Possible impacts on the fishery and aquaculture sector of the Red Sea Houthi attacks

Objective: this report aims at assessing the possible impacts of the Red Sea Houthi attacks on the fishery and aquaculture sector. The approach will assess if and to what extent there are direct impacts on the imports of fishery and aquaculture products (FAPs) using this route to the EU, in terms of timing (boats rerouted) and prices (increase of containers' costs resulting from increased fuel consumption and insurance premiums, etc.), and indirect impacts impacting the EU fishing fleets, aquaculture farmers and processors.

This report will be updated biweekly in the first instance.

Main findings:

- The dependency of EU imports of FAPs on the Suez Canal route is estimated around 20% (with higher dependency for freshwater fish and tuna). Based on 2022 data.
- The analysis of weekly import data on a selection of relevant combination of products and origins shows significant decreasing volumes in the first weeks of 2024 compared to the same period in 2023. However, in terms of import prices, it is not possible to conclude on a visible impact at this stage.
- According to analysts' reports, freight costs have been rising but most of the turbulence is already behind us. The situation is likely to normalise once carriers have adapted to the rerouting and backlogged inventory has been cleared.
- Although a slight increasing trend was observed in January and February for marine fuel prices, there is not enough evidence to link it with the situation in the Red Sea.

1. Imports of FAPS

1.1. Assessment of the share of EU imports of FAPs passing by the Red Sea and the Suez Canal

This selection was made by filtering the 2022 extra-EU imports including only the relevant origins (South-East Asia, Eastern Africa and Oceania) combined with a selection of preservation states (excluding fresh and smoked products) assumed to be transported by sea on shipping vessels[1].

It resulted that the share of this selection of trade flows over the global extra-EU imports in 2022 is 21% in volume and 22% in value. The Commodity groups the most dependent on this maritime route are freshwater fish (72% of imported volume of freshwater fish use this route, mostly Pangasius) and Tuna and tuna-like species (51% use this route). For some commodity groups, the dependence on this route is

[1] There are of course some grey areas, for example South Africa is easier to reach via the Red Sea from Mediterranean ports, but it is actually easier to reach via west African route from Atlantic ports. Similarly, Saudi Arabia would not be affected by the Red Sea disruption if the ship enters Jeddah but would be affected if it enters via Dammam.

negligible: 7% for non-food use (confirming that imports of fish meal and fish oil are not under threat), 2% for salmonids and 1% for small pelagics.

Table 1: Assessment of the share of extra-EU imports of FAPs passing through the Red Sea

2022 volume in kg	Volume assumed to pass through the Red Sea	Total extra EU imports	Share in %
Bivalves and other molluscs and aquatic invertebrates	49.613.887	133.399.073	37%
Cephalopods	199.207.282	529.570.031	38%
Crustaceans	206.239.699	687.413.788	30%
Flatfish	17.579.879	106.100.562	17%
Freshwater fish	99.113.685	136.791.384	72%
Groundfish	197.677.565	1.082.340.744	18%
Miscellaneous aquatic products	45.313.044	140.411.809	32%
Non-food use	57.274.126	794.843.813	7%
Other marine fish	51.661.519	277.957.511	19%
Salmonids	22.459.278	1.065.325.419	2%
Small pelagics	6.006.464	468.728.236	1%
Tuna and tuna-like species	334.949.771	650.770.901	51%
Total	**1.287.096.199**	**6.073.653.271**	**21%**

Source: EUMOFA based on Eurostat-Comext

1.2.Analysis of DG TAXUD weekly import data

As a first step for this assessment, it is decided to focus the analysis on a selection of 5 main products imported through this specific maritime route. This selection was made by filtering the 2022 extra-EU imports including only the relevant origins (South-East Asia, Eastern Africa and Oceania) combined with a selection of preservation states (excluding fresh and smoked products) assumed to be transported in containers on shipping vessels. Based on this filtering process, we selected the most significant imported products in terms of imported volume (2022) and the most important origins. The selection[2] is provided below:

- Frozen fillets of pangasius from Vietnam
- Frozen fillets of Alaska pollock from China
- Frozen tropical shrimps (from India, Vietnam, Bangladesh and Madagascar).
- Frozen squid (*Loligo* spp.) from India, China, Vietnam, and Thailand.

[2] 03046200 - Frozen fillets of catfish "Pangasius spp., Silurus spp., Clarias spp., Ictalurus spp."
03047500 - Frozen fillets of Alaska pollack "Theragra chalcogramma"
03061792 - Frozen shrimps of the genus "Penaeus", even smoked, whether in shell or not, incl. shrimps in shell, cooked by steaming or by boiling in water
03074338 - Squid "Loligo spp.", frozen (excl. "Loligo vulgaris, pealei and gahi")
16041421 - Prepared or preserved skipjack, whole or in pieces, in vegetable oil (excl. minced)
16041426 - Fillets known as "loins" of skipjack, prepared or preserved, whole or in pieces (excl. such products in vegetable oil or minced)
16041428 - Prepared or preserved skipjack, whole or in pieces (excl. minced, fillets known as "loins" and such products in vegetable oil)

- Prepared or preserved skipjack tuna (from Papua New Guinea, Vietnam, Philippines, China and Mauritius)

The available weekly import data goes up to W08-2024. The change rate was calculated between weeks 1 to 8 2024 and the same period in 2023. For all selected products, a significant decline of imported volumes is reported (from -71% for Alaska pollock to -10% for Pangasius) which could be linked with the context in the Red Sea. In terms of prices, decreasing trends have been observed for most of products except for preserved skipjack tuna (+27%).
As far as the change rate between weeks 1 to 8 2024 and the 8 last weeks of 2023 is concerned, contrasted trends in volume are reported: slight decreases for squid and shrimp, slight increase for Pangasius and significant decreases for Alaska pollock and skipjack tuna. In terms of prices, a slight decreasing trend is reported for squid and stability for others. At this stage there is no clear link between the price trends and the context in the Red Sea.

Table 2: Change rates in EU-27 import volumes and prices for assessing the impacts of the Houthis attacks in the Red Sea

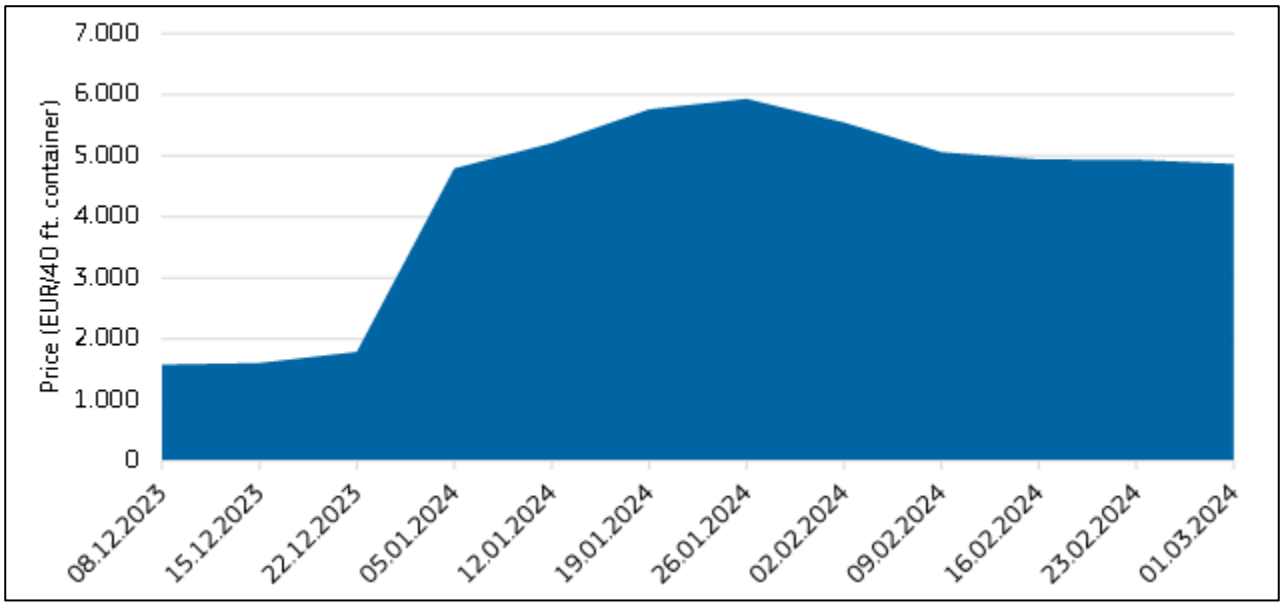
Import volumes	**W1-8 2024 vs W1-8 2023**	**W1-8 2024 vs W46-53 2023**
Frozen Pangasius fillets	-10%	4%
Frozen Alaska pollock fillets	-71%	-82%
Preserved skipjack tuna	-42%	-40%
Frozen squid	-17%	-6%
Frozen shrimp	-18%	-8%
Import prices	**W1-8 2024 vs W1-8 2023**	**W1-8 2024 vs W46-53 2023**
Frozen Pangasius fillets	-20%	2%
Frozen Alaska pollock fillets	-17%	-3%
Preserved skipjack tuna	27%	2%
Frozen squid	-18%	-13%
Frozen shrimp	-9%	2%

Source: EUMOFA elaboration based on DG TAXUD weekly import data.

1.3.Freight costs

From December 2023 to January 2024, a sharp increase in container freight costs from China/east Asia to northern Europe became evident, when the price for one 40 ft-container rose from around 1.600 EUR to nearly 4.800 EUR in the span of three weeks. The price continued to increase throughout January, reaching its peak around 26 January at more than 5.900 EUR, a price increase of 272%. Since then, the container freight price has started a slow, but gradual decline, measuring around 4.900 EUR on 01 March 2024.

Figure 1: Container freight costs[3] from China/east Asia to northern Europe (price in EUR/40 ft-container)



Source: Freightos.

All major container lines have started routing vessels around the Cape of Good Hope to avoid the Houthi militias operating in and around the Bab al-Mandab Strait[4]. Naturally, this has elevated shipping costs for customers and has created network and container positioning difficulties for lines. In addition, the diversions have spent all excess vessel capacity in the market, rendering vessel space and box equipment tight in the coming months.

Since the attacks started, deployed containerships on routes from Asia to Europe have increased by 23% compared to the same period a year earlier[5], increasing trade capacity by more than 700.000 Twenty-foot Equivalent Units (TEU)[6]. Most of the additional capacity goes to the Far East – Mediterranean (55%) as transit times to this region has increased the most on average, with 18 days to the west Mediterranean and 10 days to the east Mediterranean. Transit times to northern Europe has increased by about seven days. Intra-EU capacity has increased by about 25%, especially for the intra-Mediterranean and north Europe-Mediterranean routes.

The situation is likely to normalise once carriers have adapted to the rerouting and backlogged inventory has been cleared. It is worth noting that the experience gained from the Covid-19 crisis helps carriers to bounce back faster, as this crisis taught many shippers to maintain tight communication with their partners and deal with unexpected events promptly.

[3] The global ocean freight container pricing index, FBX11, was used to create the figure. The FBX11 measures 40' container prices across key port pairs from China/east Asia to northern Europe. This index is created and maintained in collaboration with the Baltic Exchange. Key ports in the index include Shanghai (PVG) and Ningbo (NGB) in China and Rotterdam (RTM) and Hamburg (HAM) in Europe.

[4] DHL (2024). *Container shipping turned upside down by Red Sea crisis.* Lot.dhl.com

[5] Diversions around the Cape of Good Hope has caused delays in traffic, in some cases by as much as 40 days. To alleviate some of the pressure, excess vessel capacity has been deployed on these routes. Thus, despite the delays, the flow of goods have been maintained to a certain degree.

[6] The Twenty-foot Equivalent Unit is based on the volume of a standardised container that is 20' long, 8' wide and 8' high. The term is used to illustrate the loading capacity of a ship and is used as an industry standard by everyone involved in logistics and transport of goods.

1.1.Environmental costs

In addition to increased transit times, freight rates and container costs, the potential for environmental disaster in the Red Sea is also present. The Belize-flagged vessel M/V Rubymar which was attacked by Yemen's Houthi rebels on 18 February 2024, has sunk after days of taking on water[7]. This is the first vessel to be fully destroyed in the conflict.

The Rubymar reportedly carried 22.000 tonnes of toxic fertilizer which now threatens the Red Sea fishing industry, coral reefs and the world's largest network of desalination plants based in Saudi Arabia. Prior to sinking, the Rubymar also leaked an estimated 7.000 barrels of heavy fuel into the environment, creating a 30 km oil slick.

Due to the unique hydrodynamics of the Red Sea, what goes into the Red Sea, stays in the Red Sea. This means that the environmental impact could be long-lasting and far reaching. The nature of the environmental impact is also dependent on whether the cargo onboard the Rubymar remains intact underwater. If so, the impact will be a slow trickle of fertilizer instead of a massive release.

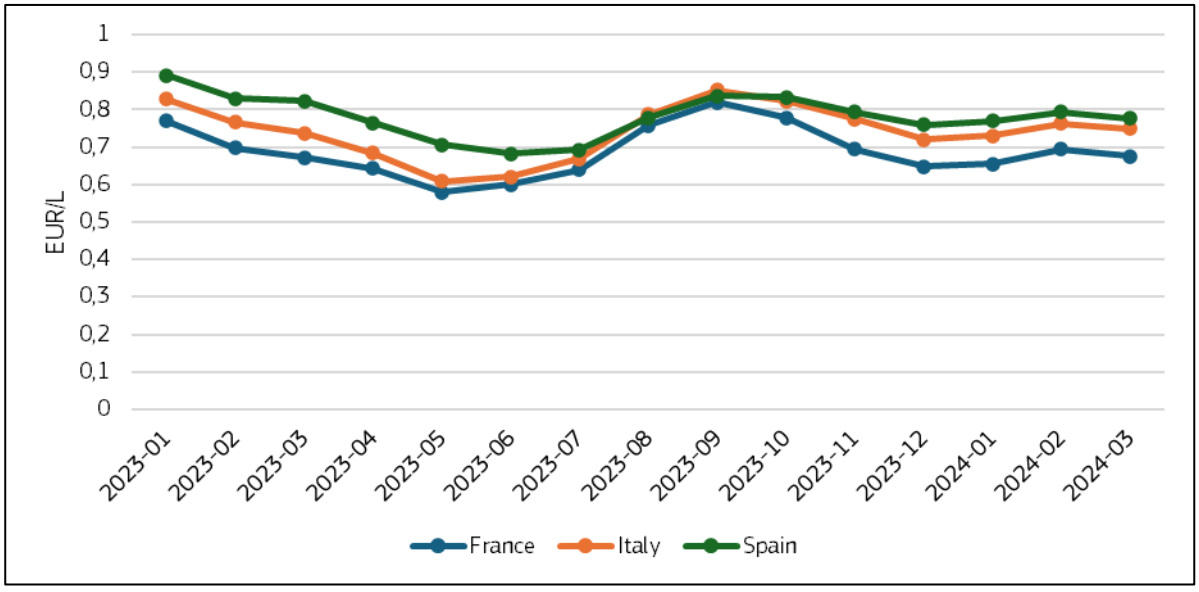
As more and more traffic is rerouted to bypass the Red Sea, concern for the remaining traffic increases. It is believed that what traffic remains consists of poorly maintained vessels, oil tankers and bulk carriers that pose great environmental risk should they be sunk, and their contents released into the environment.

2. Potential impacts on EU production of FAPs

2.1 Evolution of marine fuel in a selection of MS

In January 2024, marine fuel prices slightly increased (+1% in Italy and France, +2% in Spain) compared to December 2023. It stopped the decreasing trend observed since September 2023. In February, it continued increasing (+6% in France, +4% in Italy and +3% in Spain). However, there is no indication that this is linked to the context in the Red Sea. In March, it seems that prices started decreasing in all selected countries.

Figure 2: Marine fuel prices in a selection of MS (EUR/L)



Source: EUMOFA elaboration of MABUX data

[7] Goodman, J. (2024). *Oil spill and fertilizer leak from sinking of cargo ship highlight risks to Res Sea from Houthi attacks.* Apnews.com