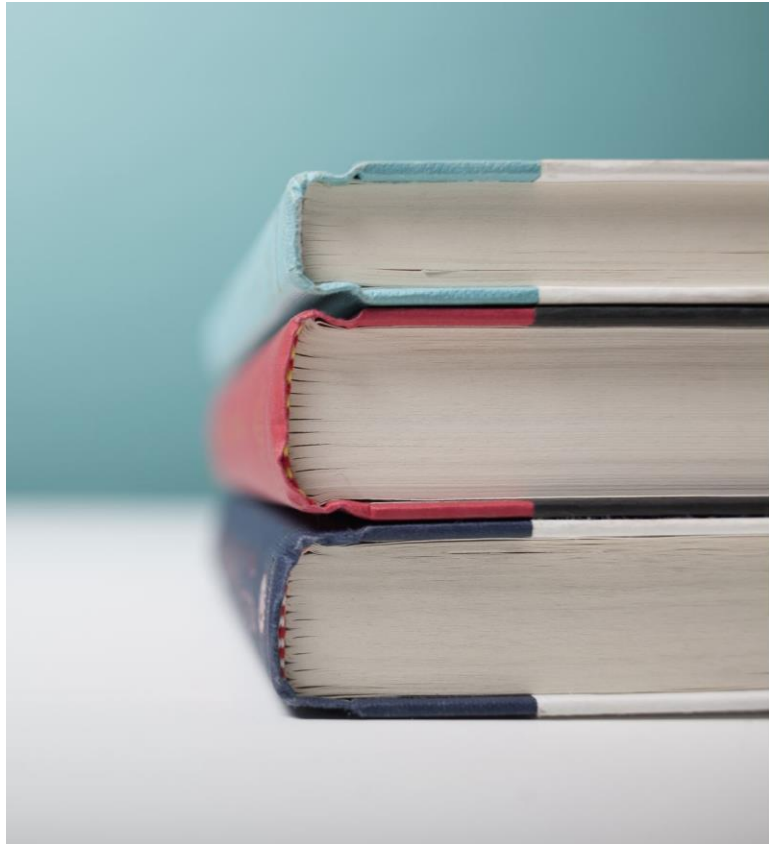


## Conclusion:

Financial markets today operate under heightened structural uncertainty. The traditional frictionless, linear-risk paradigm is increasingly inadequate to explain the extreme volatility episodes we have observed. For financial institutions, investors, and policymakers, success lies not just in forecasting mean outcomes, but in managing tail risks, contagion channels, and liquidity fragility. In this environment, robust risk frameworks, dynamic stress tests, prudent buffers, clear communication, and cross-border coordination are essential. The frontier of research from nonlinear models of uncertainty to machine-learning-based predictive indicators holds promise for better anticipating volatility regimes.

This lecture has attempted to map out the landscape: from theory to empirical stylised facts, through modern drivers and practical policy implications. For your further reading and research, the references below offer a starting point.

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(PowerPoint presentation created using Microsoft 365)



Thank you