1) Identify relevant regimes in the data

Theoretically affecting crisis periods - major global shocks[1]

No.	Period	Event
1	2007 – 2009	Global Financial Crisis: A systemic financial collapse (mortgage bagged securities) that disrupted global financial systems.
2	2010 – 2012	European Debt Crisis: A period of sovereign debt instability affecting the Eurozone.
3	2014 – 2016	Oil Price Crash: A sharp decline in crude oil prices driven by oversupply and geopolitical tensions.
4	2020 – 2021	COVID-19 Pandemic: A global health crisis that caused unprecedented disruptions in supply chains and demand patterns.
5	2022 – present	Russia-Ukraine Conflict: An ongoing geopolitical conflict with significant implications for energy and agricultural markets.

N_{min} = 5 vs. N = 2 (high vola and low vola)

Alternative approaches: N > 2

Include relevant exogeneous variables

Variable	Thematic Area to capture
Futures Trading Open Interest	Degree of Financial Integration
Futures Trading Volume	Degree of Financial Integration
VIX Index	Volatility

Classical approaches: N = 2

Benchmark models

Markov Switching

STR/STAR Model

2) Analyze and compare the regimes