Logistical aspects of global grains/oilseeds trade

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Note on data limitations

The analysis in this presentation is partly based on private real time shipping data compiled by Kpler (provided as part of the IGC food security-linked project supported by the delegation of Japan).

While offering more timely and granular information on commodity flows and logistics, the shipping data has certain constrains, as it
  — shows the ports of departure (as opposed to the origin),
  — covers dry bulk shipments (does not include containerised trade), and
  — does not fully include small vessel flows (coasters below 10,000 dwt).

Given the fluid nature of vessel tracking information, the most recent data may be subject to updates and revisions.
Global grains/oilseeds trade is faced with an increasing number of logistical challenges. Some of them emerged/worsened in recent months.

**Germany:** Low/high water levels on the Rhine River
- 2H 2023

**Red Sea/Gulf of Aden:** attacks on vessels
- From Dec 2023

**Black Sea:** conflict-related security risks; Ukraine-EU land-route bottlenecks
- From Feb 2022

**USA:** occasionally challenging conditions on the key waterways

**Panama Canal:** drought-induced restrictions
- From Jul 2023

**Brazil:** harvest-time Inland and port bottlenecks
- 1Q 2023
- Shallow water levels on the Amazon River
- 4Q 2023

**Ukraine-EU land-route bottlenecks**

**Ukraine - EU land route bottlenecks**
Divergent trends in commodity and freight prices point to an increased share of the latter in delivered values (and increasing importance of logistics)

**Average export prices: IGC Grains and Oilseeds Index**

Jan 2000 = 100

- Commodity prices down by 25% y/y

**Average freight costs: IGC Grains and Oilseeds Freight Index**

Jan 2013 = 100

- Freight costs up by 27% y/y

Note: Based on nominal fob quotations at key exporting origins.

Note: Based on nominal freight rates on key grains/oilseeds routes.
Around one-fifth of global dry bulk grains/oilseeds shipments use the Panama and Suez Canals. A downtrend noted recently as flows on other routes increased.

Dry bulk grains and oilseeds flows

- 2019: 450 m t
- 2020: 430 m t
- 2021: 410 m t
- 2022: 390 m t
- 2023: 370 m t

Via Suez Canal:
- 2019: 61 m t (5-yr. ave.)
- 2020: 55 m t
- 2021: 51 m t
- 2022: 47 m t
- 2023: 43 m t

Via Panama Canal:
- 2019: 31 m t (5-yr. ave.)
- 2020: 26 m t
- 2021: 21 m t
- 2022: 16 m t
- 2023: 11 m t

Other routes:
- 2019: 360 m t
- 2020: 340 m t
- 2021: 320 m t
- 2022: 300 m t
- 2023: 280 m t

Panama / Suez volumes and shares:

- 2019: 120 m t
- 2020: 140 m t
- 2021: 160 m t
- 2022: 180 m t
- 2023: 200 m t

Panama + Suez share:
- 2019: 20%
- 2020: 25%
- 2021: 20%
- 2022: 15%
- 2023: 10%

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Panama Canal: Maize and soyabeans account for around 80% of transits, but both commodities reduced reliance on the Canal in 2023.

Panama Canal: Dry bulk grains and oilseeds flows

Panama share of global seaborne commodity flows

* Includes rapeseed and barley
Suez Canal: Wheat and maize account for around three-quarters of transits. Flows in 2023 boosted by soyabeans and sorghum (amid Panama Canal issues).

Panama Canal: Dry bulk grains and oilseeds flows

Average share of wheat and maize at ~75%

Suez share of global seaborne commodity flows

* Includes rapeseed and sunflowerseed
USA: The share of the Panama Canal has plunged in 2023, with volumes shifting to the Suez and (more recently) other routes, led by soyabees.
USA: Diversions from Panama/Suez have risen to of 1/5 seaborne grains/oilseeds shipments in January, led by soyabean flows.

Global soyabean flows:

USA: Diversions from Panama/Suez Canals

- **2023**: 19 vessels, 1.0m t
- **2024**: 33 vessels, 2.1m t

Share of total seaborne >

- **2023**: 11%
- **2024**: 21%
US Gulf-China deliveries: Diversions via southern Africa add around $4/t in freight costs. The cost of Suez-COGH diversion is relatively small.

- **Via Panama Canal:**
  - Time: 32 Days
  - Cost: ~ $51/t

- **Via Suez Canal:**
  - Time: 45 Days
  - Cost: ~ $54/t

- **Via Cape of Good Hope (COGH):**
  - Time: 48 Days
  - Cost: ~ $55/t

Voyage rates from the US have been mostly tracking global trends and touched a multi-month low recently.

The IGC Grains and Oilseeds Freight Index (GOFI) has been rebased: 13 Feb 2023 = 100.

- **IGC Grains and Oilseeds Freight Index (GOFI):**
  - Five-month low: +63% y/y

- **Timecharter rates**: Average for Panamax, Supramax and Handysize Baltic Indices

- **Marine fuel costs**: Average LSFO prices at main fuelling destinations

- **GOFI US sub-Index**: Rebased: 13 Feb 2023 = 100
  - Five-month low: -3% y/y

Map source: Thompson Reuters Eikon Distance Calculator. Freight cost calculations by IGC based on inputs as of 5 February 2024.

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* Average for Panamax, Supramax and Handysize Baltic Indices
** Average LSFO prices at main fuelling destinations
While relatively small, additional freight costs add to unusually wide spreads in fob soyabean prices with Brazil, the main competitor.
US soyabean supplies competing for reduced export business this season, with slower sales to China only partly countered by firmer demand from the EU/Mexico.

Annual change in 22/23: +16.0m t (+10%)

Annual (y/y) change in exports (Oct/Sep) in 23/24

US commitments – 23/24 (Sep/Aug): as at 1 February

Total commitments down by 19% y/y

US soyabean supplies competing for reduced export business this season, with slower sales to China only partly countered by firmer demand from the EU/Mexico.
Suez Canal: Transits picked in Oct’23 boosted by US soyabean, but fell thereafter. Dec flows were 1/5 lower y/y but wheat has been holding up well.
Despite elevated security risks, Russia and Ukraine increased wheat shipments via the Suez Canal in Dec’23. However, some diversions were noted from the EU.

Note: Shipping data do not fully cover coaster vessel shipments (below 10,000 dwt).
Diversions from the EU rose by 60% m/m in January, led by wheat. Most volumes originating from France (also include Germany, Poland, Latvia and Romania)
Diversions from Western Europe (France) are less costly than from the Black Sea, but both regions have to compete with southern hemisphere suppliers into Asia.

**EU (France, Rouen) – China (Dalian)**
- Via Suez: 34 Days ~ $44/t
- $2/t
- Via COGH: 42 Days ~ $46/t

**Russia (Novorossiysk) – Indonesia (Jakarta)**
- Via Suez: 21 Days ~ $49/t
- Via COGH: 39 Days ~ $56/t
- $7/t
- +18 days
- +8 days
- +2/t

**Argentina (Rosario) – Indonesia (Jakarta)**
- 28 Days ~ $50/t

**Australia (Kwinana) – Indonesia (Jakarta)**
- 6 Days ~ $17/t

Map source: Thompson Reuters Eikon Distance Calculator. Freight cost calculations by IGC based on inputs as of 5 February 2024.
Stiff competition on a fob / c&f basis into Asia seen limiting leeway to increase freight costs

Calculated delivered (c&f) prices to Indonesia

- Australia APW: $304/-16% y/y
- Argentina Grade B: $289/-27%
- EU (France): $277/-25%
- EU (Romania): $275/-22%
- Russia (12.5%): $272/-20%
- Ukraine (11.5%): $253/-22%

Note: Values may not be directly comparable due to different wheat specifications.
Argentina is seen well positioned to absorb any shifts in demand, with Russia also seen shipping more this season. However, next season may be different.

Wheat exports (Jul/Jun) (IGC estimates/forecasts)

Annual (y/y) change in exports (Jul/Jun) in 23/24

Annual (y/y) change in exports (Jul/Jun) in 24/25

Note: Values may not be directly comparable due to different wheat specifications.
Total grains/oilseeds/products exports from Ukraine have reached the BSGI peak recently, to a large extent owing to rising grain shipments to Asia (via the Suez).
Ukraine: Tentative outlooks for 2024/25 point to a continued shift in area from grains to oilseeds… with associated changes to export flows

Grains/oilseeds production and area

Total area 24/25: -2% y/y
Total output 24/25: -8% y/y

5-yr. ave. total production

Oilseeds production
Grains production
Grains area
Oilseeds area

Wheat
Maize
Barley
Sunseed
Soyabean
Rapeseed

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Thank you for your attention