The Conflict in the Persian Gulf Compared to Previous Food Price Crises

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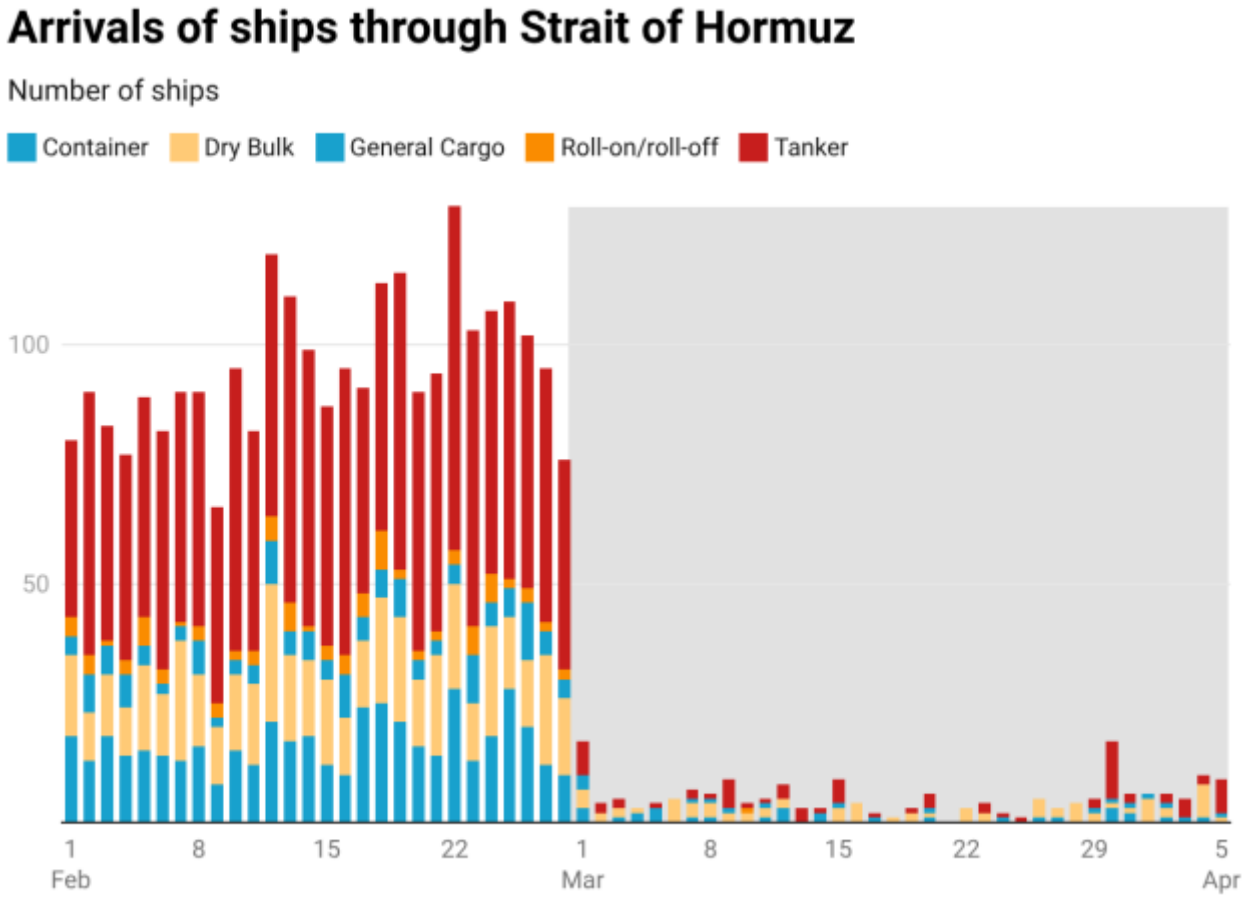
Disruption in oil and fertilizer markets

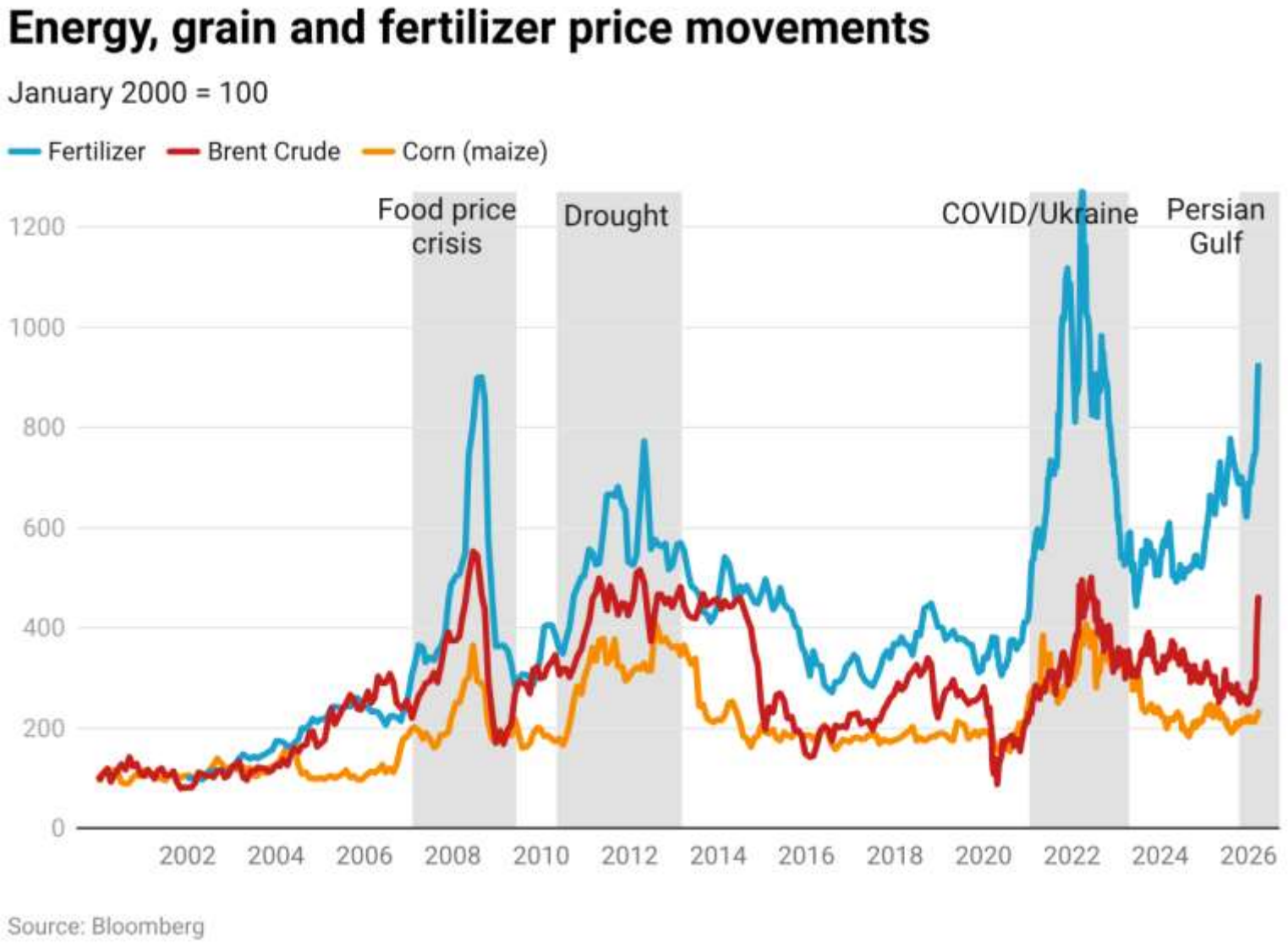
- Strait of Hormuz:
  - 25-30% of world oil exports
  - 20% of liquified natural gas exports
  - Nitrogen, Phosphate, Sulphur
- Almost 90% decline in shipping since the attacks began
- Iran had been allowing some oil tankers to transit
- Ceasefire, now US blockade?
- What happens next?



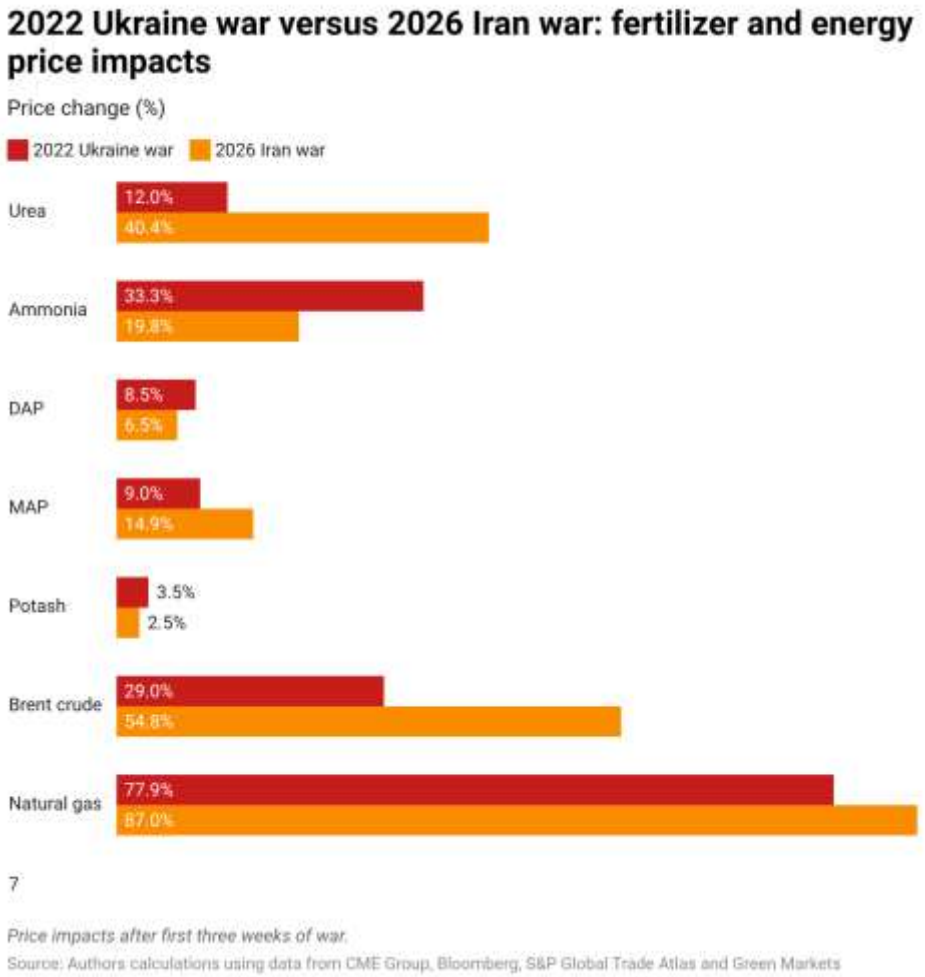
IMF Portwatch database

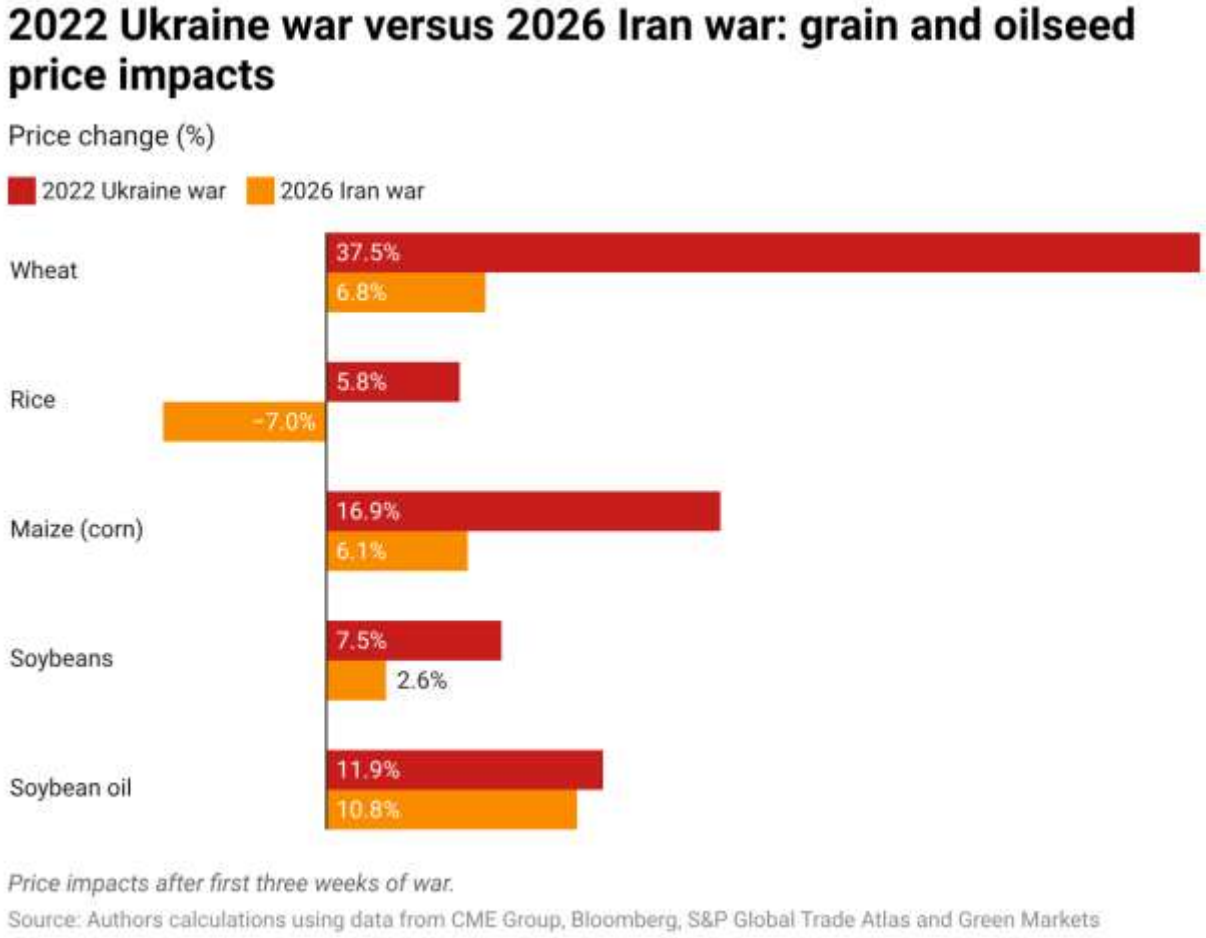
Prices

- Energy and fertilizer prices rise following closure of the Strait of Hormuz
- Below 2022 highs (thus far)
- Crop price movements remain constrained (at least for now)



Energy and fertilizer prices rise; minimal impacts on grains and oilseeds





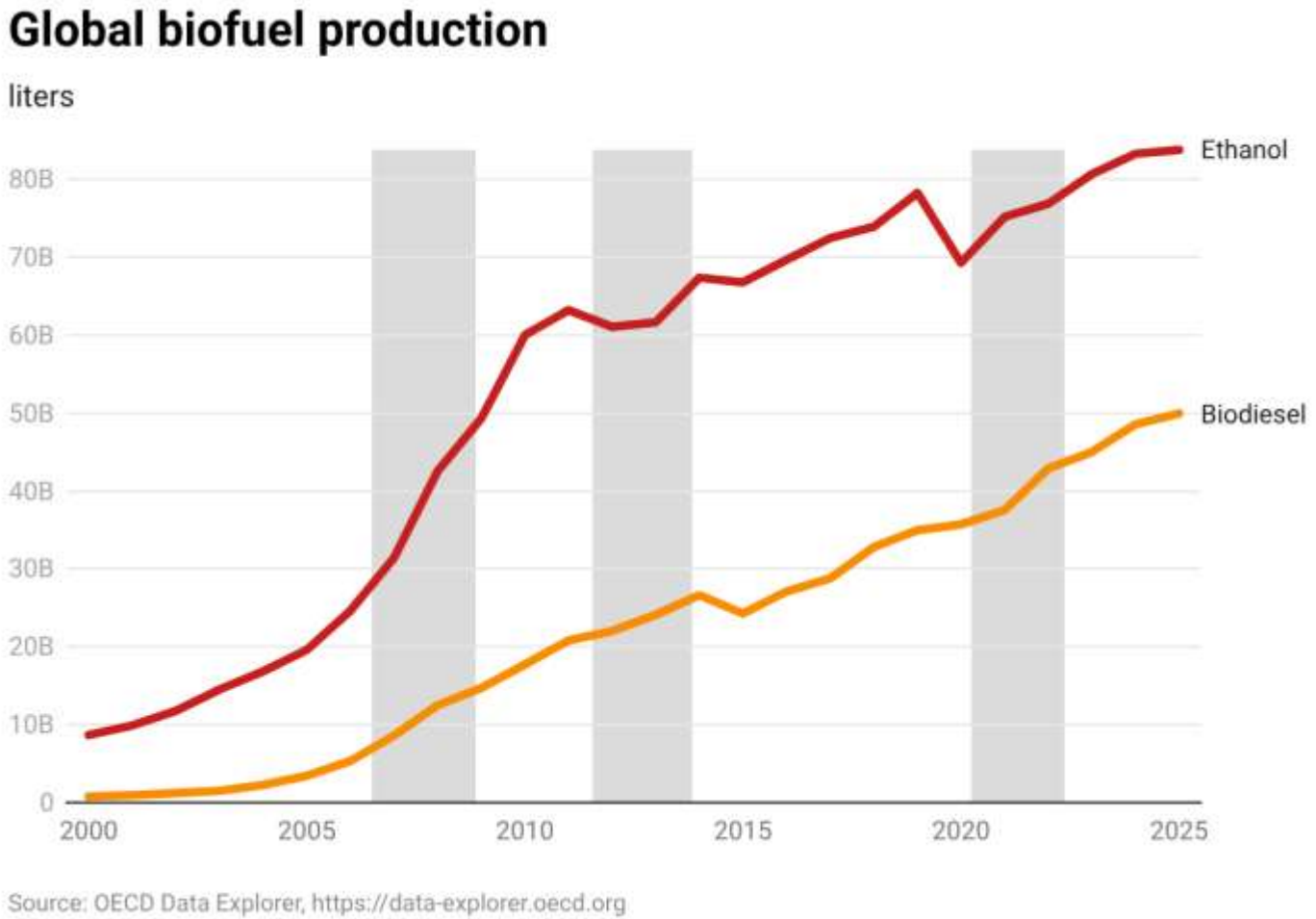
Previous food price spikes

- Number of factors present in previous food price spikes
  - Demand shocks (China, biofuels)
  - Supply shocks (droughts)
  - Macroeconomic (weak dollar)
  - Policy actions (export restrictions)
- Current crisis largely restricted to closure of Strait of Hormuz

	Food price crisis 2007-2008	Global droughts 2010-2012	COVID/Russia invasion of Ukraine 2020-2022	Iran war/closure of Strait of Hormuz 2026-Today
Demand shocks	**US biofuel growth** **China soybean demand growth**	**Steady China soybean demand**	**China feed demand (post ASF)**	**Flat global feed demand**
Supply shocks	**Australian droughts reduce wheat crop**	**Triple La Nina; US drought**	**La Nina impact on S. America soybean and corn**	**Favorable growing conditions; El Nino**
Physical stocks	**Corn, wheat, rice tight s/u**	**Tight feed grains and soybeans**	**Ample stocks**	**Ample stocks**
Macroeconomic	**Weak US dollar**	**Weak US dollar**	**Weak US dollar**	**Relatively strong US dollar**
Geopolitical	**Export bans Argentina; Russia; India**	**Russia export ban**	**Black Sea disruption. Indonesia ban on vegetable oils (short-lived)**	**Hormuz closure. Restrictions on fertilizer sales (China)**

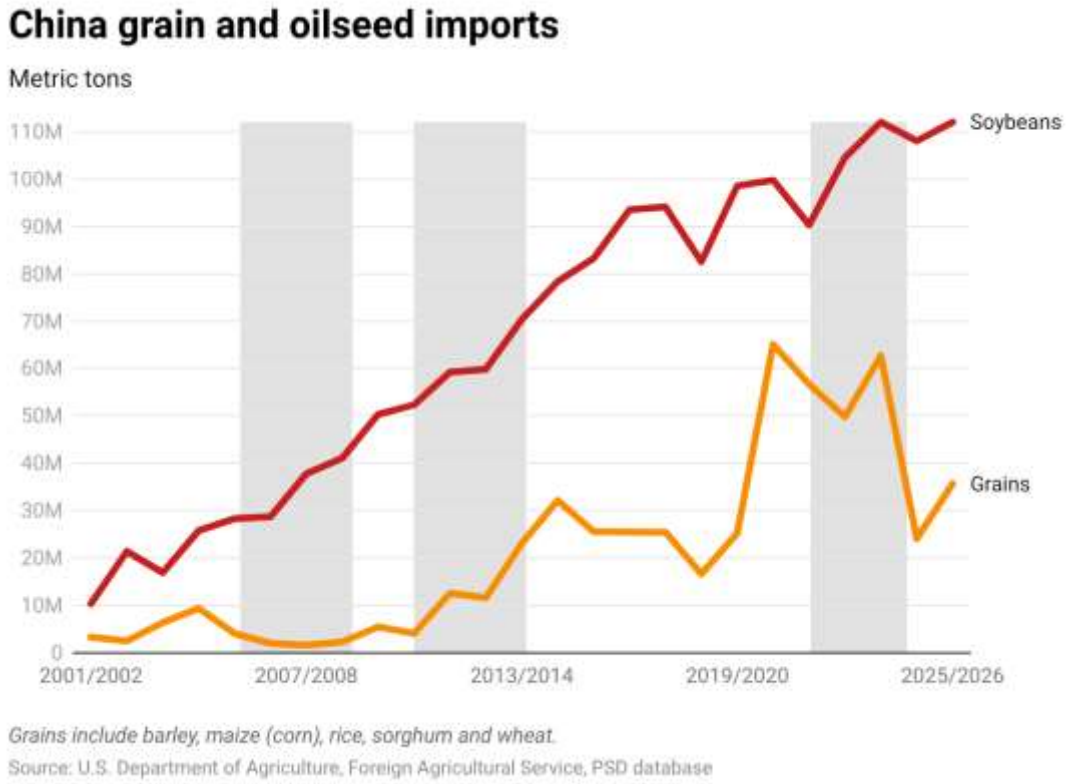
Biofuels

- Rapid ethanol expansion in US, 2005-11.
- More gradual expansion since then (BZ maize ethanol; US E15; India)
- Biodiesel expansion
  - Slowing growth in EU
  - Renewable biodiesel in US, Brazil
  - Indonesia B50 mandates
- Impact of high oil prices on biofuel

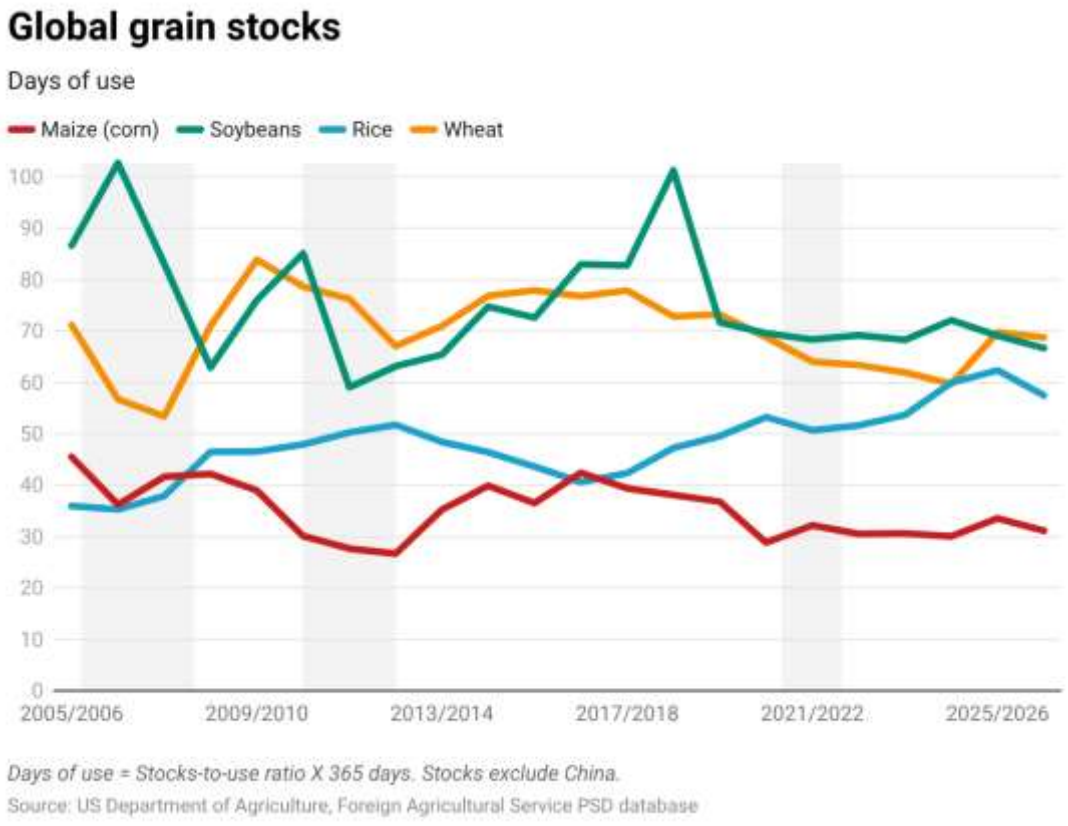


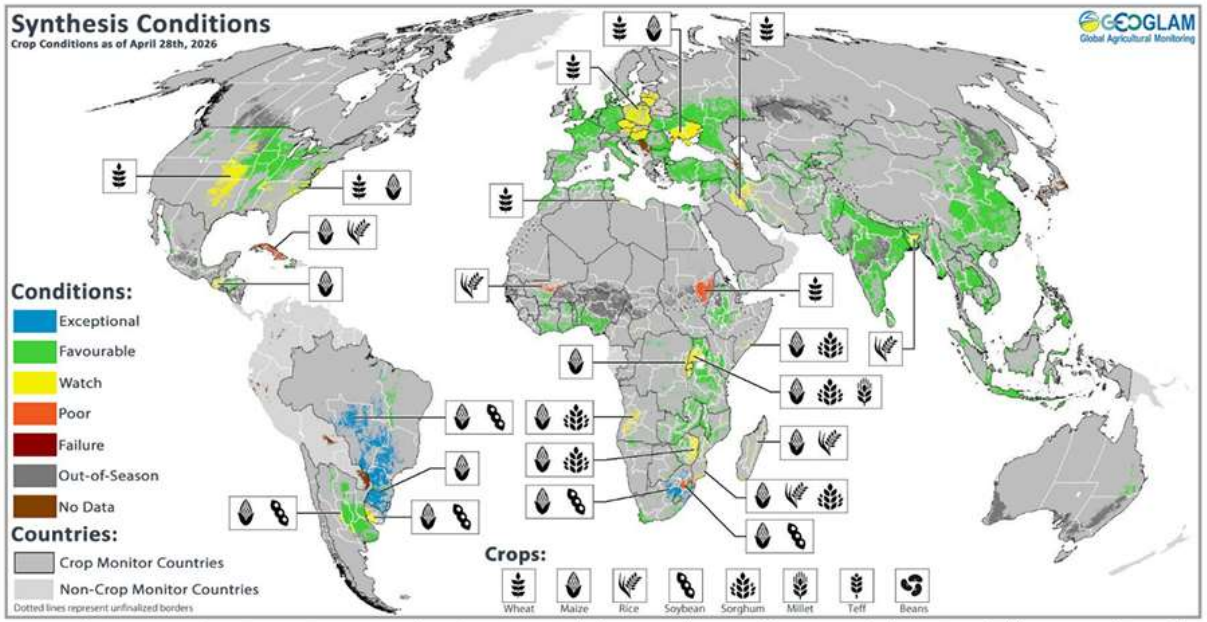
China import demand

- Soybeans:
  - Rapid soybean import growth 2000-2015—15%/year
  - Since 2015—2%/year
- Grains:
  - ASF precipitated increase in hog consolidation, decline in "backyard" production
  - Increased demand for compound feeds
  - Increase (temporary) in feed grain imports



Grain and oilseed supply outlook

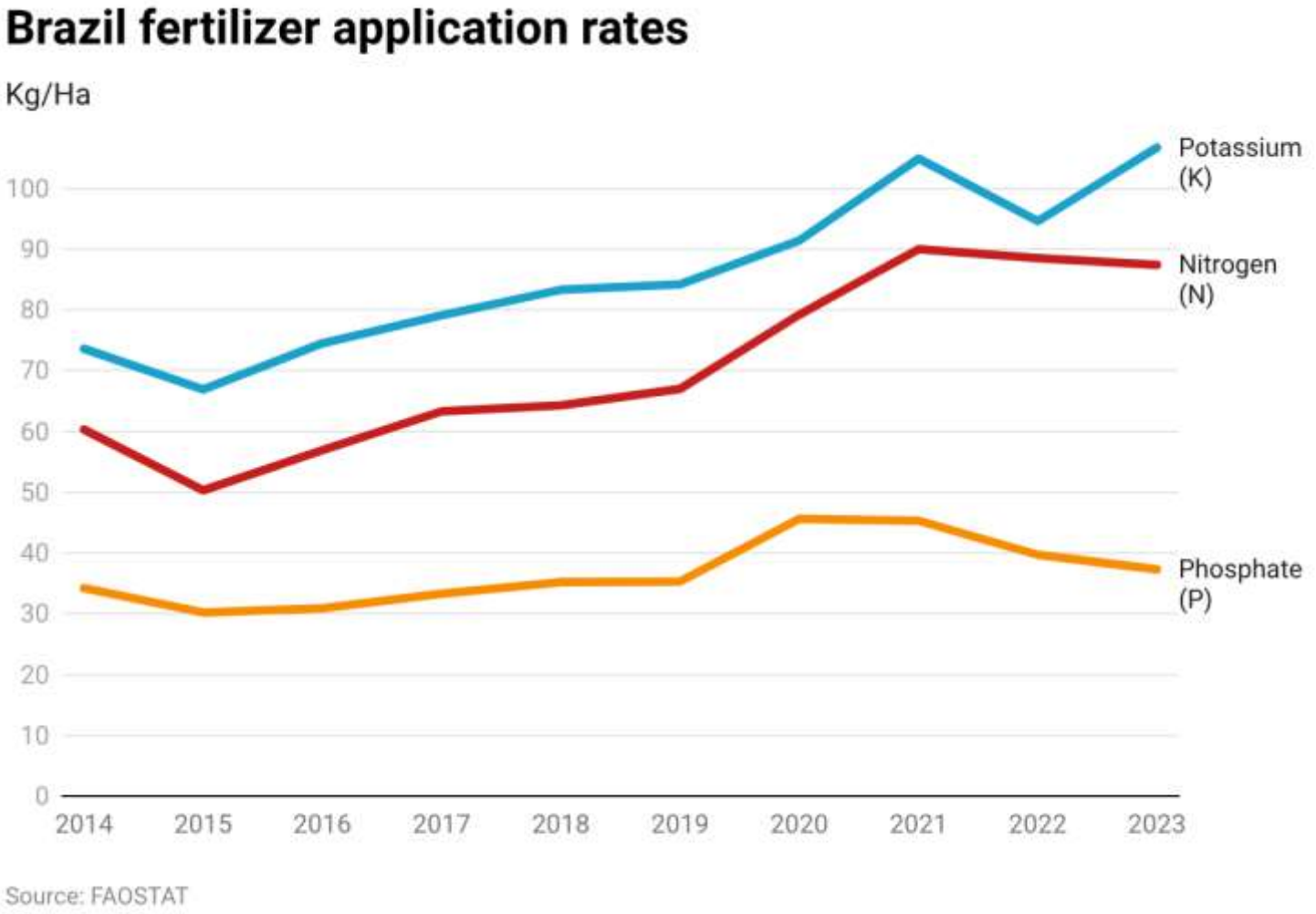




Crop conditions across the main growing areas are based on inputs, including remotely sensed data, ground observations, field reports, and input from national and regional experts. Regions with conditions other than favourable are labelled on the map with a symbol representing the affected crop(s).

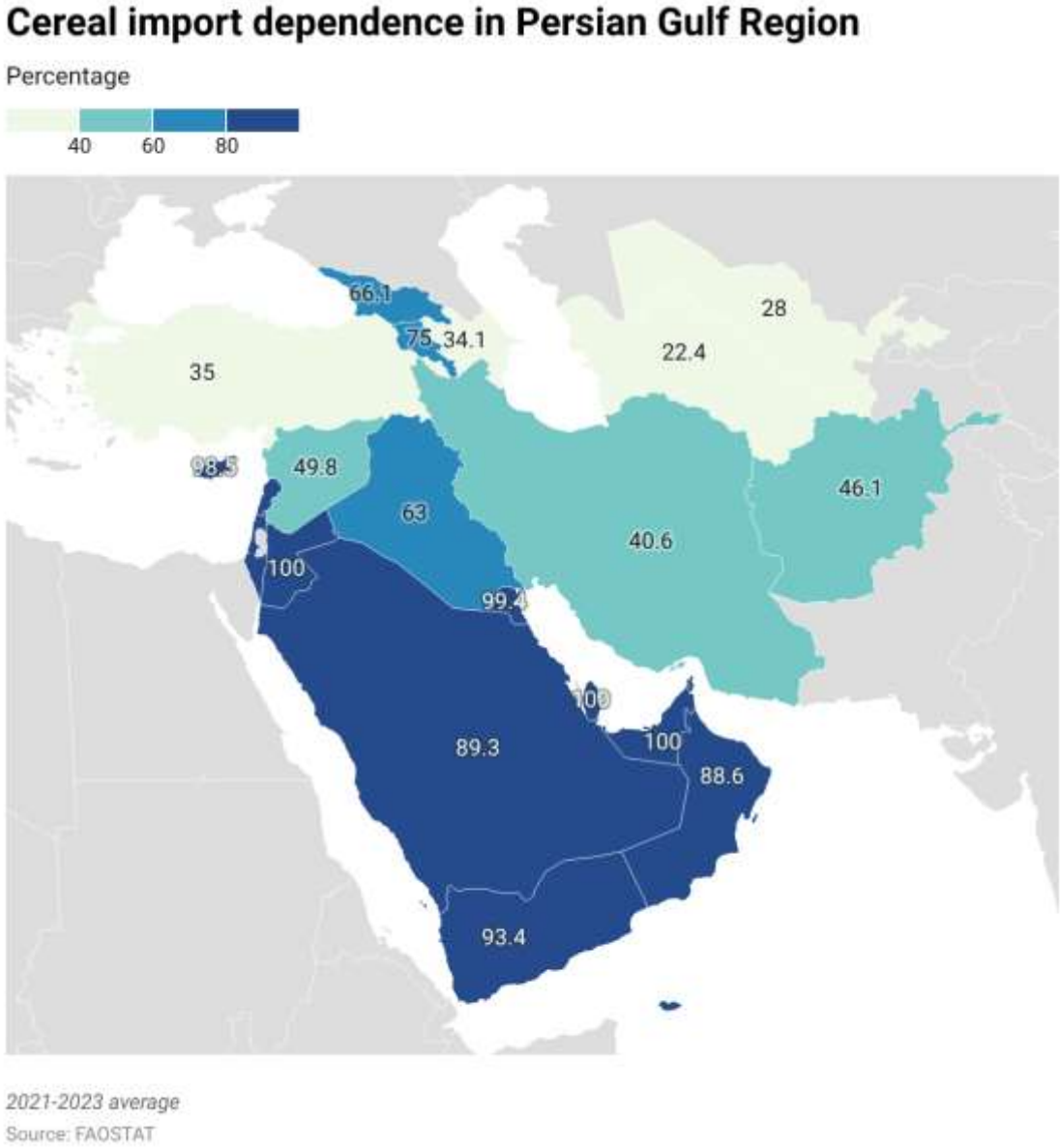
prices on input use and production

- Crop choice: In 2022, maize area fell by about 4.9 mil ha while soybean area increased by 5.7 million ha.
- Input use: In 2022,
  - Nitrogen use -1.7%
  - Phosphate use -12.5%
  - Potassium use -10.0%
- Global yield impacts were minimal in 2022
- Nitrogen supply is a bigger problem in 2026 than 2022
- 2nd half of the year could be more problematic if closure continues



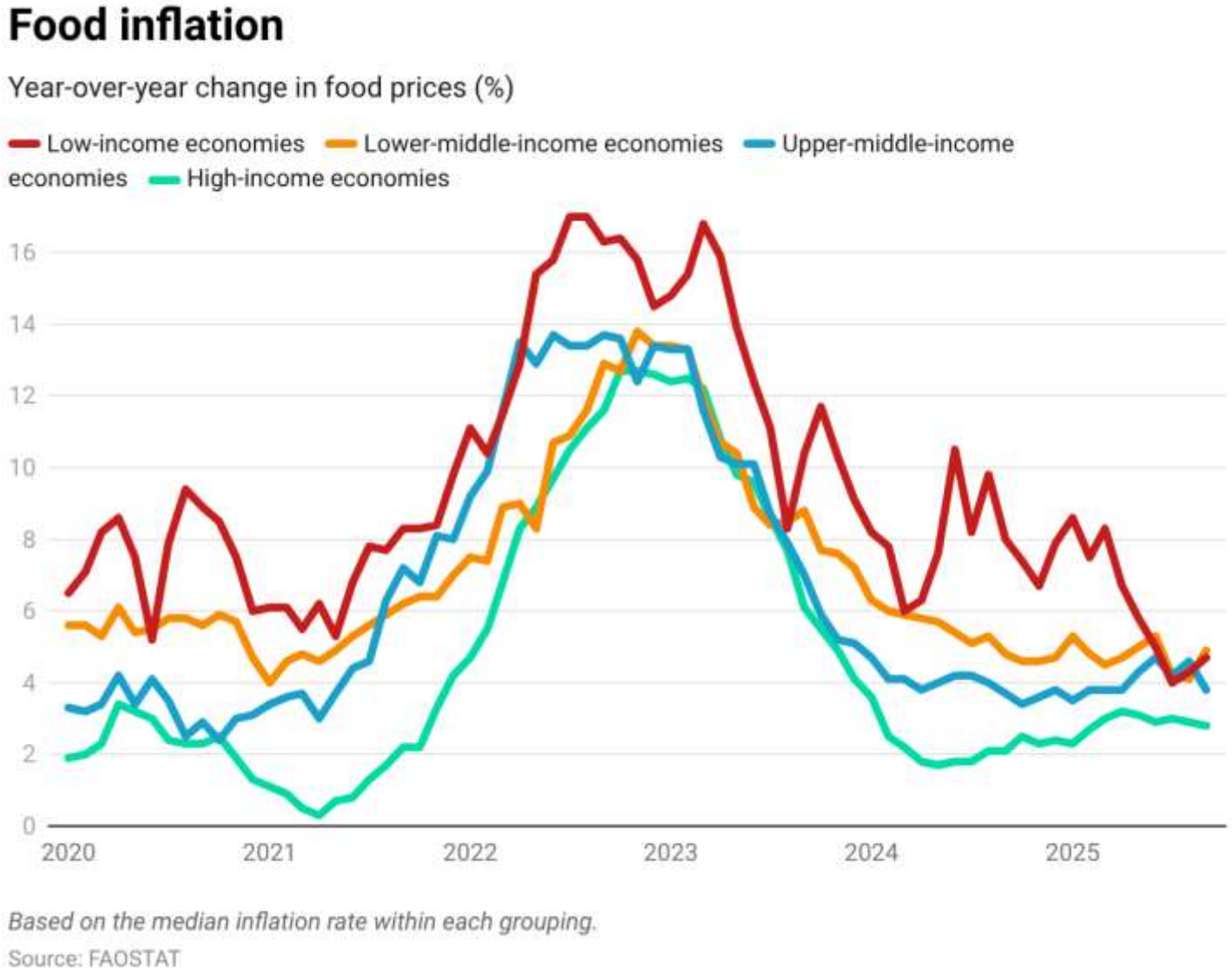
ons for regional food security

- High dependence on imports to meet grain and oilseed needs.
- Much of the imports transit to the region via the Straits of Hormuz
- Alternative routes:
  - Saudi Arabia—Suez Canal
  - Iraq via Turkey/Syria
  - Iran via Caspian Sea



price inflation

- Sustained higher energy and shipping costs would likely fuel higher consumer prices.
- Energy costs are embedded throughout the food value chain (farm, transportation, processing, refrigeration, etc)
- Could reignite food inflation concerns.



Caveats

- Prolonged closure of the Strait and/or expanded conflict beyond the Gulf
- Large increase in biodiesel production in response to high oil prices
- Export restrictions by major fertilizer exporters (eg, Russia, China)
- Drought affecting