United Nations Conference on Trade and Development

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# Managing commodity price volatility in commodity-dependent developing countries

By

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# Managing commodity price volatility in commodity-dependent developing countries

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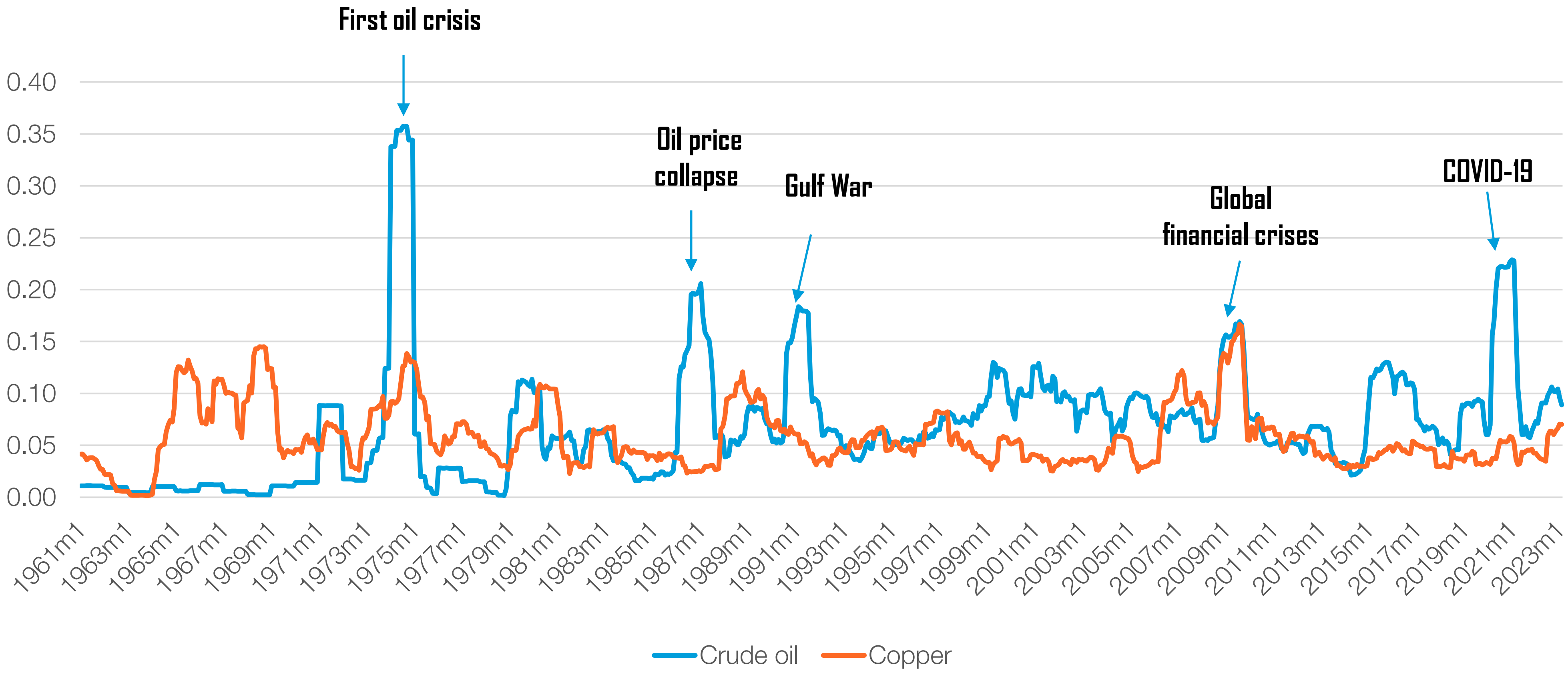
# Commodity prices are highly volatile

Volatility of crude oil and copper prices, 1961 m1-2023 m2

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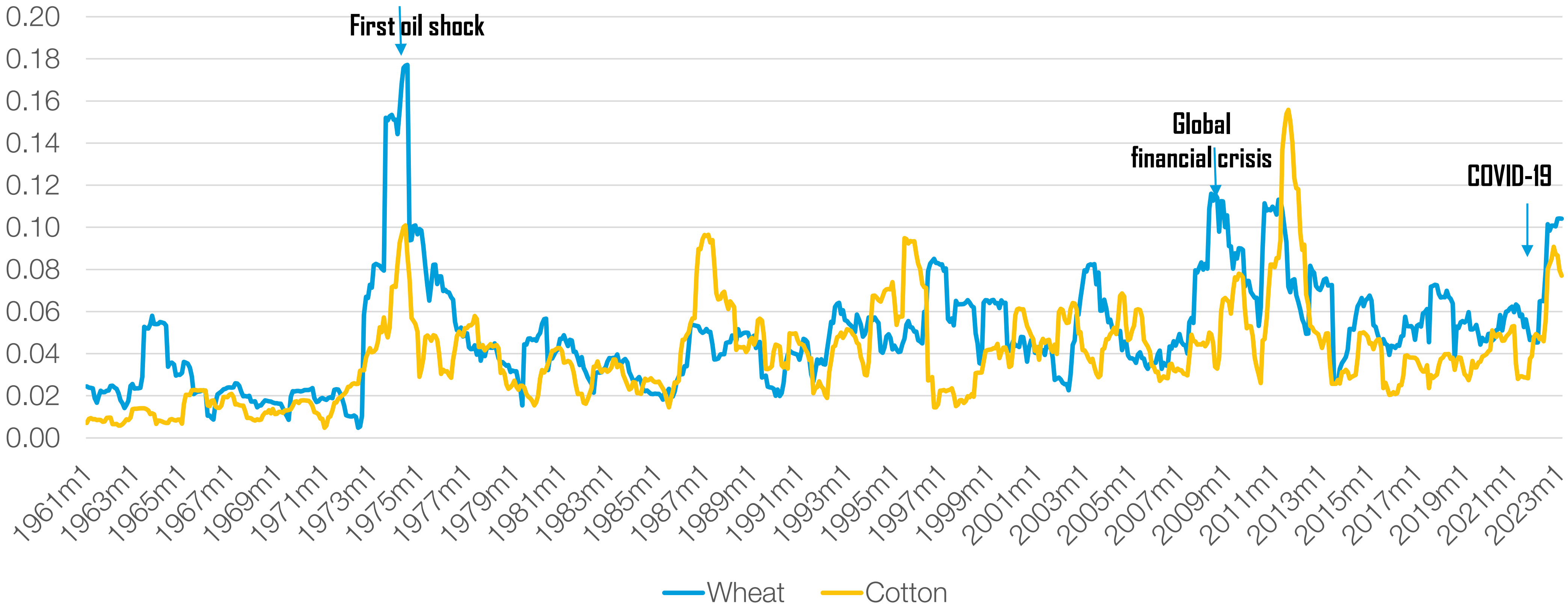
# Commodity prices are highly volatile

Volatility of wheat and cotton prices, 1961 m1-2023 m2

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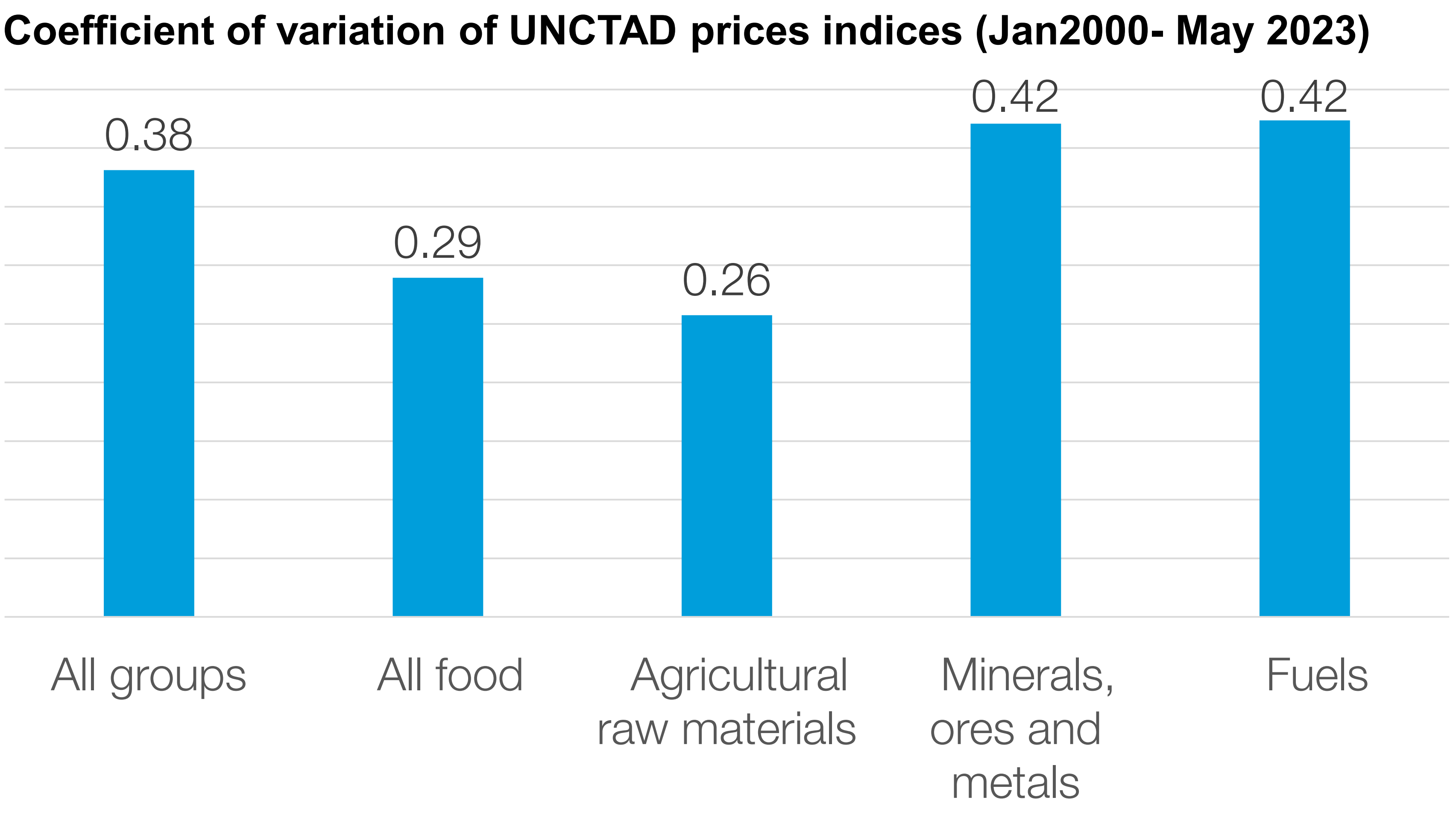
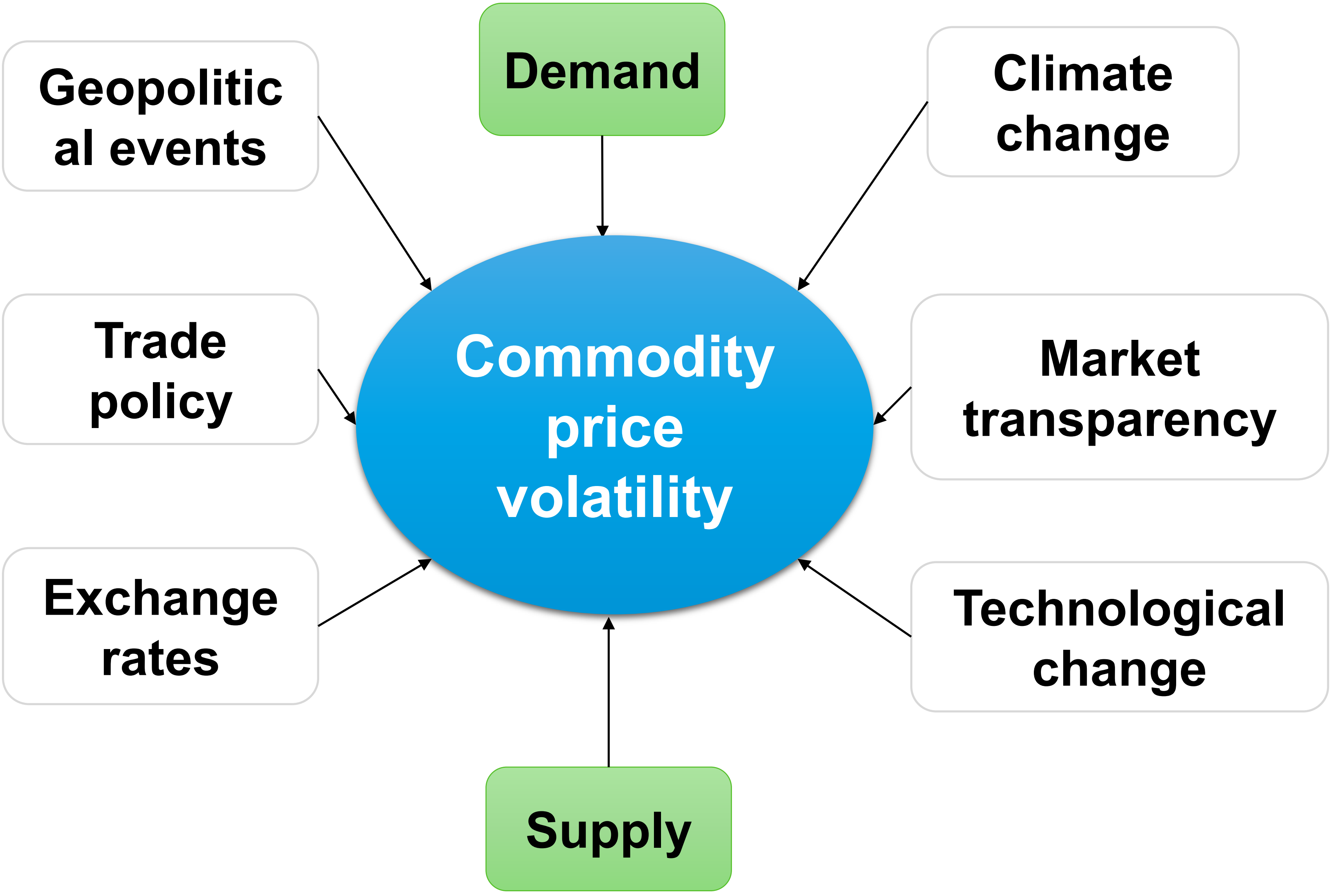
# Fuels, Minerals, ores and Metals have been the most volatile



# Drivers of commodity price volatility

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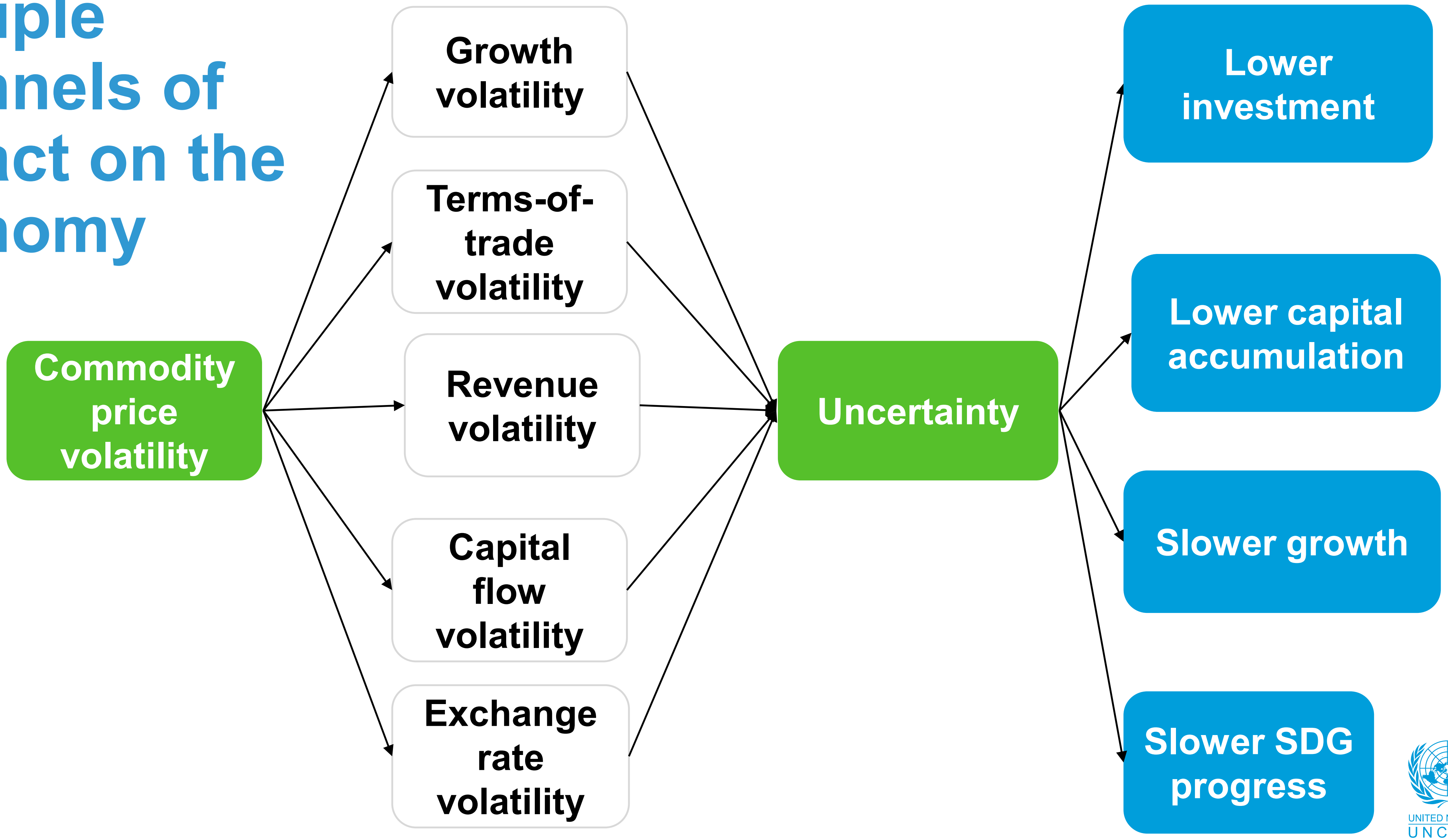
# Multiple channels of impact on the economy

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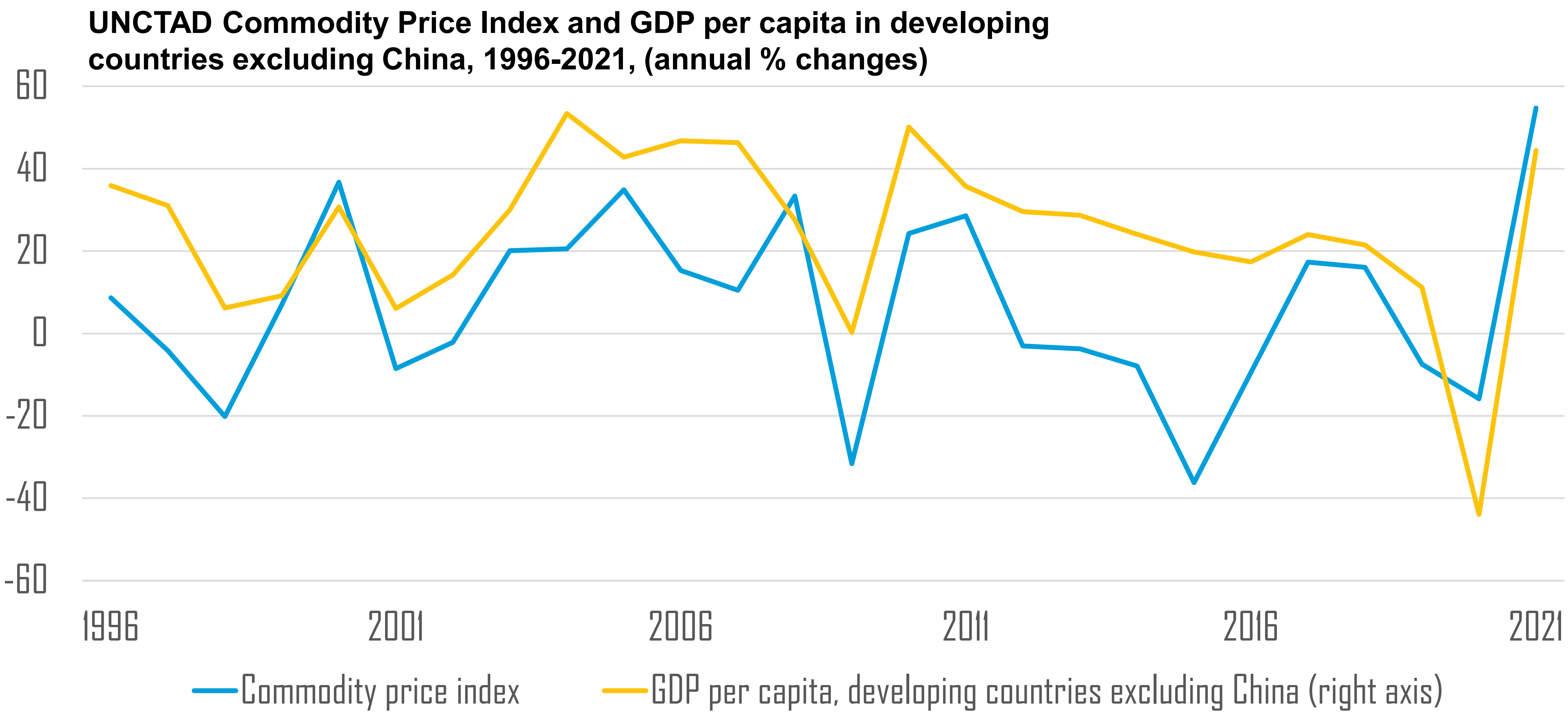
# STRONG CORRELATION BETWEEN COMMODITY PRICES & GROWTH




**Correlation coefficient = 0.62**

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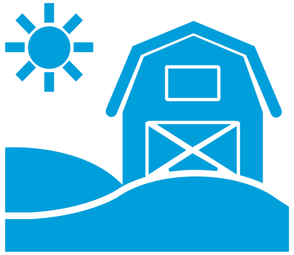
# The impacts of commodity price volatility at microeconomic level

## Effects on households and firms



### Direct effects

1 producer prices for agricultural commodity exports

2 food Insecurity in Net-Food developing countries

### Indirect effects

1 currency  fluctuations:  absorber or amplify shock

2 public investment and spending decline

# How to manage the risks associated with commodity price volatility?

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# Financial instruments hedging commodity price risk

**Options-**Right  but not the obligation, to buy (call option) or sell (put option)

**Futures-**legal agreement to buy or sell a commodity, asset, or security

**Forwards contracts-** customizable derivative contracts between two parties

**Swaps-** agreement between two parties to exchange cash flows

# Commodity exchanges market

- Regulated market platforms
- Improve market entry
- Price determination, risk management and trade facilitation
- Example: Ethiopian Commodity Exchange (ECX) and the Nigerian Commodity Exchange (NCX)

# Commodity-linked bonds

Coupon rates, repayments of principal or payment schedule linked to commodity prices

Improve the ability to deal with price fluctuations, reduce fiscal vulnerabilities and promote long-term economic stability and sustainable development

Examples: Mexican Petrobonds in 1977-1980, Sonatrachan oil-linked loan in 1989

Challenges: market liquidity, elevated risk or novelty premiums, and political considerations.

# Commodity stabilization funds & precautionary saving

## Stabilization funds

- Protection against unexpected shocks and fluctuations in commodity revenues
- counter-cyclical fiscal policy rules
- Example of Chile's Economic and Social Stabilisation Fund

## Saving funds

- Asset diversification to mitigate risk
- Example of Saudia Arabia

# Information and communications technology (ICT)

## Role of ICT

improve market transparency and provide timely and accurate information

Improve supply chain management and reduce transaction costs

## Benefits of ICT

Reduce information asymmetries and promote great market efficiency

Example of Agricultural market Information System (AMIS)

# Long-term solution: Economic Diversification

REDUCING COMMODITY DEPENDENCY

MITIGATING ASSOCIATED RISKS

STRENGTHENING MACROECONOMIC RESILIENCE

ECONOMIC GROWTH AND DEVELOPMENT

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# Thank you!

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