

TRADE BALANCE

A trend analysis of seafood import, export and trade balance (in volume and value), by EU MS and main commercial species

TRADE FLOWS

International and EU trade flows in value and by processing and source and year

MAIN PARTNERS

The most relevant countries of origin and countries of destination for seafood trade in terms of value, by EU MS, main commercial species and year

MAIN COMMERCIAL SPECIES

The most relevant commercial species for import and export in terms of value, by EU MS and year

TRADE BY PROCESSING AND PRESERVATION

The distribution of seafood import and export (in volume and value) across categories of seafood preservation and processing status, by EU MS and year

TRADE COMPETITION RATIO (TCR)

This index, calculated as the ratio between the sum of import and exports volumes and the apparent seafood consumption (Tveter\aaas et al. 2012), can be used as a proxy for the exposure of domestic markets to trade competition; the higher the ratio, the higher the relevance of trade in respect to the domestic consumption and hence the exposure of the domestic market to trade competition.

$$TCR = \frac{\text{Export} + \text{Import}}{\text{Apparent Seafood Consumption}}$$

In the analysis, TCR is decomposed in two parts, summing up to TCR, which are defined as follows:

$$TCR \text{ export} = \frac{\text{Export}}{\text{Apparent Seafood Consumption}}$$

$$TCR \text{ import} = \frac{\text{Import}}{\text{Apparent Seafood Consumption}}$$

Trade volumes come from the COMEXT database, while seafood consumption estimates are based on per capita seafood consumption data from FAO and population data from the World Bank.

NORMALIZED REVEALED COMPARATIVE ADVANTAGE INDEX (NRCA)

This index provides an indication of whether a country has a comparative advantage on the international market for a specific product in respect to other products (i.e. if its level of specialization for that product is higher than in the rest of the world).

It is a normalized version of the Balassa's one (RCA), which is the ratio between a product's share in a country's exports and the share of the same products in world's exports (Balassa 1965).

$$NRCA_k^i = \frac{RCA_k^i - 1}{RCA_k^i + 1}$$

Where:

$$RCA_k^i = \frac{x_k^i/x^i}{x_k/x}$$

x_k^i is country i's exports of good k

$x^i = \sum_k x_k^i$ its total exports

$x_k = \sum_i x_k^i$ is the world exports of good k

$x = \sum_i \sum_k x_k^i$ is the total world exports

$NRCA_k^i$ is symmetric and takes values in the range -1 to $+1$ (differently to RCA_k^i which is asymmetric and takes values between 0 and infinity). A value above zero means that the country has a revealed comparative advantage in that product and the closer to the upper limit ($+1$), the higher the advantage. Symmetrically, values below zero indicate a comparative disadvantage.

MARGINS OF EXPORT GROWTH (MEG)







In the pie charts, the change of the country's seafood export value between one year and the previous one is decomposed into different components (i.e. export margins). The way in which this variation is distributed among the components tells if the country is expanding towards new markets, consolidating existing markets, reducing or dropping existing trade relations.

Total Δ = Δ at the intensive margin (IM) + Δ at the extensive margin (EM) + failures

Where:

- Δ = Change of the export value between year 2 and year 1
- Δ at the intensive margin = Δ existing flows (a)
- Δ at the extensive margin (i.e. growth of the export due to the activation of new trade flows) = Δ products traded in year 1 to destinations existing in year 1, but in new combinations (b) + Δ products traded in year 1 to new destination (c) + Δ products not traded in year 1 to destinations existing in year 1 (d) + Δ new products to new destinations (e)
- Failures = Decrease in the export value due to the complete abandonment of existing trade flows (f)

Example

Trade flows in year 1	Trade flows in year 2	Type of margin	Descriptions and colours used in the pie charts
P1 to C1	P1 to C1	a	 Intensive margin previous year
	P2 to C1	b	 EM new combination of product by destination
	P2 to C3	c	 EM new destinations
	P3 to C2	d	 EM new products
	P3 to C3	e	 EM new products to new destinations
P1 to C2		f	 Failures previous year

P = product

C = country

In the second graph, the export margins are analysed over time. This analysis is based on a two steps approach:

1. All trade flows characterising the country's seafood trade patterns from 2001 to 2012 have been classified into four categories:
 - a. **Existing flows:** trade flows present at least in one of the first three years of the reference period (i.e. 2000, 2001 and 2002), and at least in one of the last three years (i.e. 2010, 2011 and 2012);
 - b. **New flows:** trade flows not present in any of the first three years of the reference period, and present at least in one of the last three years;
 - c. **Failures:** trade flows present at least in one of the first three years of the reference period, and not present in any of the last three years;
 - d. **Other flows:** trade flows present neither in any of the first three years of the reference period, nor in any of the last three years.
2. The annual change of the country's seafood export value has been disaggregated into these categories (note: in the graph, the parts of the change attributable to the existing and the new flows are respectively defined as "intensive margin" and "extensive margin", while "failures" and "other" refer to the other two categories.