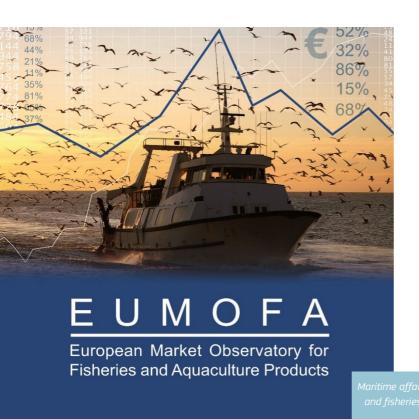


THE EU FISH MARKET

2025 EDITION



HIGHLIGHTS
THE EU IN THE WORLD
MARKET SUPPLY
CONSUMPTION
IMPORT – EXPORT
LANDINGS IN THE EU
AQUACULTURE

WWW.EUMOFA.EU

Manuscript completed in November 2025.

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PDF ISBN 978-92-68-34342-5 ISSN 2363-4154 doi: 10.2771/1531521 KL-01-25-064-EN-N

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Scope

"The EU fish market" aims at providing an economic description of the whole European fisheries and aquaculture industry. It replies to questions such as what is produced/exported/imported, when and where, what is consumed, by whom and what are the main trends.

A comparative analysis allows to assess the performance of fishery and aquaculture products in the EU market compared with other food products. In this report, value and price variations for periods longer than five years are analysed by deflating values using the GDP deflator (base=2020); for shorter periods, nominal value and price variations are analysed.

This publication is one of the services delivered by the European Market Observatory for Fisheries and Aquaculture Products (EUMOFA).

This edition is based on data available as of November 2025. The analyses included in this report do not take into account possible updates occurred in the sources used after this date.

More detailed and complementary data are available in the EUMOFA database: by species, place of sale, Member State, partner country. Data are updated daily.

EUMOFA, developed by the European Commission, represents one of the tools of the Market Policy in the framework of the Common Fisheries Policy. [Regulation (EU) No 1379/2013 on the common organisation of the markets in fishery and aquaculture products, Article 42].

As a market intelligence tool, EUMOFA provides regular weekly indicators, monthly market trends and annual structural data along the supply chain.

The database is based on data provided and validated by Member States and European institutions. It is available in all 24 EU languages.

EUMOFA website, publicly available as from April 2013, can be accessed at www.eumofa.eu.

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METHODOLOGICAL BACKGROUND

The present report is mainly based on consolidated and exhaustive volume and value data collected through different sources and published by EUMOFA at all stages of the supply chain. Within EUMOFA, data on fisheries and aquaculture products are harmonised into "Main commercial species", each referring to "Commodity groups", in order to allow comparisons along the different supply chain stages. At the following links, users can view and download:

The list of EUMOFA Main commercial species and Commodity groups

https://eumofa.eu/documents/20124/35680/Metadata+2+-+DM+-+Annex%2B1 %2BList%2Bof%2BMCS%2Band%2BCG.pdf/0d849918-162a-4d1a-818c-9edcbb4edfd2?t=1580806413808

The correlation table used for harmonizing data on fish species at ERS¹ code level (data on catches, landings, aquaculture production) to the EUMOFA standards

https://eumofa.eu/documents/20124/35680/Metadata+2+-+DM+-+Annex+3+Corr+of+MCS CG ERS.PDF/1615c124-b21b-4bff-880d-a1057f88563d?t=1618503978414

The correlation table used for harmonizing data at CN-8 code level² (data on EU trade) to the EUMOFA standards

https://eumofa.eu/documents/20124/35680/Metadata+2+++DM+-+Annex+4+Corr+CN8-CG-MCS.pdf/ae431f8e-9246-4c3a-a143-2b740a860291?t=1697717528452

MAIN SOURCES OF DATA EUMOFA, EUROSTAT, national administrations of the EU, FAO, OECD, Federation of European Aquaculture Producers (FEAP), Europanel/Kantar/GFK, Trade Data Monitor (TDM) and Euromonitor. The sections below in this Methodological background provide detailed information on the sources used.

Catches include all products fished by a country's fleet in any fishing area (both marine and inland waters), independently from the area of landing/selling. Data excludes marine mammals, crocodiles, corals, pearls, mother-of-pearl, shells, and sponges. Catches data are provided in this report in live weight equivalent.

The main sources of data on catches are FAO (for non-EU countries) and Eurostat (for EU Member States, online data code: fish ca main, extraction made on 3rd July 2025). In line with Eurostat's guidelines on the production and dissemination of statistical data by Commission services after the UK withdrawal from the EU, since the most recent reference period is year 2023, UK is excluded from the EU aggregations of each year. For the purpose of properly conducting an analysis on EU-27 catches, since

¹The acronym "ERS" refers to the Electronic Reporting System established by Council Regulation (EU) N° 1966/2006.

²The acronym "CN" refers to the Combined Nomenclature, i.e. the goods classification used within the EU for the purposes of foreign trade statistics. This classification is based on the Harmonised Commodity Description and Coding System (HS) managed by the World Customs Organisation (WCO). The HS uses a six-digit numerical code for the coding of products and the Combined Nomenclature is further breaking down the coding into an eighth digit level according to EU needs.

Eurostat does not provide data on catches in inland waters, EUMOFA has integrated EU data with data collected from the FAO database.

In addition, in case data for some species were confidential on Eurostat, figures from FAO were used, if available. The list below reports such instances (for all other instances not reported in this list, only Eurostat data were used):

- Denmark: 2018-2019 data on Northern prawn.
- Greece: 2016, 2017, and 2018 data on several species.
- Ireland: data on several species for the period 2018-2023, as well as 2010-2011 data on horse mackerels other than Atlantic horse mackerel.
- Latvia: 2021 data on cod and 2017, 2018, 2019, 2022 and 2023 data on several species.
- Portugal: 2023 data on several species.

Moreover, other issues to consider are the following:

- data include FAO forecasts for most of non-EU and EU countries.
- for some EU Member States, Eurostat data include estimates and provisional figures, as below listed:
 - Bulgaria: 2017 and 2020 data are national estimates.
 - Denmark: data on Northern prawn are national estimates for 2017, while those of 2021 and 2023 are provisional.
 - Germany: 2017 data for almost all species are provisional.
 - Ireland: 2017 data on saithe, haddock and "anglerfishes nei" are national estimates.
 - France: 2018-2019-2020-2021 data are provisional.
 - o Italy: 2018 data, 2020 data, and most of 2019 data are provisional.
 - Romania: 2017 data are national estimates.
 - Finland: 2016 and 2017 data are national estimates, and 2020-2021 data are provisional.

AQUACULTURE

The main source used by EUMOFA for aquaculture data of EU countries is Eurostat (online data codes <u>fish_aq2a</u> and <u>fish_aq2b</u>, <u>extractions made on 3rd July 2025</u>). For non-EU countries, it is FAO, and most of them represent estimates or forecasts.

As aquaculture data are available up to 2023, in line with Eurostat's guidelines on the production and dissemination of statistical data by Commission services after the UK withdrawal from the EU, UK is excluded from the EU aggregations of each year.

For the purpose of properly conducting an analysis on aquaculture production in the EU, in some instances EUMOFA has integrated Eurostat EU data with data deriving from <u>FAO database</u>, national sources and sector associations. The list below reports such instances, as well as those instances for which data are estimates or provisional figures. For all other instances not reported in this list, only Eurostat data were used.

Belgium

2016 Eurostat confidential data were integrated with FAO estimates. 2017-2022 data were collected from FAO.

> Bulgaria

2013 and 2014 data on mussel Mytilus spp. and pike were collected from FAO

2014 data on freshwater crayfish were collected from FAO.

2016-2017 values for seaweed and eel were collected from FAO.

2018 data for seaweed were collected from FAO.

2019-2020 data for oyster were collected from FAO.

2020 data on the grouping "other freshwater fish" were integrated with figures from FAO.

Czechia

2020 data on freshwater catfish were integrated with figures from FAO.

Denmark

Data on salmon were collected from FAO.

2013 data on turbot, char, sturgeon, and pike-perch were collected from FAO. 2015-2018 data for seaweed were collected from FAO, those of 2015 and 2016 being forecasts.

2014, 2015 and 2016 Eurostat confidential data were integrated with figures from FAO (those on eel for 2016 being forecasts).

2011, 2017 and 2018 data for pike-perch were collected from FAO.

2017-2018 data for the groupings "other salmonids" and "other freshwater fish" were collected from FAO.

2018 data on eel are FAO forecasts.

2019 and 2021 data on values were integrated with figures from FAO, those on 2021 being estimates.

2020 and 2022 data on most of the species were integrated with figures from FAO.

Germany

2013-2023 Eurostat confidential data for several species were integrated with figures from FAO.

2011 Eurostat confidential data for trout, pike, pike-perch and eel were integrated with figures collected from the national source (DESTATIS).

Estonia

2014-2022 Eurostat confidential data for some species were integrated with figures from FAO. For 2023, this was made for freshwater fish only.

Ireland

For 2014, values are National estimates available in Eurostat except from scallop and the grouping "Other molluscs and aquatic invertebrates", whose confidential values were integrated with figures from FAO.

For 2015, Eurostat confidential values of the grouping "Other molluscs and aquatic invertebrates" were integrated with figures from FAO.

2016 data on the grouping "other molluscs and aquatic invertebrates" were collected from FAO.

2017-2018 data are National estimates available in Eurostat.

2020 data for molluscs were integrated with figures from FAO.

Greece

2013, 2015 and 2016 Eurostat confidential data on some species were integrated with figures from FAO.

2017 data are National provisional figures available in Eurostat.

2022 data were integrated with figures from FAO.

Spain

2019-2020 data on most of the species were integrated with figures from FAO.

2022 data on eel and whiteleg shrimps were collected from FAO.

France

For sole, data are FAO forecasts.

For salmon, 2015-2017 data are FAO forecasts. 2010-2014 data were integrated with figures provided by FEAP and respective values were estimated by multiplying the volumes to its 2008-unit price, as available in Eurostat.

For turbot, 2015-2017 data are FAO forecasts. 2009-2014 data were integrated with figures provided by FEAP and respective values were estimated by multiplying the volumes to its 2008-unit price, as available in Eurostat.

2013 and 2016-2017 data on carp, catfish and other freshwater fish include National estimates available in Eurostat.

2018-2019 data on values of carp, pike, pike-perch and on the grouping "other freshwater fish" include National estimates available in Eurostat. 2019-2020 data for abalone are FAO's forecasts.

Croatia

2020 data the grouping "other freshwater fish" were integrated with figures from FAO.

2021 data were collected from FAO.

2022 confidential data on trout were integrated with figures from FAO.

Hungary

2016 data for the grouping "other freshwater fish" were collected from FAO. 2020 data for freshwater catfish were integrated with figures from FAO.

➤ Italy

2015 data are National estimates and forecasts available in Eurostat.

2017 data on grooved carpet shell are FAO forecasts.

2020 data for warmwater shrimps were collected from FAO.

Latvia

2014-2015 and 2017-2018 Eurostat confidential data were integrated with figures from FAO. For 2023, this was made for freshwater fish only. 2019 data for pike and pike-perch were collected from FAO.

> Lithuania

2019-2020 data for pike-perch were collected from FAO.

Netherlands

For eel, freshwater catfish and the grouping "other marine fish", 2015, 2018 and 2019 values are National estimates available in Eurostat.

For mussel, data of 2012 and 2014-2016 are National estimates available in Eurostat.

For turbot, 2013-2017 data are FAO forecasts.

For pike-perch, all data are FAO forecasts.

2019-2020 data, as well as 2023 data, on most of the species were integrated with figures from FAO.

Austria

2013-2019 Eurostat confidential data were integrated with figures from FAO.

Poland

2016 data on tilapia are FAO forecasts.

2019-2020 data on the grouping "other freshwater fish" were integrated with FAO's forecasts.

2021 data were collected from FAO, most of them being estimates.

Portugal

2013 and 2014 data on clam are National estimates available in Eurostat. For 2015, data on trout and clam are National estimates available in Eurostat while data on all other species are National provisional figures available in Eurostat.

2015-2018 data on sea mussels were collected from FAO.

2020 data on the grouping "other marine fish" were integrated with figures from FAO.

Romania

2015 data are National estimates available in Eurostat.

For turbot, 2015-2016 data are FAO forecasts.

2019 data are National estimates available in Eurostat.

2020 data on freshwater catfish and on the grouping "other freshwater fish" were integrated with FAO's forecasts.

Slovenia

2013-2023 Eurostat confidential data on several species were integrated with figures from FAO.

Slovakia

For 2019, data on pike and pike-perch are FAO forecasts. In addition, data on the following species were integrated with FAO forecasts: carp, freshwater catfish. trout.

2020 data for most of the species were integrated with FAO's forecasts. 2021 data for most of the species were integrated with FAO's estimates, including Eurostat confidential data on catfish.

Sweden

Salmon data 2013, 2014 and 2016 were collected from FAO. 2019, 2021 and 2022 Eurostat confidential data on several species with figures from FAO. For 2023, this was made for freshwater fish only.

SUPPLY BALANCE SHEET The supply balance is a proxy that allows to follow the evolutions of the EU internal supply of fishery and aquaculture products destined for human consumption and their "apparent consumption".

> In the light of this, the supply balance and apparent consumption should be used in relative terms (e.g. analysing trends) rather than in absolute terms.

> The supply balance is built on the basis of the following equation, calculated in live weight equivalent:

(catches + aquaculture production+ imports) - exports

apparent consumption

Data included in the supply balance available in EUMOFA are broken down by commodity group and main commercial species. Possible discrepancies in totals are due to rounding.

The sources used are as follows:

> Catches: products caught by fishing vessels of the EU Member States. Amounts of catches not destined for human consumption were estimated using proxies based on destination use of landings (as available in EUROSTAT). Catches data are available in live weight equivalent. Source: EUROSTAT for catches in marine areas (reference dataset: <u>fish ca main</u>), integrated with FAO for catches in inland areas.

- Aquaculture production: products farmed in the EU Member States. Aquaculture data are available in live weight equivalent. Source: EUROSTAT (reference dataset: fish-aq2a). The data cover the aquaculture sector from the point of view of farm-gate production available for human consumption. An exception from the "for human consumption" criteria is being made since the reference year 2016 for aquatic plants, which are included regardless of their final use. To be noted, however, that seaweed in the EU is almost exclusively harvested. Data are integrated with data from FAO, FEAP and national administrations (for sources' details by year and country, please refer to the related section of this methodological background).
- ➤ Imports exports: fishery and aquaculture products imported/exported by the EU Member States from/to non-EU countries. Non-food use products are not included. Import and export data are available in net weight. For the supply balance purposes, net weight is converted into live weight equivalent in order to have a harmonized supply balance sheet (for conversion to live weight equivalent, please refer to the specific section below in this methodological background). Through the assessment of origin of imports and exports in terms of production method, it is possible to estimate the share of imports/exports originating from aquaculture and captures by making use of FAO data (for the method applied, please refer to the specific section below in this methodological background). Source: EUROSTAT-COMEXT (reference dataset: DS-045409).

Apparent consumption (total and per capita): amount of fishery and aquaculture products estimated to be consumed in the EU. Per capita consumption indicates the amount by each individual person in the EU.

CONVERSION OF NET WEIGHT INTO LIVE WEIGHT EQUIVALENT Since EUROSTAT provides production data in live weight, import/export net volumes are converted by using conversion factors (CF) for the purpose of building a harmonized supply balance sheet.

Example of CF for the item whose CN8 code is 03044410: this item corresponds to "Fresh or chilled fillets of cod 'Gadus morhua, Gadus ogac, Gadus macrocephalus' and of fish of the species "Boreogadus saida". The CF is set at 2,85, representing an average of those found for skinned and boned fillets for this species in EUROSTAT and FAO publications.

For the complete list of CFs used for the EUMOFA purposes, please refer to the Metadata published within the EUMOFA website at the link https://eumofa.eu/documents/20124/35680/Metadata+2+-+DM+-

+Annex+7+CF+per+CN8.pdf/7e98ac0c-a8cc-4223-9114-

af64ab670532?t=1681387953349

ASSESSMENT OF ORIGIN
OF IMPORTS AND
EXPORTS IN TERMS OF
PRODUCTION METHOD

Assessing the production method of imported and exported fishery and aquaculture products serves to quantify the share (%) of aquaculture production in the EU supply balance analysis. This includes assessing the basis of production methods used for these products in countries of origin, namely: i) products imported to the EU from extra-EU countries and ii) products exported to extra-EU countries from EU Member States.

These assessments i) cover the Main Commercial Species for which CN-8 codes are available and ii) calculate average production volume data from the selected country of origin, thus creating a 3-year time series for both fisheries and aquaculture.

The assessment of the share of aquaculture of Main Commercial Species is done by calculating a weighted average share of aquaculture production in the total production of aquatic food (aquaculture + fisheries) and expressing it as a coefficient (percentage). This coefficient then quantifies the weight of aquaculture in both extra-EU imports and extra-EU exports, and is used to calculate the supply balance sheet. By calculating the weight of aquaculture, it is possible to estimate the production methods of imported and exported fishery and aquaculture products and their relative share.

EXPENDITURE AND
PRICES FOR FISHERY AND
AQUACULTURE
PRODUCTS

EU expenditure data are provided by EUROSTAT. These data are compiled basing on a common methodology elaborated within the "EUROSTAT – OECD PPP Programme" (http://www.oecd.org/std/prices-ppp/eurostat-oecdmethodologicalmanualonpurchasingpowerparitiesppps.htm).

In "The EU fish market" report, the "Nominal expenditure (in euro)" and the "Nominal expenditure per inhabitant (in euro)" have been used. The "expenditure" is taken as a component of the Gross Domestic Product and concerns the final consumption expenditures on goods and services consumed by individual households.

Expenditure is provided in Purchasing Power Parities (PPPs) which are spatial deflators and currency converters that eliminate the effects of the differences in price levels between Member States/countries, thus allowing volume comparisons of GDP components and comparisons of price levels. For the countries outside the Euro-zone, Price Level Indices (PLIs) are used for harmonising different currencies in a single currency (euro in this case). PLIs are obtained as ratios between PPPs and current nominal exchange rates, therefore, PPPs and PLIs values coincide in the Euro-zone countries

Price indices refer to the Harmonised Index of Consumer Prices (HICP) which gives comparable measures of inflation. It is an economic indicator that measures the change over time of the prices of consumer goods and services acquired by households. In other words, it is a set of consumer price indices calculated according to a harmonised approach and a set of definitions as laid down in Regulations and recommendations.

"Food" is an aggregate of products, corresponding to COICOP 01.1 (https://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST NOM D TL&StrNom=HICP 2019&StrLanguageCode=EN&IntPcKey=43907206&StrLayoutCode=HIERARCHIC). It includes all food products purchased for consumption at home. In this report, analyses are provided for the following items belonging to the "Food" aggregate:

- "Fishery and aquaculture products", corresponding to COICOP 01.1.3. It includes
 "fresh or chilled", "frozen", "dried, smoked or salted", and "other preserved or
 processed products", as well as land crabs, land snails and frogs, as well as
 fish and seafood purchased live for consumption as food.
- "Meat", corresponding to COICOP 01.1.2. It includes "fresh, chilled or frozen, dried, salted or smoked meat and edible offal" and "other preserved or processed meat and meat-based preparations". It also includes meat and edible offal of marine mammals and exotic animals, as well as animals and poultry purchased live for consumption as food.

HOUSEHOLD
CONSUMPTION
OF FRESH FISHERY AND
AQUACULTURE
PRODUCTS

Data are collected from EUROPANEL and refer to households' purchases of selected fresh species in 11 EU Member States, which are then aggregated for the EUMOFA purposes into "Main commercial species".

Households' purchases are recorded daily by a sample of households in supermarkets, discount shops, micro-markets, groceries, fishmongers and online sales (Amazon Fresh included), who reports to EUROPANEL many information, among which species, quantities and values.

The sample of households (i.e., "panel") is composed in order to be representative of the population of each country and to appropriately estimate its characteristics. Below, specifications regarding panels from which data derive are provided:

Member State	Sample size (Households)
Denmark	3.000
Germany	30.000
Ireland	5.650
Spain (excluding Canary Islands)	12.000
France	20.000
Italy	10.000
Hungary	4.000
Netherlands	10.000
Poland	8.000
Portugal (excluding Madeira and Azores Islands)	4.000
Sweden	4.000

For each country surveyed (except Hungary), household consumption data cover a selection of most consumed fresh species *plus* the additional item "other unspecified products", aggregating all other fresh species recorded by household panels but not available at disaggregated level. Products monitored include either packaged or loose fish, always without any additional ingredients. Below the complete lists of "main commercial species" monitored for each country is reported:

Denmark	France	Germany	Ireland
Cod	Cod	Alaska pollock	Cod
Dab	Gilthead seabream	Carp	Haddock
Flounder	Hake	Cod	Hake
Halibut	Mackerel	Herring	Mackerel
Mackerel	Monk	Mussel <i>Mytilus</i>	Saithe (=Coalfish)
Mussel <i>Mytilus</i>	Saithe (=Coalfish)	Plaice	Salmon
Salmon	Salmon	Saithe (=Coalfish)	Shrimps
Trout	Sardine	Salmon	Other unspecified products
Other unspecified products	Trout	Shrimps	
	Whiting	Trout	
	Other unspecified products	Other freshwater fish	
		Other unspecified products	

Italy	Netherlands	Poland	Portugal
Anchovy	Cod	Carp	Clam
Clam	Herring	Mackerel	European seabass
European seabass	Mackerel	Salmon	Gilthead seabream
Gilthead seabream	Mussel <i>Mytilus</i>	Trout	Hake
Hake	Pangasius	Other unspecified products	Mackerel
Mussel <i>Mytilus</i>	Plaice		Octopus
Octopus	Salmon		Salmon
Salmon	Shrimp Crangon spp		Sardine
Squid	Other shrimps		Scabbardfish
Swordfish	Trout		Shrimps
Other unspecified products	Other unspecified products		Other unspecified products

Spain	Sweden	Hungary
Cod	Cod	Unspecified products
European seabass	Flounder	
Gilthead seabream	Haddock	
Hake	Halibut	
Mackerel	Herring	
Monk	Pike-perch	
Salmon	Salmon	
Sardine	Other salmonids	
Sole	Other unspecified products	
Tuna		

Other unspecified products

RETAIL SALES AND
OUT-OF-HOME
CONSUMPTION

Data for retail sales and out-of-home consumption are provided by Euromonitor International¹ (https://www.euromonitor.com/), whose data and estimates could be different from other statistics available at national level, as different methodological approaches may be used. They refer to "unprocessed" and "processed" products. Please note that this definition of unprocessed products differs from the official definition used by the European Commission, as set out in Regulation (EC) No 852/2004 on the hygiene of foodstuffs (https://eur-lex.europa.eu/eli/req/2004/852/oj/eng).

Unprocessed products

Data are provided for the category "fish and seafood", as well as for the sub-categories finfish, crustaceans and molluscs and cephalopods, more detailed below:

Fish and seafood: This is the aggregation of finfish, crustaceans and molluscs and cephalopods. This category includes packaged and unpackaged unprocessed fish and seafood (fresh, chilled, frozen). Chilled and frozen fish and seafood can be cleaned, gutted, peeled/trimmed/filleted/cut to a different extent, but not cooked and no sauces, herbs or condiments can be added.

- Crustaceans: includes all fresh, chilled and frozen but uncooked crustaceans (i.e. animals living in water with firm body and have a hard-outer shell) such as lobsters, shrimps and crabs, whether sold packaged or unpackaged.
- Finfish: includes all fresh, chilled and frozen but uncooked freshwater and marine finfish (wild caught or farmed), whether sold packaged or unpackaged, cut or whole.

 Molluscs and cephalopods: includes all fresh, chilled and frozen but uncooked molluscs (shellfish such as oysters and clams) and cephalopods (such as the octopus, squid, cuttlefish), whether sold packaged or unpackaged.

Processed products

Data are provided for the category "processed fish and seafood", as well as for the subcategories shelf-stable seafood, chilled processed seafood and frozen processed seafood, more detailed below:

Fish and seafood: This is the aggregation of shelf-stable, chilled and frozen fish and seafood.

- Shelf-stable: includes shelf-stable fish, shellfish and seafood typically sold in cans, glass jars or aluminium/retort packaging. It is also usually preserved in oil, brine, salt water or with a sauce (e.g. sardines in tomato sauce). Pickled fish/seafood sold ambient is also included. Product types include: cod, haddock, mackerel, sardines, tuna, prawns, crab, mussels, anchovies, caviar etc.
- Chilled processed: includes all packaged processed chilled fish/seafood products and smoked fish sold in the self-service shelves of retail outlets. Processed fish/seafood products sold together with a sauce and cooked prawns are included. Note: herring products sold in chiller/refrigerator cabinets, and which have a shelf-life of more than 6 months are excluded. These products, which are very common in Scandinavian countries, are included in shelf-stable seafood as they have similar shelf-life to shelf-stable fish sold ambient.
- Frozen processed: includes all processed fish and seafood products which are further prepared with the addition of other ingredients, including breading/batter, sauce, seasoning, etc. Product types include: fish fingers, fish pies, battered or breaded fish, fish with any type of sauce, fish balls, cuttlefish balls, scampi, calamari, etc.

IMPORT-EXPORT

The trade flows of fishery and aquaculture products are analysed for the items referring to the list of CN-8 codes at the link: $\frac{\text{https://eumofa.eu/documents/20124/35680/Metadata+2+-+DM+-+Annex+4+Corr+C}}{\text{N8-CG-MCS.pdf/ae431f8e-9246-4c3a-a143-2b740a860291?t=1697717528452}}.$

The source used for collecting import-export data is EUROSTAT – COMEXT (online data code: DS-045409, extraction made on 22nd April 2025). For more information on the methodology and principles behind EUROSTAT's recording of "country of origin" and "country of destination", please visit EUROSTAT's "Quality Report on International Trade Statistics", at https://ec.europa.eu/eurostat/web/products-statistical-reports/w/ks-ft-22-010.

It must be specified that data do not comprehend instances in which volumes or values are not reported due to confidentiality. The principle of statistical confidentiality of Eurostat is explained at the link: https://ec.europa.eu/eurostat/about-us/statistical-confidentiality#:~:text=Statistical%20confidentiality%20is%20a%20fundamental.the ir%20use%20for%20statistical%20purposes.

EXTRA-EU TRADE FLOWS

They encompass all transactions between European Union (EU) Member States and countries outside the EU (non-member countries). The source used for these trade flows is EUROSTAT - COMEXT. In line Eurostat's guidelines on the production and dissemination of statistical data by Commission services after the UK withdrawal from the EU, and since most recent reference period is year 2024, UK is excluded from the EU aggregations of each year. This means that UK is dealt with as extra-EU country of origin/destination of EU-27 imports and exports.

Finally, it is important to underline that while imports are reported as such by Eurostat-COMEXT according to flows recorded by national customs, in most cases the EU Member States are not the actual destinations. Rather, they are "points of entry" for the fisheries and aquaculture products imported to the EU, which are then traded within the internal market.

INTRA-EU TRADE FLOWS

They encompass all transactions declared by Member States of the European Union (EU) with one another. For the analysis of intra-EU trade, only export flows have been considered. The source used for these trade flows is EUROSTAT - COMEXT.

In general, bilateral comparisons between Member States of intra-EU flows reveal major and persistent discrepancies, thus comparisons dealing with intra-EU trade statistics and related results must be taken into account cautiously and should consider the existence of these discrepancies. This is the official explanation from Eurostat: considering that the intra-EU trade data are based on common and largely harmonised rules, one might expect the intra-EU trade balance to be zero or at least close to it. However, it is worth underlining that a perfect match is made impossible first of all by the CIF/FOB³ approach: the import value should be higher than the mirror export value as it includes extra transport costs.

A close match could nevertheless be legitimately expected given that trading partners within the EU are often neighbouring countries, but deliveries to vessels and aircraft are another methodological reason preventing this: such movements of goods create asymmetries in intra-EU ITGS as specific legal provisions state that only dispatches are to be reported.

At global level, most methodological reasons for asymmetries disappear. The remaining issues are in data reporting (e.g. missing Intrastat declarations, and trade in specific goods like sea-going vessels and aircraft not being properly captured).

LANDINGS

Eurostat data regarding landings (online data code: fish ld main, data collected on 16th June 2025) comprise the initial unloading of any fisheries products from on board a fishing vessel to land in a given EU Member State. As landings data are available up to 2023, line with Eurostat's guidelines on the production and dissemination of statistical data by Commission services after the UK withdrawal from the EU, UK is excluded from the EU aggregations of each year. Data include landings made by vessels from EU Member States and from Canada, Faroe Islands, Greenland, Kosovo, Iceland, Norway and the UK. Data also include landings of species not destined for human consumption and seaweed.

The following issues should be mentioned regarding data used for the "Landings in the EU" chapter:

Confidentiality. As indicated by national data providers to Eurostat, landings are confidential when they originate from less than three vessels. Therefore, in some instances, Member States provide data at more aggregated level, in others data are just not available. The EUMOFA system discards the records having volume or value equal to zero, because such records would represent partial information invalidating any analysis of data. The following instances, broken down by country, year and species involved, are not included in the analysis as they are affected by confidentiality issues:

³ Cost, Insurance and Freight (CIF) and Free on Board (FOB) are international shipping agreements used in the transportation of goods. The CIF rule places an obligation on the seller to arrange insurance for the consignment. If the FOB rule is used, once the goods have been loaded on board, risk transfers to the buyer, who bears all costs thereafter.

- Denmark

For 2017, details on the destination use and/or presentations/preservations of some specific species belonging to the following main commercial species are confidential: eel, pike, cod, sole, sardine, bluefin tuna, crab, cold-water shrimps, Norway lobster, oyster, clam and the groupings "other freshwater fish", "other groundfish", "miscellaneous small pelagics" and "miscellaneous tunas". Only totals are available, and were collected from Statistics Denmark.

For other years, data do not include the following confidential figures: 2019:

- o for blue whiting, landings of the Irish fleet
- o for herring, landings of the German and UK fleets destined for industrial use
- for Atlantic horse mackerel, landings of the Danish fleet destined for industrial use
- o for sandeels, landings of the German fleet
- o for sprat (= Brisling), landings of the German and Estonian fleets as well as landings of the Latvian fleet destined for industrial use.

2020:

- o for herring and sprat, landings of the German fleet destined for industrial use and animal feed, respectively.
- for sprat, landings of the Lithuanian and Polish fleets destined for animal feed and industrial use, respectively.
- o for blue whiting, landings of the UK fleet.
- o for clam, landings of the species Spisula solida of the Danish fleet.

2021:

- o for blue whiting, landings of the Irish and Icelandic fleets
- o for herring, landings of the Dutch fleet.
- o for clam, landings of the species Spisula solida of the Danish fleet
- o for sandeels, landings of the German fleet
- o for boarfishes (included in the main commercial species "Other marine fish"), landings of the UK fleet.

2022:

- o for boarfishes (included in the main commercial species "Other marine fish"), landings of the Danish and UK fleet
- landings of capelin (included in the main commercial species "Miscellaneous small pelagics")
- landings of herring destined for human consumption of the Icelandic and UK fleets, as well as landings of herring for unknown destination use of the Danish fleet
- landings of sprat destined for industrial use of the German, Finnish and Polish fleets
- landings of solid surf clam
- landings of blue whiting destined for industrial use of the Irish and Icelandic fleets

Furthermore, for all other main commercial species, several confidential figures are excluded each year, related to vessels' flag, destination use and/or presentations/preservations of some specific species.

- Finland: values are confidential for several species landed in 2023.

- Ireland

- 2018 data are confidential for the following main commercial species: abalone, dab, dogfish, European flounder, grenadier, Atlantic halibut, ray's bream, redfish, sardine, scabbardfish, sea cucumber, European seabass, seabreams, swordfish, bluefin tuna and weever. Furthermore, for all other main commercial species, some confidential figures are excluded, related to vessels' flag, destination use and/or presentations/preservations of some specific species.
- 2019 data are confidential for the following main commercial species: anchovy, European flounder, grenadier, Greenland halibut, mussel Mytilus spp., sardine, sea urchin, warmwater shrimps, swordfish. Furthermore, for all other main commercial species, several confidential figures are excluded, related to vessels' flag, destination use and/or presentations/preservations of some specific species.
- 2020 data are confidential for the following main commercial species: eel, European flounder, grenadier, haddock, Atlantic halibut, herring, horse mackerel, redfish, sea cucumber, bigeye tuna, weever. Furthermore, for all other main commercial species, several confidential figures are excluded, related to vessels' flag, destination use and/or presentations/preservations of some specific species.
- 2021 data are confidential for the following main commercial species: Greenland halibut, mussel *Mytilus* spp. (blue mussel), salmon, sardine, swordfish, and bluefin tuna. Furthermore, for all other main commercial species, several confidential figures are excluded, related to vessels' flag, destination use and/or presentations/preservations of some specific species.
- 2022 data are confidential for the following main commercial species: anchovy, redfish and trout.
- Furthermore, for all other main commercial species, several confidential figures are excluded each year, related to vessels' flag, destination use and/or presentations/preservations of some specific species.
- In addition, the following data were collected from SFPA (Sea-Fisheries Protection Authority) and Central Statistics Office:
 - 2013, 2014, 2018 and 2019 data regarding hake
 - 2014 data regarding mackerel
 - 2016 data regarding herring
 - 2018 data regarding blue whiting and monk
 - 2019 data regarding the value of mackerel and blue whiting

- Greece

2016 and 2017 data are confidential for those landings made by one single vessel operating in Atlantic, Eastern Central regarding the following main commercial species: cuttlefish, flounder (other than European flounder), John dory and the grouping "other flatfish". Only for 2017, data do not include confidential figures for frozen deep-water rose shrimp.

Furthermore, for 2016, 2017 and 2018, some confidential figures are excluded related to destination use and/or presentations/preservations of some specific species. They concern:

 For 2016-2017: some species belonging to the following main commercial species: octopus, red mullet, seabream (other than gilthead seabream), squid, and the groupings "other sharks" and "other marine fish". Only for 2017, data do not include confidential figures for some species belonging to the grouping "warmwater shrimps".

 For 2018: some species belonging to the following main commercial species: crab, John dory, octopus, red mullet, squid, seabream (other than gilthead seabream) and the grouping "other marine fish".

- Malta

All data regarding landings made by vessels with Cyprus flag are excluded as they are confidential.

> Provisional data

- France

2018, 2019, 2020 and 2021 volumes and values are provisional data available in Eurostat.

- Italy

2018, 2019 and 2020 volumes and values are provisional data available in Eurostat.

Estimates

- Bulgaria

2017 and 2020 volumes and values are national estimates available in Eurostat.

- Denmark

Values for 2019, 2020, 2021 and 2022 include national estimates available in Eurostat.

- Ireland

Volumes and values for 2017, and values for 2020 and 2022, include national estimates available in EUROSTAT.

- Lithuania

Volumes and values for 2017 are national estimates available in EUROSTAT.

- Netherlands

Volumes and values for 2017, 2018, 2019, 2020, 2021, 2022 and 2023 include national estimates available in Eurostat.

- Portugal

Volumes and values for 2018, 2019, 2020, 2021, 2022 and 2023 include national estimates available in Eurostat.

- Romania

Volumes and values for 2017 are national estimates available in Eurostat.

HIGHLIGHTS

CONTINUE TO SHAPE EU HOUSEHOLD CONSUMPTION

HIGH PRICES In 2024, household spending on fishery and aquaculture products in the EU-274 reached EUR 62,8 billion, up by EUR 2,7 billion or 4% from 2023. Growth was recorded in all Member States, marking the third consecutive year of steady increases. This rise reflected persistently high price levels rather than increased consumption, as household purchases of fresh fish continued to fall. According to Europanel/Kantar/GfK data, total at-home consumption of fresh fish has been declining since 2021, with a drop of more than 4% from 2023 through 2024 in the highest-consuming EU countries. Fish prices remained elevated across the EU, continuing a trend that began in 2020. While the sharp price increases in 2022 were driven by broader economic and geopolitical tensions, inflationary pressures persisted in 2023 and 2024, maintaining the high prices, despite a general slowdown in inflation. Indeed, between 2020 and 2024, EU consumer prices for aquatic food rose by more than 25%, while meat prices increased by 28% and overall food prices by 32%.

EU TRADE FLOWS DECREASED IN VALUE FOR THE SECOND **CONSECUTIVE YEAR**

In 2024, EU trade flows⁵ of fishery and aquaculture products slowed slightly. The total nominal value decreased 1% from 2023, while traded volumes decreased a marginal 0,5%. Despite this modest downturn, 2024 still recorded the third-highest trade value of the 2015-2024 decade. Over the longer term, total EU trade flows increased by 18% in real terms from 2015 to 2024 - equivalent to an average annual growth rate of about 2% - while trade volumes grew by only 2%.

Intra-EU exchanges accounted for 5,8 million tonnes and EUR 31,7 billion in 2024, both down 1% from 2023. These flows represented 45% of total trade value and 42% of total volume. Notably, intra-EU trade exceeded value of extra-EU imports for the second consecutive year.

Extra-EU imports, which accounted for 43% of both the value and volume of EU trade, totalled 5,9 million tonnes worth EUR 29,9 billion. Volumes remained stable compared with 2023, while values fell a slight 1%, staying below pre-pandemic levels. Extra-EU exports played a much smaller role, confirming the EU's position as a net importer. Their value rose 1% to EUR 8,3 billion, which accounted for 12% of total trade value, while their volume declined 1% to 2,2 million tonnes, the lowest level since 2019. This made extra-EU exports the only flow that recorded value growth in both 2023 and 2024.

Overall, the 2024 trade results reflected a continued slowdown that followed the sharp growth recorded in 2022 - a year marked by inflationary pressures and geopolitical tensions. Although inflation eased in 2024, it remained an important factor influencing trade values. By December 2024, the EU inflation rate had fallen to 2,7%, down from 3,4% a year earlier, and stabilised around 2,4% in early 2025.

⁴ In line with Eurostat's guidelines on the production and dissemination of statistical data by Commission services after the UK withdrawal from the EU, since the most recent reference period is year 2024, UK is excluded from the EU aggregations of each year. In addition, EU data include Croatia since 2013, date of the EU's enlargement to this country.

⁵ Extra-EU imports + extra-EU exports + intra-EU trade flows.

IMPROVEMENT OF THE EU TRADE BALANCE AND OTHERS MAIN NET IMPORTERS OF FISH

In 2024, the EU's trade deficit 6 in fishery and aquaculture products narrowed slightly, decreasing by 2% from 2023. The improvement was driven by a 1% rise in exports and a 1% drop in imports. Trade volumes remained broadly stable, with imports up by 0,3% and exports down by 1%.

At Member State level, results were mixed. Spain recorded the largest increase in its trade deficit, followed by France, Italy and the Netherlands, while Denmark, Sweden and Germany registered improvements. Several of these countries act as key entry points for high value imports into the EU – Sweden, for example, remains a main gateway for Norwegian products.

Across commodity groups, most categories contributed to the overall improvement in 2024. Groundfish and non-food use products recorded the strongest gains, with the latter moving into a trade surplus. Miscellaneous aquatic products also maintained a positive balance, whereas tuna and tuna-like species saw their trade deficit widen, reflecting higher imports and lower exports than in 2023.

The United States and Japan – the world's second and third largest net importers of fishery and aquaculture products – showed diverging trends in 2024. The US trade deficit grew by around 5%, rising to EUR 18 billion in 2024. In contrast, Japan's deficit narrowed by roughly 3%, decreasing to EUR 10,3 billion.

2023: DECLINE IN
APPARENT
CONSUMPTION, RISE
IN SELF-SUFFICIENCY
RATE

In 2023, apparent consumption⁷ of fishery and aquaculture products in the EU was estimated at 10,25 million tonnes LWE, corresponding to 22,89 kg LWE per capita – the lowest level of the past decade and 3% below 2023. This decline, which reflected reduced aquaculture production and lower import volumes, was only partially offset by a moderate increase in catches. Despite this trend, farmed products maintained a stable share in total consumption, while the share of wild products fell to its lowest level in ten years.

Apparent consumption of wild products dropped to 7,32 million tonnes LWE, or 16,36 kg LWE per capita, whereas farmed product consumption remained close to its tenyear average at 2,92 million tonnes LWE, or 6,53 kg LWE per capita.

EU landings, including species not destined for human consumption and seaweed, have followed a downward trend since 2018. In 2023, they totalled 2,92 million tonnes, valued at EUR 6,21 billion, marking the lowest level recorded during the 2014–2023 decade. That same year, imports decreased by around 300.000 tonnes LWE compared with 2022, while exports declined by about 90.000 tonnes LWE. As a result, the EU's self-sufficiency rate increased for the first time since 2018, reaching 38,1%, a level comparable with that of 2021.

According to EUMOFA and national estimates, Portugal continued to record the highest apparent per capita consumption of fishery and aquaculture products⁸, at 53,61 kg LWE per capita in 2023. In line with the overall EU decline from 2022 through 2023, most major consuming Member States saw decreases, with the exception of Italy and Cyprus, which recorded slight 1% increases compared with 2022.

⁶ Extra-EU exports *minus* extra-EU imports. Every year, EUMOFA estimates the total supply of fishery and aquaculture products for EU consumers by adding catches + aquaculture production + imports. Then, by subtracting exports, this formula provides an approximation of EU apparent consumption. As consolidated data on EU production of fishery and aquaculture products are available up to 2023, the estimates have been made up to 2023 as well

⁷ The definition of "apparent consumption" is available in the "Supply balance sheet" section of the Methodological background.

⁸ It is worth underlining that the methodologies for estimating apparent consumption at EU and Member State levels are different, the first based on data and estimates as described in the Methodological background, the latter also requiring the adjustment of abnormal trends due to the higher impact of stock changes.

RECENT DYNAMICS FOR SOME MAIN **SPECIES**

EU salmon imports grew by 5% in 2024, supported by a 5% increase in European aquaculture output that was partially offset by a 6% drop in American production. At the same time, catches of wild Pacific salmon declined sharply, estimated to decrease by about 50% from the record high reached in 2023. Although EU import volumes of wild Pacific salmon were low, it remained an affordable raw material for the EU processing sector. Despite the increase in import volumes, the overall value of salmon imports remained stable, increasing a slight 0,1% to EUR 8,4 billion in 2024, which matched 2023 levels. Notably, import values in 2022-2024 were the highest ever recorded, doubling over the past decade. In the first seven months of 2025, EU salmon imports continued to expand, with import volumes rising by about 12% over the same period in 2024. However, the import value declined by around 7%, reflecting markedly lower unit prices amid easing global supply chain constraints. The rise in import volumes was driven by growth in both European and American aquaculture, with European production estimated to increase by 9 to 11% and American production by 6 to 8% compared with 2024. Catches of Pacific salmon are estimated to increase by about 40% in 2025.

Shrimp⁹, the fourth most consumed aquatic species in the EU in 2023, accounted for 10% of total EU import volume and 13% of value in 2024. Compared with 2023, import volumes increased by nearly 4%, while values remained stable, dropping by only 0,4%. Warmwater shrimp¹⁰, primarily sourced from Ecuador, represented 54% of import volume and 52% of value. Miscellaneous shrimp species¹¹ followed, accounting for 35% of volume and 39% of value, with Argentina, India and Vietnam as key suppliers, providing 36%, 14% and 11% of total volumes, respectively. Coldwater shrimp¹² made up 10% of import volume and 7% of value, with 80% of supply originating from Greenland. In 2024, Ecuador, Argentina and India all expanded their market shares by 2%, 1% and 1% in volume, respectively. Together, these three trade partners supplied 54% of the EU's total shrimp import volume. In the first seven months of 2025, EU shrimp imports strengthened noticeably, with import volumes rising by about 10% and values by roughly 15% compared with the same period in 2024. Growth was mainly driven by warmwater shrimp, which recorded the strongest increases in both volume and price, while miscellaneous shrimp and deep-water rose shrimp also contributed to the overall expansion.

Cod remains one of the most popular species among EU consumers. In 2024, Northeast Arctic cod quotas were reduced by 20%, following similar cuts in 2022 and 2023, resulting in a 10% decline in foreign supply to the EU market. The average product price for cod increased by 3%, growing from 6,71 EUR/kg to 6,90 EUR/kg, while the total import value fell by nearly 7% compared with 2023. In 2025, cod quotas were reduced by an additional 25% and import prices surged in the first seven months of the year, averaging 8,22 EUR/kg, as supply to the EU decreased by 8% compared with the same period in 2024. Prices are expected to remain elevated, with further quota cuts of 14% projected for Northeast Arctic cod quotas in 2026.

Tuna¹³ remains the most consumed aquatic products in the EU, with per capita consumption reaching 2,68 kg (LWE) in 2023. In 2024, tuna accounted for 11% of the total EU import volume of FAPs and 10% of the value. Compared with 2023, import volumes rose by 18% and values by 8%. Skipjack tuna represented 58% of the imported volume and 56% of the value, followed by yellowfin tuna with 28% for both. Bluefin tuna, primarily farmed for fattening, recorded a sharp 60% decline in average

⁹ Shrimps include warmwater shrimp, coldwater shrimp, deep-water rose shrimp, shrimp *Crangon* spp., and miscellaneous shrimp.

¹⁰ Shrimps of the genus *Penaeus*.

¹¹ The most imported product in this group was "Frozen shrimps and prawns, even smoked, whether in shell or not, incl. shrimps and prawns in shell, cooked by steaming or by boiling in water (excl. "Pandalidae", "Crangon", deepwater rose shrimps "Parapenaeus longirostris" and "Penaeus")", CN8 code: 03061799.

¹² Shrimps of the genus *Pandalus*.

¹³ Tuna includes skipjack tuna, yellowfin tuna, bigeye tuna, albacore tuna, bluefin tuna and miscellaneous tuna.

price in 2024, to 4,71 EUR/kg from 11,89 EUR/kg. Miscellaneous tuna species reached 6,00 EUR/kg, overtaking bluefin as the highest priced tuna category. Ecuador remained the EU's main supplier, accounting for 29% of import volume and 48% of value. Prepared and preserved products, mainly tuna loins for the processing industry, continued to dominate EU tuna imports, representing 75% of total volumes. In the first seven months of 2025, EU tuna imports continued to expand, with volumes rising by around 8% and values by roughly 10% compared with the same period in 2024. Growth was mainly driven by strong inflows of skipjack tuna, which reached exceptionally high volumes, increasing 17% in early 2025 while albacore imports increased markedly, growing by 147%. Bluefin tuna imports, although small in volume, showed a recovery in value, reaching to 6,76 EUR/kg from the very low level recorded in 2024.

Alaska pollock remains a key species for the EU processing industry. In 2024, import volumes decreased by 17% to 237.200 tonnes, while values declined by 32%. This was largely driven by reduced imports from China (-51%, 74.400 tonnes). This shift led to a significant change in market shares: China lost 21% of its volume share, while the US increased its share by 19%. Imports from the US commanded the highest average product price at 3,22 EUR/kg, while prices for Chinese and Russian products were roughly 0,85 EUR/kg lower. On average, import prices for the top three suppliers - US, Russia, China - fell by around 23% in 2024. In the first seven months of 2025, EU imports of Alaska pollock rebounded, with volumes rising by around 16% and values by nearly 20% compared with the same period in 2024. This recovery was mainly driven by higher imports from Russia and the US, while Chinese imports stabilised at lower levels following their steep decline in 2024. Despite the upturn in supply, average import prices remained well below pre-2024 levels, indicating that market prices are recovering more slowly than import volumes.

TRENDS

MACROECONOMIC In 2024, the euro (EUR) appreciated by 0,5% against the US dollar (USD)¹⁴, but its position against other currencies relevant to the fishery and aquaculture sector varied widely. It strengthened by 1,8% against the Norwegian krone (NOK), depreciated by 2,3% against the British pound (GBP) and remained broadly stable against the Icelandic króna (ISK) with a slight 0,1% increase. During the first three quarters of 2025, the euro appreciated 3,0% against the USD and by 0,7% against the NOK, while it depreciated by 1,2% against the GBP and 2,6% against the ISK.

> The European Central Bank (ECB) raised its key interest rate¹⁵ from 0,00% in July 2022 to a peak of 4,00% in September 2023. Undertaken to curb record high inflation in the euro area, this marked its fastest tightening cycle on record. As inflationary pressures eased, the ECB initiated a gradual easing phase from mid-2024 onwards. The deposit facility rate fell from 3,75% in June 2024 to 3,00% by December, and continued to decline during 2025, reaching 2,00% in June. This progressive reduction reflected the ECB's shift toward a more neutral monetary stance, aiming to support economic recovery while keeping inflation expectations anchored near its 2% target. Inflation in the EU eased markedly between 2023 and 2025 after the exceptional price surge of 2022. The Harmonised Index of Consumer Prices (HICP)¹⁶ for the EU-27 fell from an average of 6,4% in 2023 to 2,6% in 2024, before stabilising at around 2,3% in 2025. In the euro area, inflation followed a similar path, declining from 5,4% in 2023 to 2,4% in 2025 and settling close to the ECB's target in 2025. This broad moderation was driven by easing energy and food prices, improved supply chain conditions, and the lagged effects of monetary tightening. By mid-2025, inflation

¹⁴ European Central Bank (ECB) https://www.ecb.europa.eu/stats/policy_and_exchange_rates/euro_reference_exchange_rates/html/index.en.html

¹⁵ European Central Bank (2025). Key ECB interest rates. https://www.ecb.europa.eu/stats/policy_and_exchange_rates/key_ecb_interest_rates/html/index.en.html

¹⁶ Eurostat (2025). HICP – inflation rate. https://ec.europa.eu/eurostat/databrowser/view/tec00118 custom 18856701/default/table

HIGHLIGHTS

across Member States had largely normalised, signalling a return to price stability after two years of strong volatility.

Marine fuel prices¹⁷ continued to decline through 2023 and 2024 before stabilising in 2025. After averaging 0,93 EUR/l in 2022, prices dropped to 0,72 EUR/l in 2023 and further to 0,66 EUR/l in 2024, reflecting lower crude oil quotations and easing geopolitical tensions. In 2025, marine fuel prices remained relatively stable at an average of 0,59 EUR/l, with moderate fluctuations between 0,53 EUR and 0,67 EUR per litre. The stabilisation of fuel costs provided relief to fishing operators after two years of high energy expenses, contributing to an overall improvement in operating margins across the EU fleet.

Prices for fishery and aquaculture products showed moderate growth between 2023 and 2025, following the sharp increased recorded in 2022. According to the HICP, inflation for fish and seafood¹⁸ averaged around 3,5% in 2023, eased to about 2,0% in 2024, and fluctuated between 1,5% and 3,0% during 2025. Disaggregated data show that prices for fresh or chilled fish were relatively volatile, with annual rates rising from around 1,5% in early 2024 to about 4,5% by late 2025, while frozen seafood recorded more moderate growth, generally between 1,0% and 2,0% over the same period.

At the producer level, prices for processed and preserved fish, crustaceans and molluscs¹⁹ remained elevated but showed only limited growth between 2023 and 2025. The producer price index averaged about 24% above 2021 levels in 2023, increasing slightly by 0,9% in 2024 and a further 1,7% in the three first quarters of 2025. This indicates that most of the sharp cost adjustments observed in 2022 had already stabilised from 2023 to 2024. The modest gains thereafter reflect lingering cost pressures from energy, labour and packaging, alongside improved supply chain conditions. Overall, producer and consumer price developments across the sector point to a gradual normalisation, with inflation returning to historically moderate levels while remaining marginally above pre-pandemic levels.

¹⁷ EUMOFA key economic drivers dashboard (MABUX). Included countries in the average were Belgium, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Poland, Portugal, Slovenia, Spain, and Sweden.

¹⁸ Eurostat (2025). HICP - monthly data (annual rate of change). https://ec.europa.eu/eurostat/databrowser/view/PRC_HICP_MANR_custom_18858497/default/table

1/ THE EU IN THE WORLD

1.1 GLOBAL PRODUCTION

In 2023, total global production²⁰ from both fisheries²¹ and aquaculture amounted to 227,8 million tonnes. This represented a 10-year peak and a growth of 2% or 4,8 million tonnes from 2022. Aquaculture drove the overall trend, reaching a 10-year high in 2023 with 136,1 million tonnes of farmed production. As for fisheries, it 2023 volume dropped to 91,7 million tonnes marking a decrease of 370.000 tonnes from the previous year. Total production in the EU ranked eighth in the world with 4,6 million tonnes, which was 1% higher than in 2022. This was linked to increased catches of blue whiting, whereas EU aquaculture registered a slight decrease.

China leads in terms of both aquaculture and catches, with total production increasing by 4% from 2022 to 2023. More in detail, it saw increases of 4% in aquaculture and 2% in catches. Of the major producers, which are mainly Asian countries, India recorded the most significant increase, with production from both catches and aquaculture increasing by 11%.

Russia followed in terms of relative increases from 2022, augmenting its production by 8%. In this case, the growth was led by fisheries production.

In contrast, the US fell to a decade low in total production in 2023, with a 3% drop from 2022. This decrease was mostly due to a drop in the harvest of clams as well as to decreased catches of hake, squid and skipjack tuna.

The significant drop in fisheries production in Peru also deserves special mention. For the first time in ten years, the country was not among the top 10 producers. Catches in Peru mostly include small pelagics which are prone to significant fluctuations linked to climatic variability. Indeed, Peru's production drop was due to its lower harvest of anchoveta (Engraulis ringens).

Aquaculture's share of total world production has increased continuously since 2000, and since 2013, aquaculture production has been higher than production of catches. This trend has been driven by Asian countries, where aquaculture production accounted for 92% of the world's total farmed production in 2022. It is worth noting that this applies to production of both animal products and seaweed and other algae. When only animal products are considered, aquaculture has overtaken fisheries production since 2021.

Asia is indeed the only continent where aquaculture production prevails over fishery production. It is home to the world's four top producing countries and most production is from aquaculture in each of them. This includes China, where aquaculture in 2023 accounted for 85% of production, Indonesia where it accounted for 66%, India where it reached 65% and Vietnam where it was 61%.

By contrast, in the Americas, Europe (including EU and non-EU countries) and Africa, aquaculture only accounted for one fifth of total production. Aquaculture's share of total production is even lower in Oceania, where it only reached around 15%.

²⁰ The source of production data for non-EU countries is FAO. To be noted that in this chapter, in line with FAO database, Russian figures included in the European production encompass total production in Russia.

²¹ Catches include all products fished by a country's fleet in any fishing area (both marine and inland waters), independently from the area of landing/selling. Data include catches for both food and non-food use. In line with Eurostat's guidelines on the production and dissemination of statistical data by Commission services after the UK withdrawal from the EU, since the most recent reference period is year 2023, UK is excluded from the EU aggregations of each year. In addition, EU data include Croatia since 2013, date of the EU's enlargement to this country.

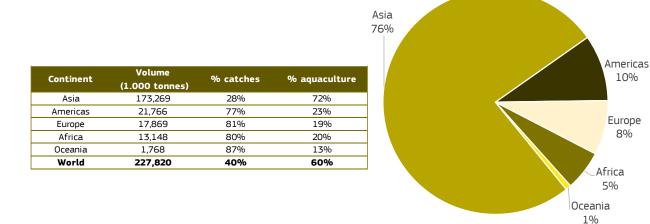
TABLE 1 TOP-15 PRODUCERS IN 2023 (1.000 TONNES)

Source: Eurostat (online data codes: fish ca main and fish aq2a) and FAO. Data include catches for both food and non-food use. Possible discrepancies in % changes and totals are due to rounding. More details can be found in the Methodological background.

	Catches	Aquaculture	Total production	% of total	% evolution of total production 2023/2022
China	13.425	78.276	91.701	40%	+4%
Indonesia	7.817	15.353	23.170	10%	+5%
India	6.178	11.321	17.499	8%	+11%
Vietnam	3.417	5.379	8.796	4%	+0.4%
Russian Federation	5.393	365	5.759	3%	+8%
Bangladesh	2.063	2.853	4.915	2%	+3%
United States of America	4.156	456	4.612	2%	-3%
EU-27	3.555	1.043	4.598	2%	+1%
Norway	2.544	1.650	4.194	2%	-2%
Chile	2.596	1.503	4.099	2%	-3%
Philippines	1.715	2.384	4.099	2%	-0.4%
Japan	2.904	879	3.783	2%	-3%
Peru	3.519	105	3.624	2%	-34%
Republic of Korea	1.317	2.304	3.621	2%	+2%
Myanmar	1.623	1.197	2.820	1%	-8%
Others	29.458	11.071	40.529	16%	+2%
TOTAL	91.681	136.140	227.820	100%	+2%

CHART 1 WORLD PRODUCTION BY CONTINENT IN 2023

Source: Source: Eurostat (online data codes: fish ca main and fish aq2a) and FAO. More details can be found in the Methodological background.



ASIA In addition to leading the world in aquaculture, Asia also leads in fisheries production. In 2023, Asia's farmed production reached a 10-year peak of 124 million tonnes, marking a 4% rise from 2022. Catches recorded a 2% increase from 2022 and totalled 48 million tonnes.

China stands out as Asia's top producer in both aquaculture and fisheries, playing a key role in shaping overall regional trends. However, this dominance is much more pronounced in aquaculture production. Indeed, in 2023, China's 78 million tonnes of farmed fish equalled 63% of Asia's aquaculture production. Further, with its 13 million tonnes of catches, China accounted for 28% of the region's fishery production.

China's most farmed species, seaweed and carp, represented more than half of its total aquaculture production. Both recorded increases in production from 2022 through 2023, the most important being that of seaweed which grew from 22,5 million tonnes to 23,1 million tonnes. Seaweed production has been followed an upward trend during the 2014–2023 decade and is destined for both food and non-food uses. Carp farming grew from 18,7 million tonnes in 2022 to 18,9 million tonnes in 2023. Although increases in carp production have been observed from 2020, they were less significant than those of seaweed. Over the 2014-2023 decade, Chinese production of seaweed surged by 48%, whereas that of carp rose by only 6%.

China's global role in farming these two species is substantial, accounting for 84% of carp and 61% of seaweed. By comparison, the EU farmed just 72.333 tonnes of carp in 2023, which represented only 0,3% of the global farmed production of this species. It also harvested almost 83.437 tonnes of seaweed, which represented a 14% increase in production since 2022. That said, EU seaweed production, which takes place almost entirely in France and Ireland, largely originates from wild harvesting and is mainly meant for non-food purposes, which limits the relevance of its comparison with Chinese production.

A significant portion of Asia's fishery production comes from bony fish (*Osteichthyes*, mostly including *Actinopterygii*), which makes up a quarter of the continent's total. Catches of bony fish are mainly made by China, Indonesia and Vietnam. Other notable increases included skipjack tuna, with higher catches in Vietnam and Japan, and mackerel, particularly in Indonesia and India.

AMERICAS

Production of fishery and aquaculture products in the Americas – namely North, Central and South America – is the second highest of the five continents. In 2023, the region produced close to 21,8 million tonnes, continuing the downward trend observed in 2022.

The total decrease from 2021 through 2023, which reached 10% or 2,4 million tonnes, was mainly attributable to a drop in Peru's harvest of anchoveta (*Engraulis ringens*), that is used in fishmeal production. Indeed, 77% of production in the Americas came from fisheries and more specifically, from Peruvian production of anchovy and US catches of Alaska pollock. As opposed to the decrease recorded for anchovy, Alaska pollock rose by 17% from 2022 reaching a total of 1,4 million tonnes. This marked a recovery after the similar decrease observed from 2021 to 2022.

American aquaculture production, on the other hand, totalled more than 5 million tonnes in 2023, which was a 2% increase from 2022 and the highest amount of the decade. This largely comprised 1,2 million tonnes of warmwater shrimp production in Ecuador and 1 million tonnes of salmon production in Chile, both of which represented 10-year peaks. By comparison, the EU's 2022 farmed production was much less, with only 246 tonnes of warmwater shrimp, mostly in France, and 9.300 tonnes of salmon, mostly in Ireland.

EUROPE

Production of fishery and aquaculture products in Europe – including both EU and non-EU countries – is the third highest in the world. In the period from 2020 through 2022, total production saw slight fluctuations of less than 1%, whereas in 2023, it reached 17,9 million tonnes, which represented a 3% increase from the previous year.

This was linked to catches increasing from 13,8 million tonnes to 14,4 million tonnes, a growth driven by the increase registered in Russian catches which reached a decade peak of 5,4 million tonnes and were the highest in Europe. Alaska pollock, the major species fished by the Russian fleet, accounted for more than one third of Russian catches. Of note, Russian catches of Alaska pollock have been stable at around 1,9 million tonnes; increases were recorded for catches of salmon and sardine, the other two major species caught by the Russian Federation. Salmon catches grew 124%, from

272.477 tonnes to 609.376 tonnes, and sardine increased 85%, from 296.458 tonnes to 547.074 tonnes. By comparison, catches of salmon and sardine in the EU totalled 944 tonnes and 151.197 tonnes, respectively, in 2023. After Russia, the next highest volume of catches can be computed as the combination of the 27 EU Member States, which totalled 3,5 million tonnes in 2023. An increase of blue whiting catches from 2022 reached a decade peak of 375.000 tonnes in 2023 and drove the overall upward trend in EU fishery production.

Norway and Iceland follow the Russian Federation and the EU in terms of fishery production in Europe. In 2023, their catches amounted to 2,5 million tonnes and 1,4 million tonnes, respectively, with Norway recording a 3% decrease from 2022 and Iceland recording a 4% decrease. Herring, blue whiting and cod are the major species fished by the two countries.

As regards aquaculture, Norway ranks first in Europe, covering almost half of all European farmed production. In 2023, aquaculture production in Norway amounted to 1,6 million tonnes, of which salmon accounted for 94% and trout for 5%. The EU, with more than 1,0 million tonnes, comes next. It has much more diversified species production, with the top five species in volume terms being mussel, trout, oyster, gilthead seabream and European seabass. The Russian Federation ranks third at a distance, with its aquaculture production that mainly included trout and carp reaching 365.269 tonnes in 2023.

AFRICA

Africa ranks fourth globally in fishery and aquaculture production, having reached 13,1 million tonnes in 2023 with a slight 0,03% increase from 2022. Catches originating from fisheries account for 87% of African production. These catches largely consist of sardine caught by Morocco and Mauritania, and freshwater fishes in Uganda. Of note, Morocco has the largest stock in the world of European sardine, and showed a significant decrease in catches in 2023. This fishery is particularly important for the EU canning sector.

Aquaculture in Africa is primarily focused on Nile tilapia in Egypt.

OCEANIA

Oceania contributes less than 1% of the world's total fishery and aquaculture production. In 2023, its production was close to 1,8 million tonnes, 87% of which was wild caught. Skipjack tuna is by far the main species caught in Oceania, totalling 625.000 tonnes in 2023, which represents more than one third of the continent's overall fishery and aquaculture production. The major producers in the region are Kiribati, Micronesia and Papua New Guinea. By comparison, this was almost four times larger than the EU's skipjack tuna production. To note, Oceania is also responsible for two thirds of the world's catches of grenadier. In 2023, New Zealand led Oceania's catch of grenadier, with 110.402 tonnes. Catches of grenadier in the EU were less than 4.000 tonnes in the same year.

Aquaculture in Oceania mainly takes place in Australia, which had 120.000 tonnes of production in 2023, mainly including salmon, and New Zealand, which had close to 110.000 tonnes, mainly including mussels.

1.2 IMPORT-FXPORT²²

This section focuses on the fishery and aquaculture products trade flows of the world's top five non-EU traders, namely China, the US, Norway, Japan and Thailand. It ranks them by value and compares their trade flows to those of the EU. Further, Chapter 4 of this report presents detailed trend analyses of EU Member States' imports and exports by species and partner countries, while also looking at the development of exchange rates of main currencies.

The trade flows²³ of the EU's fishery and aquaculture products are second only to China. China had lost the lead in 2020 during the COVID-19 pandemic, but regained it in 2021, when it reached a trade volume of more than 10,5 million tonnes.

In 2024, the EU's trade in fishery and aquaculture products dropped to 8,1 million tonnes with a total value of EUR 38,1 billion, which represented a decrease of 0,1% in volume and 0,5% in value from 2023. The volumes traded hit low levels in both 2023 and 2024 with respect to the previous five-year period, during which they had averaged 8,5 million tonnes. Further, when looking at both nominal and deflated values, this represented the third-highest value recorded in the 2015-2024 decade. The EU is a net importer. Its trade deficit in 2024 amounted to EUR 21,6 billion, which represented a recovery of 5% in real terms from 2023. The volumes exported actually decreased, against a slight increase of imports. However, the deficit diminished as import and export values went in opposite directions, with imports decreasing 1% and

CHINA

exports increasing 1%.

With an 8% increase from 2023, China's trade volumes reached more than 13 million tonnes in 2024, continuing the increasing trend that began in 2021. China's trade value had dropped 8% from 2022 to 2023, reaching EUR 41 million, which is where it remained from 2023 to 2024.

The volume increase was driven by increased exports, which reached 5,9 million tonnes thanks to their 825.000-tonne growth. The most significant exports recorded were to the US which increased by 90.430 tonnes, to Vietnam which increased by 76.000 tonnes, and to the Netherlands which saw an increase of 74.000 tonnes. Exports to the US mainly consist of frozen and prepared/preserved marine fish²⁴, whereas exports to the Vietnamese and Dutch markets mainly include products not destined for human consumption. Non-food use products represent the majority of China's exports of fishery and aquaculture products, covering almost 30% of the total volumes exported in 2024. In value, Chinese exports amounted to over EUR 20 billion in 2024, which was 2% higher than in 2023. That said, this was 12% lower than the almost EUR 23 billion recorded in 2022, when China's exports of frozen marine fish²⁵ to Japan peaked at almost EUR 500 million.

At the same time, imports registered a 1% increase in volume terms from 2023 to 2024, when they totalled 7,1 million tonnes. However, in value terms, there was a 3% decrease. Indeed, most of the volume increase regarded imports of fishmeal, whereas volume decreases of 7% and 6% were registered for shrimps²⁶ and Alaska pollock, respectively, which are valuable species that constitute a large part of Chinese imports. The main supplier of Alaska pollock to China is the Russian Federation, while Ecuador is the main origin of imports of shrimps.

²² Sources used in this chapter are Eurostat for the EU (online data code <u>DS-045409</u>) and Trade Data Monitor (TDM) for non-EU countries.

²³ The sum of its imports and exports with third countries

²⁴ No further detail by species is available.

²⁵ Ibidem.

²⁶ Ibidem.

Imports from the EU account for only a small portion of total Chinese imports of fishery and aquaculture products, covering only 3% in volume and value terms in 2024. These flows mainly comprise imports of non-food use products from Bulgaria. On the other hand, the EU market covered 18% of China's total export volume. The share is lower in value terms, at 11%, because they mainly include non-food use products, largely exported to the Netherlands.

UNITED STATES

The US ranked second after the EU as net importers of fishery and aquaculture products. Of the total 6 million tonnes traded in 2024, more than 60% was represented by imports, which amounted to 3,6 million tonnes. In value, they amounted to EUR 24,4 billion, or close to 80% of the total value. Indeed, the US mainly imports salmon from Chile and shrimps from India, Ecuador and Indonesia. Canada is a relevant supplier as well, mainly of products not destined for human consumption. From 2023 to 2024, US imports of fishery and aquaculture products grew by 3% in volume and 1% in value. The increase was mainly driven by increased imports from Vietnam and Malaysia, which reached peaks of 365.000 tonnes and 116.780 tonnes, respectively. Vietnam recorded increased imports of freshwater catfish, whereas Malaysia's imports were almost exclusively non-food use products.

Looking at US exports, 2024 marked a ten-year low in volume terms, as they reached 2,3 million tonnes for a 10% drop from 2023. They were worth a total value of EUR 6,4 billion, which was 11% lower than in both 2022 and 2023, but still 3% above the level reached three years before. These flows mainly include products for non-food uses. The main destinations of US exports are China and Canada, which both recorded decreases from 2023 to 2024. However, the decline of US exports was largely driven by the drop of exports destined for Mexico, the fifth largest market for US exports following the Republic of Korea and Japan, which in 2024 dropped to almost half the amount exported in 2023. Also of note, the 2024 exports to Mexico were actually in line with previous years, and 2023 represented an exception.

Of US exports of fishery and aquaculture products, 12% are destined for the EU market, a share that reaches almost 20% when considering the trade value. Most of these exports consist of frozen fillets of Alaska pollock imported in the Netherlands. On the other hand, only 5% of US imports come from the EU. The main EU suppliers to the US are Spain (mainly octopus) and the Netherlands (mainly salmon).

NORWAY

Norway, the world's major producer and exporter of salmon, ranks second after China in terms of total exports of fishery and aquaculture products. In 2024, its exports reached close to 2,8 million tonnes, destined in equal shares to EU and non-EU countries. In value terms, they totalled EUR 15 billion, 3% lower than 2023 due to decreased exports of cod and blue whiting to the EU. However, the total value of Norwegian exports was only 1% lower than in 2023. Indeed, exports of mackerel grew by 3% in volume and 23% in value, totalling 305.000 tonnes worth EUR 674 million. This offset the 2% value decrease recorded by exports of salmon to the EU against the 1% increase in volume terms. The main driver of the increase of Norway's mackerel exports was increased exports to China.

On the import side, a 3% decrease was observed from 2023, as the total volumes reached 1,2 million tonnes in 2024. In value terms, they totalled EUR 2,6 billion, which represented a 2% increase. One quarter of supplies originate from the EU, which in 2024, mainly covered imports of fish from Denmark used to feed salmon in Norwegian farms.

JAPAN

Of the total volumes of the Japanese trade flows of fishery and aquaculture products, imports represent more than 80%. In 2024, Japan imported 2,3 million tonnes of fishery and aquaculture products worth EUR 12,2 billion. This included a 1% increase

in volume but a 5% decrease in value from 2023. Most Japanese imports include frozen and prepared/preserved marine fish²⁷ from China, as well as shrimps²⁸ from Vietnam, India, Indonesia and Thailand. A drop in the values of imported salmon roe products from Russia and the US, and of tuna from Malta and Thailand caused the overall decrease in the value of imports.

As regards exports, the US is Japan's most relevant market in value terms, thanks to exports of scallops and frozen fillets of marine fish²⁹. Hong Kong, Taiwan and Vietnam follow as main destinations of Japanese exports of scallops. In volume terms, most of the exports from Japan include frozen miscellaneous small pelagics³⁰ and frozen whole marine fish³¹. Overall, in 2024, exports from Japan dropped to the lowest volumes recorded in ten years, decreasing by 4% from 2023 and reaching 468.475 tonnes, while value dropped 12% to EUR 1,9 billion. The volume decrease was mainly driven by the drop of exports to China which had started in 2023 – with decreases of 41% in volume and 38% in value from 2022 to 2023, followed by decreases of 77% in volume and 86% in value from 2023 to 2024. This was likely due to the ban on imports from Japan after the Fukushima water discharge³².

The EU is not a significant partner for Japanese trade flows of fishery and aquaculture products. In 2024, of the total value and volume of Japanese exports, only 3% and 1%, respectively, were represented by the EU market. The coverage is slightly higher for Japanese supplies, as 4% of imports originated from EU countries, in both value and volume terms.

THAILAND

The value of Thailand's trade balance of fishery and aquaculture products showed a surplus of EUR 1,3 billion in 2024, although the country imports higher quantities of these products than the volumes exported. In 2024, this included 2,4 million tonnes which was a 10% increase from 2023, compared to 1,6 million tonnes in 2023 which was an 8% increase from 2023. The value of exports from Thailand reached EUR 5,5 billion, with a 7% increase from 2023, whereas imports increased 1%, reaching EUR 4,2 billion.

Most of the supply of fishery and aquaculture products in Thailand include frozen skipjack tuna originating from Taiwan, Micronesia, the Republic of Korea and Nauru, which are most likely to be processed in the canning industry and then exported. Indeed, prepared/preserved tuna³³ represent the largest shares of total exports in both value and volume terms, namely 42% and 36%, respectively. The US prevails as its major destination market.

EU countries do not represent significant trade partners for Thailand. In 2024, of the total value and volume of Thailand exports, only 4% and 2%, respectively, were represented by the EU market. As regards imports, only 3% of total volumes and 4% of total values originated from EU countries.

²⁷ Ibidem.

²⁸ Ibidem.

²⁹ Ibidem

³⁰ Ibidem ³¹ Ibidem

³² Source: https://www.euronews.com/2025/05/30/china-to-resume-seafood-imports-from-japan-suspended-after-fukushima-wastewater-discharge

³³ No further detail by species is available

TABLE 2EXPORTS OF FISHERIES AND AQUACULTURE PRODUCTS OF MAIN WORLD TRADERS (VOLUME IN MILLION TONNES AND NOMINAL VALUE IN EUR BILLION)
AND % OF EXPORTS DESTINED FOR THE EU ON TOTAL IN 2024

Source: EUMOFA elaboration of data from EUROSTAT (for EU trade flows, online data code DS-045409) and Trade Data Monitor (for non-EU countries). Possible discrepancies in % changes are due to rounding.

	2020		20	21	2022		20	23	2024		2024 /	2023
	Volume	Value										
China	4,91	17,11	4,86	19,24	4,87	22,97	5,06	19,77	5,89	20,16	+16%	+2%
Norway	2,73	9,87	3,10	11,94	2,95	15,03	2,86	15,13	2,76	14,98	-4%	-1%
EU	2,54	6,87	2,42	6,76	2,31	8,07	2,22	8,13	2,20	8,25	-1%	+1%
US	2,74	5,59	2,74	6,21	2,52	7,38	2,61	7,22	2,33	6,41	-10%	-11%
Thailand	1,59	5,13	1,51	4,69	154	5,64	1,48	5,13	1,59	5,50	+8%	+7%
Japan	0,61	1,80	0,66	2,17	0,65	2,58	0,49	2,18	0,47	1,92	-4%	-12%

TABLE 3
IMPORTS OF FISHERIES AND AQUACULTURE PRODUCTS OF MAIN WORLD TRADERS (VOLUME IN MILLION TONNES AND NOMINAL VALUE IN EUR BILLION)
AND % OF IMPORTS ORIGINATING FROM THE EU ON TOTAL IN 2024

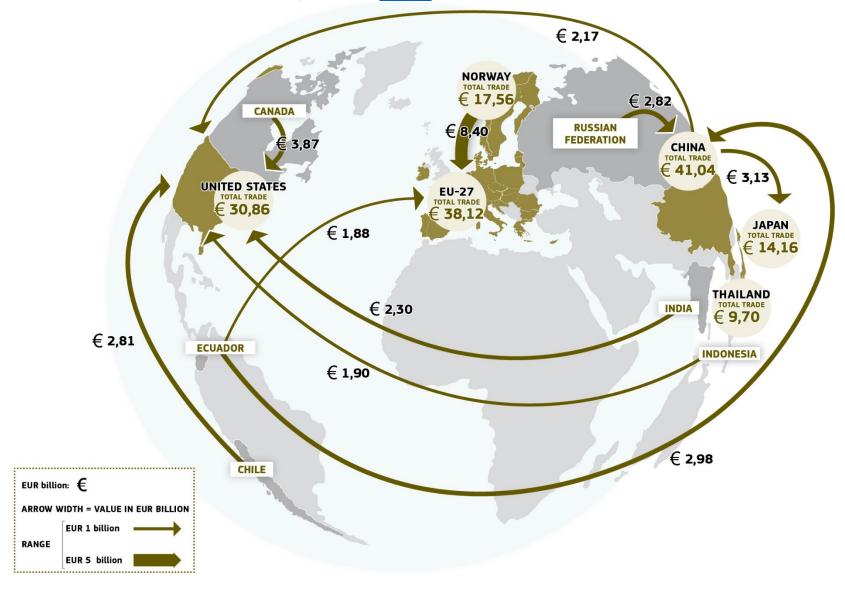
Source: EUMOFA elaboration of data from EUROSTAT (for EU trade flows, online data code DS-045409) and Trade Data Monitor (for non-EU countries). Possible discrepancies in % changes are due to rounding.

	20	20	2021		20	2022		23	2024		2024 / 20	
	Volume	Value	Volume	Value								
EU	6,16	24,20	6,24	25,85	6,12	31,92	5,93	30,18	5,95	29,87	+0,3%	-1%
US	3,30	19,47	3,80	24,63	3,84	29,41	3,53	24,32	3,64	24,45	+3%	+1%
China	5,75	13,53	5,89	15,14	6,62	22,15	7,03	21,57	7,14	20,88	+1%	-3%
Japan	2,40	12,03	2,36	12,33	2,38	14,80	2,27	12,84	2,29	12,23	+1%	-5%
Thailand	2,21	3,47	2,16	3,46	2,13	4,45	2,17	4,17	2,37	4,20	+10%	+1%
Norway	0,83	1,48	1,19	1,88	1,22	2,42	1,20	2,53	1,17	2,57	-3%	+2%

CHART 2

TOP-10 TRADE FLOWS IN VALUE OF FISHERY AND AQUACULTURE PRODUCTS IN THE WORLD (2024, NOMINAL VALUES)

Source: EUMOFA elaboration of data from EUROSTAT (for EU trade flows, online data code DS-045409) and Trade Data Monitor (for non-EU countries).



1.3 CONSUMPTION

According to the OECD-FAO Agricultural Outlook forecasts 2025-2034³⁴, the EU ranks 15th worldwide in per capita consumption of fish³⁵ in 2025, and this level is expected to decrease over the following three years.

TABLE 4PER CAPITA HUMAN CONSUMPTION OF FISH. TOP-20 COUNTRIES ARE RANKED ACCORDING TO 2025 PER CAPITA CONSUMPTION. (FORECASTS, VOLUMES IN KG).

Source: OECD

rec. OLCD	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Malaysia	54,99	55,38	55,31	55,81	56,10	56,32	56,31	56,60	56,95	57,19
Norway	54,21	54,29	54,15	54,77	55,09	55,22	55,10	55,40	55,77	56,01
Korea	53,94	54,15	53,97	54,42	54,68	54,84	54,77	54,97	55,23	55,40
China	46,32	46,95	47,30	47,99	48,53	49,10	49,49	50,14	50,84	51,47
Indonesia	43,38	44,02	44,67	44,40	44,55	44,59	44,26	43,92	43,93	43,97
Vietnam	42,79	43,94	44,07	43,93	44,29	44,87	45,13	45,98	46,72	47,64
Japan	41,98	41,92	41,75	42,09	42,21	42,23	42,06	42,12	42,24	42,27
Thailand	32,01	32,29	32,42	32,93	33,30	33,63	33,77	34,13	34,52	34,83
New Zealand	27,60	27,67	27,59	27,89	28,06	28,19	28,19	28,44	28,68	28,88
Israel	26,98	27,35	27,48	28,09	28,62	29,09	29,43	29,93	30,47	30,96
Peru	26,88	26,95	25,64	27,10	27,35	27,68	26,34	28,09	28,43	28,80
Philippines	24,49	24,69	24,73	25,02	25,22	25,25	25,16	25,17	25,21	25,16
United States	23,20	23,13	23,01	23,25	23,40	23,54	23,56	23,71	23,90	24,05
Russia	22,63	22,51	22,43	22,60	22,68	22,66	22,55	22,55	22,60	22,59
EU	21,60	21,41	21,17	21,05	21,10	21,08	21,02	21,11	21,20	21,07
Egypt	21,01	21,13	21,30	21,87	21,92	22,05	22,15	22,36	22,64	22,88
Canada	20,99	21,46	21,41	21,65	21,60	21,57	21,44	21,44	21,49	21,50
United Kingdom	18,53	18,30	18,18	18,28	18,29	18,31	18,27	18,33	18,44	18,51
Switzerland	15,98	15,97	15,97	15,96	15,97	15,98	15,99	16,01	16,04	16,06
Chile	15,34	15,48	15,54	15,59	15,85	15,96	15,99	15,89	16,28	16,40
World	21,43	21,51	21,46	21,53	21,60	21,65	21,60	21,68	21,78	21,84

³⁴ There is no consolidated data available at the time of writing and these data are not directly comparable with other data in this report. Therefore, forecasts should mostly be used to indicate the annual trend. Data in this section are collected from the OECD website (Organization for Economic Co-operation and Development). More details available at the link:

 $https://data-explorer.oecd.org/vis2lc=en&dfids]=dsDisseminateFinalDMZ\&dffid]=DSD_AGR%40DF_OUTLOOK_2025_2034\&dffag]=OECD.TAD.ATM\&dffvs]=1.1\&dq=OECD.A.CP_C_0111...\&pd=2010%2C2034\&to[TIME_PERIOD]=false$

³⁵ This refers to the commodity "Fish and other fishing products".

2/ MARKET SUPPLY

2.1 SUPPLY BALANCE AND SELF-SUFFICIENCY OVERVIEW

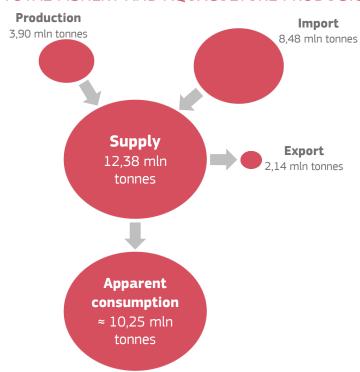
In 2023, the EU's³⁶ supply of fishery and aquaculture products for human consumption – including both domestic production and imports – totalled 12,38 million tonnes in live weight equivalent (LWE). This represented the lowest level of the 2014–2023 decade. The supply had been declining since 2018, except for a brief uptick between 2020 and 2021 that followed a sharp drop in 2020 due to the COVID crisis, which affected catches, aquaculture production and imports. Between 2021 and 2022, as catches, aquaculture and imports all decreased, the supply dropped again, though to a lesser extent of 2%. In 2023, the downward trend continued with a further 3% decline. Although supply from catches showed signs of recovery³⁷, with an increase of 1% or 22.679 tonnes LWE from 2022, this was not enough to offset the reductions in aquaculture production of 4% or 44.695 tonnes LWE and, more importantly, decreases in imports of 3% or 295.930 tonnes LWE. As a result, the EU's estimated apparent consumption³⁸ fell by 2%, reaching 10,25 million tonnes LWE which was the lowest level in ten years and nearly 240.000 tonnes LWE less than in 2022.

CHART 3

EU SUPPLY BALANCE (2023, LIVE WEIGHT EQUIVALENT, FOOD USE ONLY)

Source: EUMOFA, based on EUROSTAT (online data codes: fish ca main, fish aq2a and DS-045409) and FAO data. Details on the sources and on the methodological approach used for assessing the production method of imports and exports and the destination use of catches can be found in the Methodological background.

TOTAL FISHERY AND AQUACULTURE PRODUCTS



³⁶ In line with Eurostat's guidelines on the production and dissemination of statistical data by Commission services after the UK withdrawal from the EU, since the most recent reference period is year 2023, the UK is excluded from the EU aggregations of each year. In addition, EU data include Croatia since 2013, date of the EU's enlargement to this country.

³⁷ It is worth underlying that the data on fishery production included in the supply balance regard catches for human consumption, which is thus different from the data on landings analysed in Chapter 5 of this report. For the definitions, please refer to the Methodological background.

³⁸ The definition of "apparent consumption" is available in the "Supply balance sheet" section of the Methodological background.

FISHERY PRODUCTS

AQUACULTURE PRODUCTS

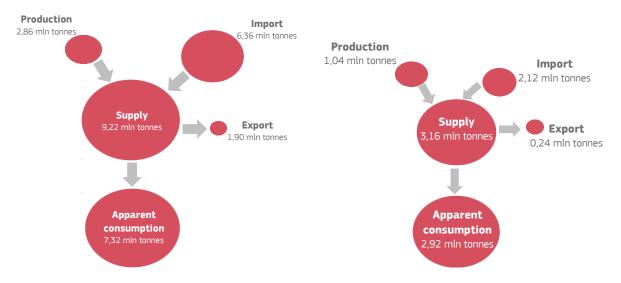


TABLE 5

EU SUPPLY BALANCE FOR FISHERY AND AQUACULTURE PRODUCTS BY COMMODITY GROUP AND PRODUCTION METHOD (2023, LIVE WEIGHT EQUIVALENT, FOOD USE ONLY)

Source: EUMOFA, based on EUROSTAT (online data codes: fish ca main, fish aq2a and DS-045409) and FAO data. Details on the sources and on the methodological approach used for assessing the production method of imports and exports and the destination use of catches can be found in the Methodological background

Commodity group	Production	Production (tonnes)		Import (tonnes)		Export (tonnes)		Apparent consumption (tonnes)			Apparent consumption per capita (kg)		
	Wild	Farmed	Wild	Farmed	Wild	Farmed	Wild	Farmed	Total	Wild Farm		Total	
Bivalves and other molluscs and aquatic invertebrates	154.882	491.375	149.132	178.442	33.250	23.199	270.764	646.618	917.382	0,60	1,44	2,05	
Cephalopods	88.901	0	635.893	0	75.107	0	649.687	0	649.687	1,45	0	1,45	
Crustaceans	113.574	656	418.456	432.930	142.490	3.525	389.540	430.061	819.602	0,87	0,96	1,83	
Flatfish	74.517	14.005	154.562	977	82.102	429	146.977	14.553	161.528	0,33	0,03	0,36	
Freshwater fish	88.933	97.960	60.591	202.647	7.216	5.769	142.308	294.838	437.147	0,32	0,66	0,98	
Groundfish	587.547	0	2.352.739	473	477.763	0	2.462.523	473	2.462.996	5,50	0	5,50	
Miscellaneous aquatic products	80.450	1.164	289.230	0	61.083	0	308.597	1.164	309.761	0,69	0	0,69	
Other marine fish	234.503	220.509	376.665	114.875	143.965	39.915	467.203	295.469	762.674	1,04	0,66	1,70	
Salmonids	11.384	184.754	60.759	1.192.355	474	160.181	71.669	1.216.928	1.288.597	0,16	2,72	2,88	
Small pelagics	1.018.137	0	719.971	0	559.222	0	1.178.886	0	1.178.886	2,63	0	2,63	
Tuna and tuna-like species*	408.372	32.658	1.142.951	632	314.849	11.133	1.236.474	22.157	1.258.631	2,76	0,05	2,81	
Total	2.861.200	1.043.081	6.360.949	2.123.331	1.897.521	244.151	7.324.628	2.922.261	10.246.891	16,36	6,53	22,89	

Estimates based on data available as of July 2025. The figures in this table may differ from those currently available on the EUMOFA website, which are constantly updated. Possible discrepancies in totals are due to rounding.

In 2023, the average EU citizen consumed an estimated 22,89 kg LWE of fishery and aquaculture products. Most of this consumption consisted of wild products and, more specifically, of imported fishery products³⁹. Wild products accounted for 16,36 kg LWE of total per capita apparent consumption, while farmed products made up the remaining 6,53 kg LWE.

The available data on catches do not distinguish between catches destined for human consumption and catches destined for non-food uses. Thus EUMOFA elaborates estimates based on proxies⁴⁰. The figures on catches presented in this chapter refer to estimated catches intended for human consumption, as included in the EU supply balance. An increase in supply of catches from 2022 to 2023 was mainly due to

^{*} Apparent consumption of the commodity group "tuna and tuna-like species" includes 95% tuna and 5% swordfish.

³⁹ For the assessment of the origin of imports and exports in terms of production method, please refer to the Methodological background.

⁴⁰ For the estimation of the catc^hes considered not to be destined to human consumption, please refer to the Methodological background.

increased catches of blue whiting. At the same time, it is estimated that catches for non-food uses increased as well, driven by catches of blue whiting and sandeels.

TABLE 6

EU PRODUCTION (TONNES, LIVE WEIGHT)

Source: EUMOFA, based on EUROSTAT (online data codes: fish ca main and fish aq2a) and FAO data. Details on the sources and on the methodological approach used to assess the destination use of catches can be found in the Methodological background. Possible discrepancies in totals are due to rounding.

		2019	2020	2021	2022	2023
Food use	Catches	3.502.245	2.963.236	2.920.197	2.838.521	2.861.200
roou use	Aquaculture	1.126.709	1.088.398	1.129.157	1.087.776	1.043.081
1	otal production					
destir	ned for food use	4.628.954	4.051.634	4.049.354	3.926.297	3.904.281
Non-food use	Catches	703.690	905.728	671.050	627.202	693.636

The EU maintains a high level of apparent consumption of fishery and aquaculture products mainly due to imports from third countries.

Self-sufficiency, defined as the capacity of EU Member States to meet demand through their own production, can be estimated by calculating the ratio of domestic production to domestic apparent consumption.

TABLE 7

SELF-SUFFICIENCY RATES BY COMMODITY GROUP

Source: EUMOFA, based on EUROSTAT (online data codes: <u>fish_ca_main</u>, <u>fish_aq2a</u> and <u>DS-045409</u>), FAO, national administrations and FEAP data. Details on the sources used can be found in the Methodological background.

Commodity groups	Self-sufficiency rates									
and share of total apparent consumption in 2023	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Groundfish (25%)	25%	26%	23%	26%	24%	23%	22%	21%	20%	24%
Salmonids (13%)	18%	17%	19%	18%	18%	17%	17%	16%	15%	15%
Tuna and tuna-like species (12%)	40%	32%	34%	32%	38%	33%	29%	31%	29%	35%
Small pelagics (12%)	124%	115%	103%	104%	101%	98%	96%	95%	95%	86%
Bivalves and other molluscs and aquatic invertebrates (9%)	57%	63%	65%	75%	77%	80%	73%	74%	70%	70%
Crustaceans (8%)	18%	17%	17%	16%	19%	17%	16%	14%	15%	14%
Other marine fish ⁴¹ (7%)	71%	68%	66%	65%	61%	60%	59%	60%	58%	60%
Cephalopods (6%)	21%	18%	14%	13%	12%	12%	13%	12%	16%	14%
Freshwater fish (4%)	34%	36%	38%	42%	39%	39%	45%	47%	43%	43%
Miscellaneous aquatic products (3%)	18%	7%	17%	14%	14%	24%	17%	25%	22%	26%
Flatfish (2%)	68%	70%	65%	66%	63%	64%	67%	62%	57%	55%
Total	46.1%	44.6%	44.0%	44.6%	43.4%	41.7%	38.9%	38.2%	37.4%	38.1%

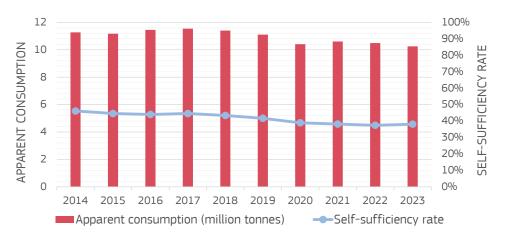
During the 2014–2023 decade, the EU's self-sufficiency in fishery and aquaculture products showed significant variation. It reached a high point of 46,1% in 2014, largely attributable to significant production levels, particularly in the fishery sector. That said, a clear downward trend emerged in 2018, primarily driven by the continuous reduction in domestic production from both fishery and aquaculture. This trend continued until

⁴¹ Species belonging to this group are gilthead seabream and other seabreams, seabass, monk, sharks, ray, red mullet, gurnard, scabbardfish, cusk-eel, dogfish, picarel, John Dory, smelt, ray's bream, weever, cobia, and marine species not included in other commodity groups. For more information, please consult the "Harmonisation" page of the EUMOFA website at the link http://www.eumofa.eu/harmonisation.

2022, when the self-sufficiency rate dropped to 37,4%, the lowest point in the analysed period. In 2023, the rate rose slightly to 38,1%, returning to a level comparable with that of 2021.

CHART 4
EU APPARENT
CONSUMPTION AND
SELF-SUFFICIENCY
RATES FOR FISHERIES
AND AQUACULTURE
PRODUCTS

Source: EUMOFA, based on EUROSTAT (online data codes: online data codes: fish ca main, fish aq2a and DS-045409), FAO, national administrations and FEAP data. Details on the sources used can be found in the Methodological background.



2.2 ANALYSIS BY MAIN SPECIES

TABLE 8
SELF-SUFFICIENCY
RATES
OF TOP-15 MOST
CONSUMED PRODUCTS
IN THE EU (2023)

Source: EUMOFA, based on EUROSTAT (online data codes:

fish ca main, fish aq2a
and DS-045409) and FAO
data. Details on the sources
used can be found in the
Methodological background.

Products ⁴² and share of total apparent consumption	Per capita consumption (kg, live weight equivalent)	Self-sufficiency rate
Tuna (12%)	2,68	34%
Salmon (10%)	2,39	1%
Alaska pollock (8%)	1,78	0%
Shrimps (7%)	1,59	11%
Cod (7%)	1,53	5%
Mussel (5%)	1,14	74%
Hake (4%)	1,01	40%
Herring (4%)	0,98	67%
Squid (3%)	0,61	15%
Surimi ⁴³ (2%)	0,54	n.a.
Mackerel (2%)	0,50	87%
Sardine (2%)	0,49	67%
Trout (2%)	0,46	84%
Saithe (=Coalfish) (2%)	0,36	11%
Gilthead seabream (1%)	0,33	74%

Meeting the EU's demand for fishery and aquaculture products chiefly relies on imports – mainly of tuna, salmon, Alaska pollock, shrimps and cod. In 2023, the combination of these five species accounted for 44% of the EU's total apparent consumption of fishery and aquaculture products. For this group, the EU's overall self-sufficiency rate was only 12%.

The segments below focus on the evolution of self-sufficiency for the 15 products with the highest apparent consumption in the EU.

⁴² Some species are grouped in a single product, namely: mussel (*Mytilus* spp. + other mussels), tuna (skipjack, yellowfin, albacore, bigeye, bluefin and miscellaneous) and shrimp (warmwater shrimps, coldwater shrimps, deep-water rose shrimps, shrimp *Crangon* spp. and miscellaneous shrimps).

⁴⁵ As surimi is made of different species and there are no statistics specifically referring to surimi production, the self-sufficiency rate cannot be calculated for this product.

TUNA

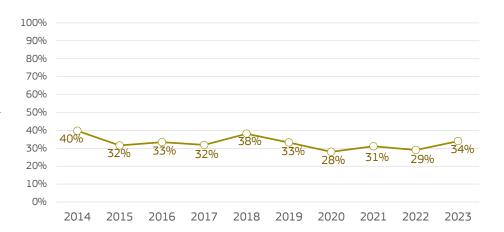
In 2023, the apparent consumption of the commodity group "tuna and tuna-like species" included 95% tuna and 5% swordfish. The self-sufficiency rate of this category reached 35%, or 34% when considering tuna only.

During the 2014–2013 decade analysed, the EU had shown the highest level of self-sufficiency for tuna in 2014. The establishment of free trade agreements with major producing countries, coupled with an increase in Autonomous Tariff Quotas (ATQs)⁴⁴ for tuna imports from 2013 onward, led to higher import volumes and a decline in self-sufficiency in 2015. However, it should be recognized that these imports include a big share of EU catches by distant water fleets that are landed in third countries and then imported again to the EU. The rate remained relatively stable until 2017, but rose in 2018 due to increased catches of skipjack tuna by the Spanish and French fleets and reduced imports. However, these catches began to decline in 2019, continuing into 2020, which meant a further drop in self-sufficiency. From 2020 through 2021, self-sufficiency recovered slightly due to the lowest imports since 2016 and to increased catches. In 2022, a new decrease in catches combined with growing imports caused self-sufficiency to drop once again. The trend reversed in 2023, with self-sufficiency rising to 34%, driven by increases in imports and production from both fishery and aquaculture.

CHART 5

SELF-SUFFICIENCY RATE FOR TUNA

Source: EUMOFA, based on EUROSTAT (online data codes: fish ca main, fish aq2a and DS-045409) and FAO data. Details on the sources used can be found in the Methodological background.



SALMONIDS

SALMON, TROUT

In 2023, less than 1% of the salmon consumed in the EU was produced domestically. Most EU imports of salmon originated from Norway, which accounted for more than 80% of total import volumes. Additionally, intra-EU trade flows between EU Member States largely consist of re-exports of products originally imported from third countries. By contrast, thanks to well established aquaculture facilities, the EU maintained a high level of self-sufficiency for trout⁴⁵, averaging close to 90% throughout the 2014–2023 decade.

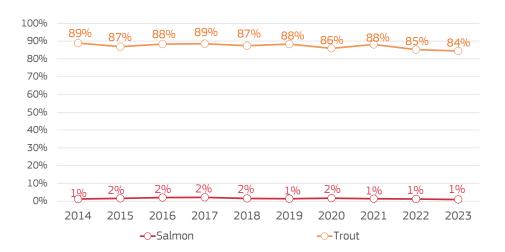
⁴⁴ Autonomous Tariff Quotas aim to stimulate economic activity of Union industries, improving competitive capacity, creating employment, modernising structures etc. They are normally granted to raw materials and semi-finished goods or components which are available in the EU but in insufficient quantities. More information is available at the link https://taxation-customs.ec.europa.eu/customs-4/calculation-customs-duties/customs-tariff/quotas-tariff-quotas-and-ceilings.en/.

⁴⁵ This consists of freshwater and ocean farmed trout.

CHART 6 SELF-SUFFICIENCY RATE FOR MOST CONSUMED SALMONIDS

Source: EUMOFA, based on EUROSTAT (online data codes:

fish ca main, fish aq2a
and DS-045409) and FAO data. Details on the sources used can be found in the Methodological background



GROUNDFISH

COD, ALASKA POLLOCK, HAKE, SAITHE Four groundfish species – namely Alaska pollock, cod, hake and saithe – had a combined per capita apparent consumption of 4,69 kg LWE in 2023, which accounted for 29% of the EU's total apparent consumption of products from fishery. When farmed products are also considered, this share corresponds to 20% of total apparent consumption.

As all Alaska pollock consumed in the EU is imported, Member States are completely dependent on non-EU suppliers to meet demand. Alaska pollock was the third most consumed species in the EU, after tuna and salmon. For the other three groundfish species – cod, hake and saithe – the EU's combined self-sufficiency rate was 18% in 2023.

For cod, self-sufficiency remained at 5%, maintaining its lowest level in a decade at nearly half of the 10-year average of 9%. This decline was largely driven by a downward trend in catches from Spain, Denmark, France, Portugal and Poland, which was likely due to both an overall reduction in cod quotas over the past years and reallocations post-Brexit⁴⁶.

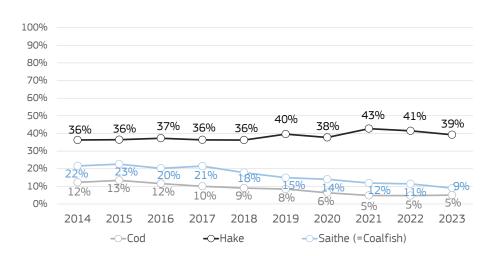
Saithe self-sufficiency also continued to decrease, hitting 9%, its lowest level of the decade, in 2023. Until 2021, the downward trend was mainly due to rising apparent consumption that was reliant on imports, while EU catches steadily decreased. From 2021 to 2022, catches stabilised, with the French fleet, the main producer of saithe, reporting a 3% increase over the previous year. However, a new drop in catches was recorded in 2023, which was linked to decreased catches by the German fleet, due to a decrease in quotas' allocation for Germany.

For hake, self-sufficiency fell from its peak of 43% in 2021 to 39% in 2023, though this remained slightly above the 10-year average of 38%. The decline was primarily due to a drop in catches by the Spanish fleet.

⁴⁶ After the UK's withdrawal from the EU, the UK share for both cod and saithe has risen gradually under the Trade and Cooperation Agreement (TCA).

CHART 7 SELF-SUFFICIENCY RATE FOR MOST CONSUMED GROUNDFISH

Source: EUMOFA, based on EUROSTAT data (online data codes: <u>fish ca main</u> and <u>DS-045409</u>). Details on the sources used can be found in the Methodological background.



SMALL PELAGICS

HERRING, MACKEREL, SARDINE With catches of 1,02 million tonnes LWE in 2023, small pelagics were estimated to cover 26% of the total EU production of fishery and aquaculture products for human consumption in the EU. When considering only wild production, their share increased to 36%. This level of production was well above EU imports of small pelagic species, which totalled less than 720.000 tonnes LWE in the same year, indicating that the EU is largely self-sufficient in meeting demand for small pelagics. In some years, the EU had a combined self-sufficiency of 100% or higher for the three most consumed species of this group, namely herring, sardine and mackerel.

In 2023, herring self-sufficiency plummeted to 67%, reflecting both reduced production and increased imports. This is also a shared stock, which, as a result of the EU-UK Trade and Cooperation Agreement, imposes a transfer to the UK, so the EU share is lower than before Brexit.

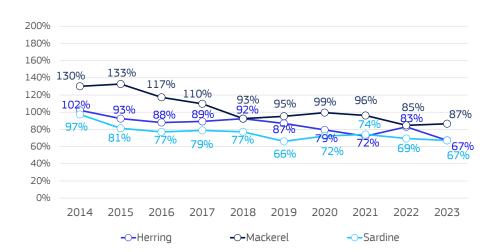
For mackerel, the EU met its total demand with self-sufficiency rates above 100% from 2013 to 2017. However, catches of mackerel have experienced a decreasing trend since 2018, resulting in reduced self-sufficiency. A decade low of 85% was observed in 2022, followed by a modest recovery to 87% in 2023. This increase coincided with higher EU production but also with growing imports. Quotas for mackerel have been more difficult to determine post Brexit, as more parties – the EU, UK, Norway, Faroe Islands, Iceland, Greenland – are involved. This has meant that quota negotiations between other coastal states may reduce (or limit) the EU's quota share.

Regarding sardines, the EU's self-sufficiency dropped to 67% in 2023, continuing the decreasing trend started in 2022. From 2018 through 2019, declining catches and rising imports had already reduced self-sufficiency from 77% to 66%. In 2020, major producers – Croatia, France, Spain, the Netherlands and Portugal – registered increased catches⁴⁷, offsetting declines from Italian and Greek fleets and a further rise in imports. In 2021, both imports and catches decreased slightly, but in 2022 and 2023, catches dropped by 5% and 13%, respectively. At the same time, imports rose by 1% in 2022, contributing to the decline in self-sufficiency, and then fell by 9%, which in terms of self-sufficiency, could not offset the lower supply in production.

⁴⁷ To note, these countries are not targeting the same stocks, which are subject to different management measures.

CHART 8 SELF-SUFFICIENCY RATE FOR MOST CONSUMED **SMALL PELAGICS**

Source: EUMOFA, based on EUROSTAT data (online data codes: fish ca main and DS-045409). Details on the sources used can be found in the Methodological background.



OTHER PRODUCTS OF DIFFERENT **COMMODITY GROUPS**

SHRIMPS, MUSSEL, SQUID, SURIMI, GILTHEAD SEABREAM

Other highly consumed products in the EU include shrimps (Crustaceans group), mussel (Bivalves and other molluscs and aquatic invertebrates), squid (Cephalopods), surimi (Miscellaneous aquatic products) and gilthead seabream (Other marine fish). Among the EU's most consumed species, in addition to small pelagics, mussel and gilthead seabream are among the few showing high levels of self-sufficiency, also due to the well-established aquaculture facilities. In 2023, both recorded a self-sufficiency rate of 74%, a decrease from 2022 that was mainly due to decreased aquaculture production. For gilthead seabream, this was also accompanied by increased supply from outside the EU (mainly Türkiye).

On the other hand, the EU is highly dependent on imports of shrimps and squid.

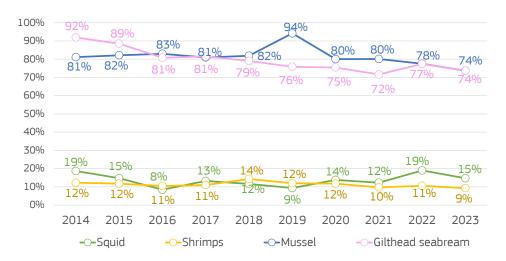
The self-sufficiency for shrimps averaged 11% in the 10-year period analysed, without showing notable variations. The most consumed shrimp species, which are mainly supplied through imports, are warmwater shrimps and Argentine red shrimp, frozen or prepared/preserved.

In the case of squid, self-sufficiency showed remarkable variations in the last two years. It reached 19% in 2022, with a 12% jump from 2021, and then dropped to 15% in 2023. This evolution reflected the changes in catches by the Spanish fleet.

The self-sufficiency rate of surimi cannot be estimated, as it is a processed product composed of various species, mainly Alaska pollock and blue whiting, for which specific production statistics are not available. The EU's surimi production – and consequently its consumption - relies heavily on imports of surimi base from outside the EU, particularly from Alaska pollock from the United States. The main EU markets for surimi are France, Spain and Italy.

CHART 9 SELF-SUFFICIENCY RATE FOR OTHER MOST CONSUMED PRODUCTS

Source: EUMOFA, based on EUROSTAT (online data codes: fish ca main, fish aq2a and DS-045409) and FAO data. Details on the sources used can be found in the Methodological background.



3/ CONSUMPTION

3.1 OVERVIEW FOR TOTAL FISHERY AND AOUACULTURE PRODUCTS

APPARENT CONSUMPTION

In 2023, apparent consumption in the EU was estimated to reach the lowest level of the past decade at 10,25 million tonnes LWE.

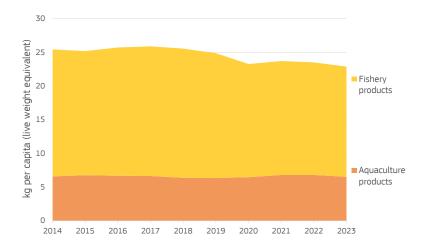
The EU's apparent consumption of fishery and aquaculture products averaged close to 11 million tonnes LWE or 24,6 kg LWE per capita during the 2014 to 2023 decade. From 2018–2023, the last years of this period, the EU's apparent consumption followed a downward trend, with the exception of one temporary increase of 2% from 2020 to 2021 – driven by increases aquaculture production and imports.

In 2023, apparent consumption in the EU was estimated to have reached 10,25 million tonnes LWE. This corresponded to 22,89 kg LWE per capita, which was the lowest level of the period analysed and a 3% decrease from 2022. This decrease was linked to reduced aquaculture production and imports. Notably, although the supply from catches registered an increase from 2022 to 2023, the apparent consumption of wild products was the lowest in ten years, namely 7,32 million tonnes LWE or 16,36 kg LWE per capita. By contrast, apparent consumption of farmed products reached 2,92 million tonnes LWE or 6,53 kg LWE per capita, which remained close to its 10-year average.

CHART 10 PER CAPITA APPARENT CONSUMPTION OF FISHERY AND AQUACULTURE PRODUCTS

Source: EUMOFA, based on EUROSTAT (online data codes:

fish ca main, fish aq2a
and DS-045409) and FAO
data. Details on the sources
and the methodological
approach used for assessing
the production method of
imports and exports and the
destination use of catches can
be found in the Methodological
background.

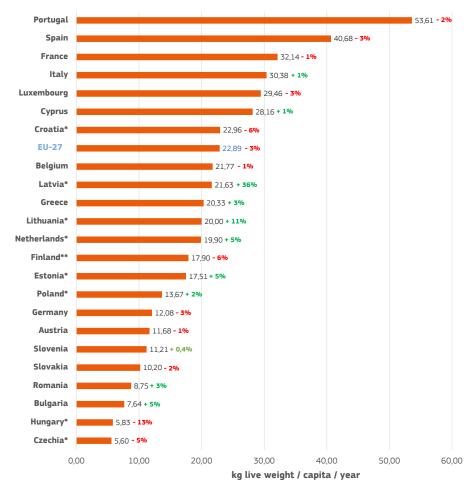


According to EUMOFA and national estimates⁴⁸, Portugal remains the major EU consumer of fishery and aquaculture products. This position was confirmed in 2023, although its per capita apparent consumption followed a downward trend after a peak in 2018 – dropping from circa 61 kg LWE in 2018 to 53,61 kg in 2023. A similar decrease was also observed in the overall EU apparent consumption, particularly for the other two major consuming countries, namely Spain and France.

⁴⁸ It is worth underlining that the methodologies for estimating apparent consumption at EU and Member State levels are different, the first based on data and estimates as described in the Methodological background, the second also requiring the adjustment of abnormal trends due to the higher impact of stock changes. Where EUMOFA estimates of per capita apparent consumption continued to show high annual volatility even with these adjustments, national contact points were contacted to confirm these estimates or to provide their own figures. These are marked with a * in Chart 11.

CHART 11
PER CAPITA APPARENT CONSUMPTION OF FISHERY AND AQUACULTURE PRODUCTS BY MEMBER STATE IN 2023
AND % VARIATION 2023/2022





*Data were provided by the following National sources. Croatia: Ministry of Agriculture, Forestry and Fisheries; Czechia: CZSO Czech Statistical Office; Estonia: Estonia: Institute of Economic Research – EKI; Hungary: Institute of Agricultural Economics; Latvia: University of Life Science and Technology and Ministry of Agriculture; Lithuania: Agricultural Data Center; Netherlands: Dutch Fish Marketing; Poland: Institute of Agricultural and Food Economics – National Research Institute.

**For Finland, estimates are not aligned with those of the Natural Resources Institute.

Denmark, Ireland, Malta and Sweden are not included in this Chart. Denmark: the Danish Fisheries Agency could not provide any estimates but, according to estimates made by the University of Copenhagen for the latest years, per capita apparent consumption has been between 20,00-25,00 kg LWE; Ireland: the Sea Fisheries Protection Authority could not provide estimates, but EUMOFA has estimated that the average per capita apparent consumption over the last three years has been around 20,00 kg LWE; Malta: due to the relevance of imports of frozen fish likely used directly as fish feed in the bluefin tuna fattening industry, available data for Malta do not allow to produce precise estimates. Also, in small countries such as Malta, tourism has a significant impact on total consumption. Considering this, annual per capita apparent consumption can be estimated between 30-40 kg LWE. Sweden: the Swedish Board of Agriculture could not provide estimates but as reported by the Swedish research institute RISE, the consumption in 2023 was 10 kg LWE/per person per year or 1,6 portions person per week.

Salmon was by far the species showing the highest apparent consumption throughout the analysed 10-year period. It should be noted that in this chapter, the product category "tuna" includes several main commercial tuna species⁴⁹, which explains why it has higher apparent consumption than salmon. The same consideration applies to the "shrimps" category which aggregates various species of shrimps and prawns.

Table 9 shows EUMOFA's estimates of per capita apparent consumption for the 15 most consumed fishery and aquaculture products in the EU.

⁴⁹ Skipjack, yellowfin, albacore, bigeye, bluefin and miscellaneous tunas.

APPARENT
CONSUMPTION
OF TOP 15 MOST
CONSUMED PRODUCTS
(2023)

Source: EUMOFA, based on EUROSTAT (online data codes:

fish ca main, fish aq2a
and DS-045409) and FAO
data. Details on the sources
and on the methodological
approach used for assessing
the production method of
imports and exports and the
destination use of catches can
be found in the Methodological
background.

Products	Per capita consumption (kg, LWE)	Consumption evolution 2023/2022	% wild	% farmed
Tuna	2,68	-9%	98,2%	1,8%
Salmon	2,39	-5%	5,7%	94,3%
Alaska pollock	1,78	+7%	100%	0%
Shrimps	1,59	-6%	42,0%	58,0%
Cod	1,53	-6%	99,9%	0,1%
Mussel	1,14	-6%	7,1%	92,9%
Hake	1,01	-2%	100%	0%
Herring	0,98	+12%	100%	0%
Squid	0,61	-16%	100%	0%
Surimi	0,54	-10%	100%	0%
Mackerel	0,50	-9%	100%	0%
Sardine	0,49	-10%	100%	0%
Trout	0,46	-1%	0,9%	99,1%
Saithe (=Coalfish)	0,36	-3%	100%	0%
Gilthead seabream	0,33	+2%	2,4%	97,6%
Other products	6,48	+2%	77,4%	22,6%
Total	22.89	-3%	71.5%	28.5%

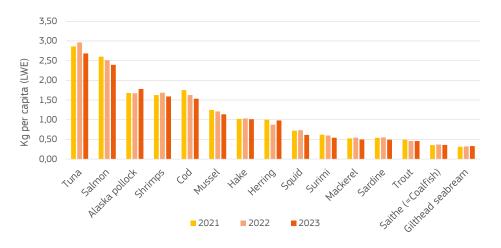
ANALYSIS BY MAIN SPECIES

CHART 12

APPARENT CONSUMPTION OF TOP 15 MOST CONSUMED PRODUCTS, THREE-YEAR TREND

Source: EUMOFA, based on EUROSTAT (online data codes:

fish ca main, fish aq2a
and) and FAO data. Details on the sources and on the methodological approach used for assessing the production method of imports and exports and the destination use of catches can be found in the Methodological background.



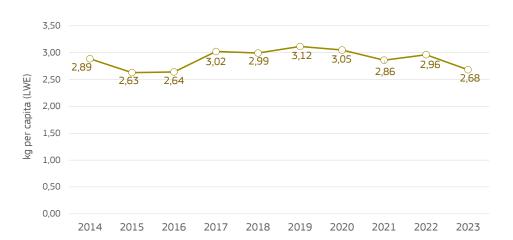
TUNA

Tuna's apparent consumption in the EU peaked at 3,12 kg LWE in 2019, due to a significant increase in imports. In 2020 and 2021, tuna consumption declined, primarily due to lower catches in 2020 and decreased imports in 2021. However, in 2022, the trend reversed, and apparent consumption rose to 2,96 kg LWE, mainly driven by higher imports and decreased exports. In 2023, the apparent consumption dropped by 9% due to reduced imports which offset the production increase.

CHART 13 APPARENT CONSUMPTION OF TUNA

Source: EUMOFA, based on EUROSTAT (online data codes:

fish ca main, fish aq2a
and DS-045409) and FAO data. Details on the sources and on the methodological approach used for assessing the production method of imports and exports and the destination use of catches can be found in the Methodological background.



SALMONIDS

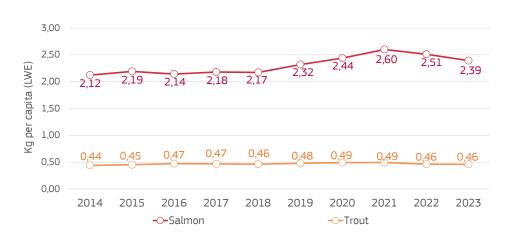
SALMON, TROUT

Apparent consumption of salmon increased steadily throughout the analysed decade, primarily supported by imports from Norway and, to a much lesser extent, by imports from Scotland and aquaculture production in Ireland. Then, in 2022 and 2023, it decreased for the first time since 2018, driven by reduced Atlantic salmon production in Ireland. However, on average, each person in the EU is estimated to have consumed close to 2,40 kg LWE of salmon in 2023, which was still higher than the average apparent consumption of the previous nine years. Despite several challenges, this indicates that European traders and processors of salmon managed to maintain a robust supply chain during the outbreak of the Covid pandemic in 2020 and in the following years.

Apparent consumption of trout in the EU remained stable at close to 500 grams LWE per capita during the decade analysed.

CHART 14 APPARENT CONSUMPTION OF MOST CONSUMED SALMONIDS

Source: EUMOFA, based on EUROSTAT (online data codes: fish ca main, fish aq2a and DS-045409) and FAO data. Details on the sources and on the methodological approach used for assessing the production method of imports and exports and the destination use of catches can be found in the Methodological background.



GROUNDFISH

COD, ALASKA POLLOCK, HAKE, SAITHE (=COALFISH) Four groundfish species – cod, Alaska pollock, hake, and saithe (coalfish) – together account for one fifth of the EU's apparent consumption of fishery and aquaculture products.

EU cod consumption is mainly supplied by imports from Norway, Iceland and Russia. Since the 2016 peak, which reached 2,06 kg LWE per capita, apparent consumption has generally decreased, except for a temporary increase in 2021. This trend could be explained by a downward trend of supply from imports and catches in the 2017–2022 period. In 2023, the average consumption of cod was estimated at around 1,53 kg LWE per capita, down from the 1,63 kg LWE estimated for 2022, primarily due to both decreased imports and decreased catches. For comparison, cod catches in 2023 were less than one third of those recorded in 2016.

Since the EU does not catch Alaska pollock, apparent consumption is estimated as total imports *minus* exports. During the analysed decade, this averaged 1,70 kg LWE.

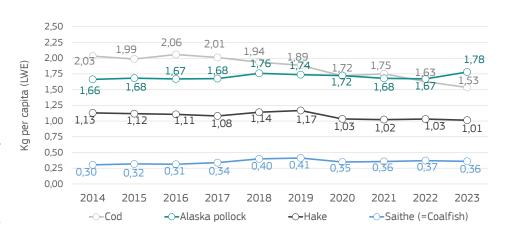
Apparent consumption of hake peaked in 2019 at 1,17 kg LWE, when both catches and imports were at the highest levels of the analysed period. However, both dropped in 2020, leading to a decline in apparent consumption, which has since remained stable. In 2023, a slight decrease in apparent consumption was estimated, as a result of decreased catches and despite increased imports.

Apparent consumption of saithe, which is largely supplied by imports from Norway and Iceland, did not show significant variations during the analysed decade. It maintained an average of 350 grams LWE per capita.

CHART 15 APPARENT CONSUMPTION OF MOST CONSUMED GROUNDFISH

Source: EUMOFA, based on EUROSTAT (online data codes:

fish ca main, and DS-045409). Details on the sources and on the methodological approach used for assessing the production method of imports and exports and the destination use of catches can be found in the Methodological background.



SMALL PELAGICS

HERRING, MACKEREL, SARDINE

The EU produces significant quantities of small pelagics, including, among others: herring, mainly caught by Netherlands and Denmark; mackerel, mainly caught by Irish vessels; and sardine, primarily caught by the Croatian and Spanish fleets. The availability of these species in the EU market is largely sustained by imports from non-EU countries, particularly Norway and the UK for herring and mackerel, and Morocco for sardine. EU exports also play an important role in shaping the supply balance for these species. In 2023, apparent consumption of herring recovered and reached close to 1 kg LWE per

capita, after hitting a 10-year low of 0,87 kg LWE per capita recorded in 2022, when reduced imports and increased exports constrained availability. The recovery was driven by increased supply from third countries as well as decreased exports, but catches dropped to the lowest level of the decade analysed, especially in Spain.

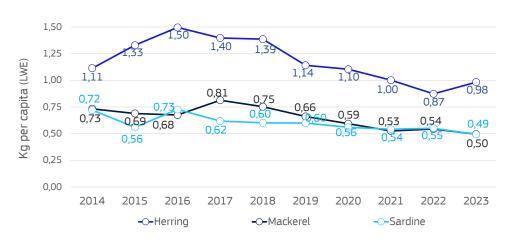
For mackerel and sardine, per capita apparent consumption remained relatively stable throughout the decade, averaging between 650 and 600 grams LWE per capita, respectively. In 2023, their apparent consumption was estimated at 500 grams LWE per capita, with each registering slight decreases from 2022.

CONSUMPTION

CHART 16
APPARENT
CONSUMPTION OF MOST
CONSUMED SMALL
PELAGICS

Source: EUMOFA, based on EUROSTAT (online data codes:

fish ca main, and DS045409). Details on the sources and on the methodological approach used for assessing the production method of imports and exports and the destination use of catches can be found in the Methodological background.



OTHER PRODUCTS OF DIFFERENT COMMODITY GROUPS

SHRIMPS, MUSSEL, SQUID, SURIMI, GILTHEAD SEABREAM Apparent consumption of shrimps in the EU is evenly split between wild and farmed products, with imports playing a crucial role. The main suppliers include Ecuador, India, Vietnam, Thailand, Indonesia, Argentina and Greenland. After peaking at close to 1,60 kg LWE per capita in 2018, shrimps' consumption in the EU dropped below 1,50 kg LWE per capita in 2019 and 2020, primarily due to reduced production of *Crangon* shrimp in the Netherlands and Germany. However, consumption of the most imported shrimp species – frozen or prepared/preserved warmwater shrimp and Argentine red shrimp – remained relatively stable. In 2021, shrimps' consumption began to recover, reaching 1,63 kg LWE per capita, driven by increased imports from Ecuador and Argentina. By 2022, it reached a new peak of 1,68 kg LWE per capita, thanks to higher catches in the Netherlands, Spain and Estonia, alongside a surge in imports. In 2023, apparent consumption declined slightly to 1,59 kg LWE per capita, as a result of decreased production and imports.

Mussel is by far the main product farmed in the EU in volume terms – especially in Spain. In 2023, mussel's apparent consumption dropped to its lowest level of the analysed decade, estimated at 1,14 kg LWE per capita, mainly due to reduced aquaculture production.

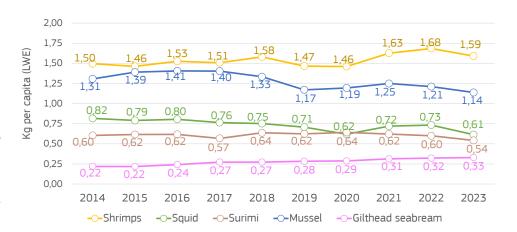
Apparent consumption of squid in the EU is largely dependent on imports. In 2020, consumption dropped due to a decrease in imports from the Falkland Islands, the EU's main supplier. Imports recovered in 2021, driving apparent consumption up to 720 grams LWE per capita. It increased further in 2022, reaching 730 grams LWE per capita, driven by a significant rise in catches from Spain and, to a lesser extent, France. However, in 2023, as imports dropped again, squid's apparent consumption decreased to an estimated 614 grams LWE per capita – its lowest level of the analysed decade. As for surimi, no statistics concerning its production are available, as it is made of a combination of different species. Therefore, its apparent consumption is calculated based on imports *minus* exports. During the analysed decade, per capita apparent consumption of surimi averaged 610 grams LWE, largely comprising surimi imported from the United States.

Apparent consumption of gilthead seabream in the EU remained stable at close to 300 grams LWE per capita during the analysed decade, supported by significant aquaculture production as well as imports – mainly from Türkiye.



Source: EUMOFA, based on EUROSTAT (online data codes:

fish ca main, fish aq2a
and DS-045409) and FAO data. Details on the sources and on the methodological approach used for assessing the production method of imports and exports and the destination use of catches can be found in the Methodological background.



HOUSEHOLD EXPENDITURE AND PRICES

From 2023 to 2024, household expenditure on fish grew in all EU Member States to reach a total of EUR 62,8 billion, which was EUR 2,7 billion more of the 2023-level. The average growth in the EU was by 4%, an increase in line with the annual increases experienced during the previous two years⁵⁰.

In 2024, fish prices across the EU remained high, continuing a trend that started in 2020. Indeed, the increases seen in 2020 and 2021 were largely driven by COVID-19 restrictions, while the sharp spike in 2022 reflected wider economic and geopolitical factors. Although inflation slowed down in 2023, inflationary pressures remained high and continued to drive prices upward also in 2024. At the same time, household volume consumption of fresh fish continued to decline. According to Europanel/Kantar/GfK data, total consumption of fresh fish at home had been declining since 2021 and decreased by more than 4% in the highest consuming EU countries from 2023 to 2024.

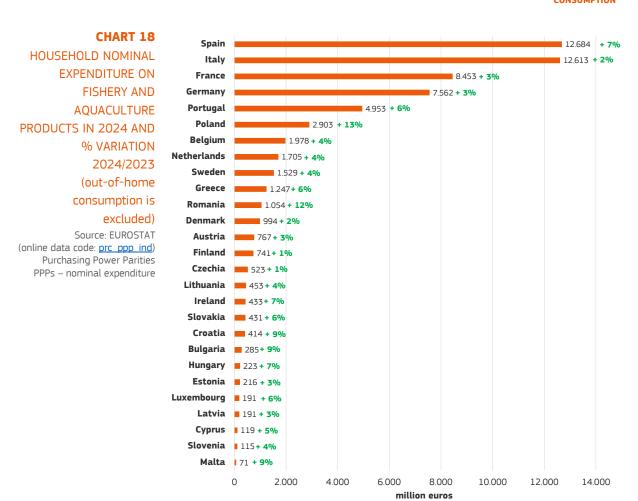
Italy, historically the EU's top spender on fishery and aquaculture products, was overtaken by Spain in 2024. Both countries recorded an increase in household expenditure compared to the previous year. Italy's spending rose by 2%, equal to an increase of EUR 203 million. Spain saw a stronger rise of 7%, amounting to 839 million euro, the largest absolute increase among all Member States. Between 2020 and 2024, Italy's total household spending on fish rose by 9%, while Spain's grew by 15%.

France ranked third in overall spending, with a 3% increase in 2024, corresponding to EUR 252 million.

In terms of per capita spending, Portugal remained the highest in the EU, reaching 464 euros per person in 2024. This figure is more than three times the EU average of 139 euros and 182 euros higher than Luxembourg, which ranked second. Spain was third, with per capita spending of 260 euros. This marked a 6% increase from 2023, or 15 euros more per person. Of note, the majority of Member States recorded an increase in per capital household expenditure from 2023 to 2024, with the exception of Finland and Czechia, which levels remained the same compared with the previous years.

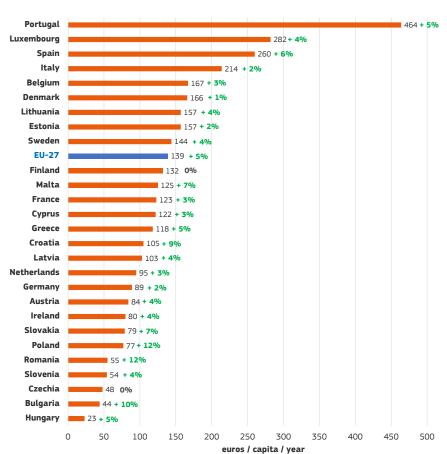
From 2023 to 2024,
household
expenditure on fish in
the EU grew by 4%,
in line with the
annual increases
experienced during
the previous two
years.

⁵⁰ In this report, value and price variations for periods longer than five years are analysed by deflating values using the GDP deflator (base=2015); for shorter periods, nominal value and price variations are analysed.





Source: EUROSTAT (online data code: prc_ppp_ind) Purchasing Power Parities PPPs – nominal expenditure per inhabitant



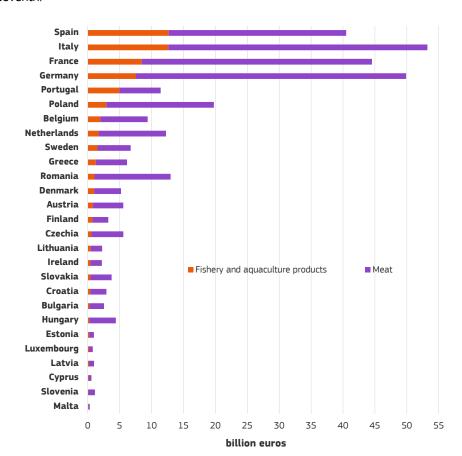
FISHERY AND AQUACULTURE PRODUCTS VS. MEAT AND FOOD IN GENERAL In all EU countries, expenditure on meat is historically higher than expenditure on fishery and aquaculture products – a pattern that also holds true for consumption volumes⁵¹. On average, EU households expenditure on fish and aquaculture products is about one fourth of what they spend on meat.

In 2024, EU households allocated EUR 246 billion to meat and EUR 63 billion to fishery and aquaculture products. Among the Member States, Portugal showed the most balanced spending ratio between these two categories, as illustrated in Chart 20. In 2024, Portuguese households spent 43% on fish and 57% on meat. Spain followed, with 31% of spending going to fish and 69% to meat. In all other EU countries, the share of spending on fish remained below 25%. The widest gaps were observed in Hungary, where only 5% of household expenditure in this category went to fishery and aquaculture products, followed by Romania at 8% and Czechia at 9%. In the four countries with the highest nominal fish consumption – namely Spain, Italy, France, and Germany – different spending habits emerge. As noted, Spanish households dedicate slightly less than one third of their spending in this category to fish. Italy aligns with the EU average, spending around one quarter. In France, fish accounts for one fifth of household spending compared with meat, while in Germany it is even lower, around one seventh.

CHART 20

HOUSEHOLD NOMINAL
EXPENDITURE ON
FISHERY AND
AQUACULTURE
PRODUCTS VS. MEAT IN
THE EU IN 2024
(out-of-home
consumption is
excluded)

Source: EUROSTAT (online data code: prc_ppp_ind) Purchasing Power Parities PPPs – nominal expenditure



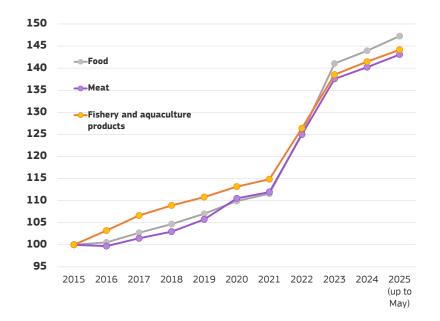
Graph 21 below clearly shows how prices rose sharply in 2022 and how they continued to rise throughout 2023. In 2024 and in the early months of 2025, prices showed signs of slowing, but remained significantly higher than in previous years.

⁵¹ This is confirmed by OECD (link: https://stats.oecd.org/viewhtml.aspx?datasetcode=HIGH_AGLINK_2019&lang=en#).

CONSUMPTION

CHART 21
CONSUMER PRICES
INDICES
(2015=100)

Source: EUROSTAT (online data code: prc_ppp_ind) Purchasing Power Parities PPPs – nominal expenditure



The prices of fishery and aquaculture products continued to rise in 2024, although at a much slower pace compared to the steep increases recorded in 2022 and 2023. Between 2020 and 2024, consumer prices for aquatic food rose by more than 25%, while meat prices increased by 28% and overall food prices by 32%.

From 2023 to 2024, however, all three categories – fish, meat and food overall – experienced a clear slowdown in price growth. Fish prices increased by 2,1%, while meat rose by 1,9% and food prices in general by 2,0%. In the first months of 2025, this trend appears to have stabilised, with growth rates hovering around 2% across all categories. Over the longer term, from 2015 to 2025⁵², consumer prices for fishery and aquaculture products rose by an average of 3,8% per year. This was slightly above the 3,7% recorded for meat but below the 4,0% annual growth for overall food prices. As shown in Table 10, while food products overall saw substantial price increases over the last five years, fish products recorded the smallest cumulative growth. As a result, in 2023, the consumer price index for food overall exceeded that of fishery and aquaculture products for the first time since 2014.

Looking at the decade-long perspective, fish prices followed a relatively steady upward path between 2015 and 2021, with an average annual growth of 2,3%, translating to a 15% increase in real terms. However, comparing prices in 2024 with those in 2015, the overall increase in fish prices reached 41,5%. This growth aligns with the rising cost of imported products, as the EU continues to rely heavily on imports to meet consumer demand for fishery and aquaculture products. Over the same period, meat prices increased by 40,2%, while food prices overall rose by approximately 44%.

TABLE 10 YEARLY EVOLUTION OF CONSUMER PRICES (2015=100)

Source: EUROSTAT (online data code: <u>prc_fsc_idx</u>) Harmonised Index of Consumer Prices HICP

Sector	2020	2021	2022	2023	2024	2025 (up to May)	2025 / 2020
Food	+2,7%	+1,5%	+12,2%	+12,7%	+2,0%	+2,3%	+34,0%
Meat	+4,5%	+1,3%	+11,6%	+10,1%	+1,9%	+2,1%	+29,5%
Fishery and aquaculture products	+2,1%	+1,5%	+10,1%	+9,6%	+2,1%	+1,9%	+27,4%

⁵² Data as of May 2023.

CONSUMPTION

RELEVANCE BY PRESERVATION STATE

With regard to statistics concerning household expenditure for fishery and aquaculture products, Eurostat provides "shares of the total household final monetary consumption expenditure"⁵³ for four preservation states, which are listed in Table 11.

TABLE 11 ITEM WEIGHTS OF EU HOUSEHOLD EXPENDITURE ON "TOTAL GOODS AND SERVICES"

Category	2023	2024
FOOD (Meat + Fishery and aquaculture products + Other food)	15,6%	15,2%
Meat	3,6%	3,4%
Fishery and aquaculture products	0,9%	0,9%
Fresh or chilled	43%	42%
Frozen	21%	20%
Dried, smoked or salted	10%	11%
Other preserved or processed and preparations	26%	27%
Other food	11,2%	10,9%
OTHER GOODS AND SERVICES	84,4%	84,8%
TOTAL GOODS AND SERVICES	100%	100%

In 2024, fishery and aquaculture products represented less than 1% of total household expenditure on goods and services in the EU – significantly lower than the 3,5% share allocated to meat. Overall, household spending on food commodities declined by 2,6% compared to 2023. Expenditure on both meat and fish products decreased at an even faster rate, with meat down by 3% and fish by 4%. The decline in spending on fish was largely driven by reduced purchases of fresh or chill and frozen products. Among all food categories, other food products recorded the smallest decrease, falling by 2,4%. At national level, the share of household expenditure on fishery and aquaculture products declined in most EU Member States in 2024. The sharpest relative drops were observed in France, Malta and Spain, where spending fell by 16%, 11% and 10%, respectively. In countries with higher fish consumption, such as Portugal and Italy, the decline was much more moderate – down just 1% and 0,2%, respectively – though both registered their lowest shares in the past five years. Early 2025 data suggest a partial rebound in Portugal and Malta, with household spending on fish rising by around 5%. In contrast, the downward trend continued in Italy, Spain and France.

⁵³ Metadata are available at https://ec.europa.eu/eurostat/cache/metadata/en/prc_hicp_esms.htm.

3.2 HOUSEHOLD CONSUMPTION OF FRESH FISHERY AND AQUACULTURE PRODUCTS

OVERVIEW

The household consumption⁵⁴ of fresh fishery and aquaculture products is monitored in 11 EU Member States, namely Spain, Italy, France, Portugal, Germany, Poland, Netherlands, Ireland, Denmark, Sweden and Hungary. Ranked according to their volumes of fish consumption, these 11 countries⁵⁵ accounted for 86% of the total EU expenditure on fishery and aquaculture products in 2024⁵⁶.

From 2020 to 2024, household consumption of fresh products decreased by 26%. As shown in Table 12, household consumption of fresh fish in the EU has declined steadily since 2020, dropping more than 25% during the five-year period under analysis. After a sharp 22% drop in 2022 – likely due to the easing of quarantine restrictions following the COVID-19 outbreak – the rate of decline slowed. Volumes fell by 5% in both 2023 and 2024, reaching a five-year low of 1.088.999 tonnes in 2024. At the national level, household consumption volumes declined across most EU countries in 2024, in line with the broader downward trend. The largest decreases were observed in the Netherlands, with the sharpest drop of 7,6%. It was followed by Italy with a decrease of 7%, Portugal with more than 6%, Spain with just above 5,5%, and Germany with 4%. Notably, the only countries that recorded an increase from 2023 to 2024 were Poland, Denmark and Sweden. It is also notable that all surveyed countries experienced a decline between 2021 and 2022 and between 2022 and 2023.

While household consumption volumes have declined consistently, the total value has also decreased, though less drastically. From 2021 to 2022, value fell by 11% to EUR 13,3 billion, marking a significant drop from the previous years. Although there was no further decline in 2023, the value did not recover, and it decreased again in 2024, dropping a slight 1% and reaching a five-year low of EUR 13,2 billion. At the same time, the sector recorded a general increase in unit values, reaching five-year peaks for most key species from 2021 onwards. Salmon proved to be a notable exception in 2024, with its unit value remaining relatively stable compared with recent years, averaging 18,30 EUR/kg and unchanged from 2023. In 2022 and 2023, the unit value of salmon increased across all surveyed countries, with average rises of 19% and 10% respectively. However, from 2023 to 2024, significant price increases were observed in only a few countries: in Poland, the unit value rose by 7%, from 16,37 EUR/kg to 17,46 EUR/kg; in Spain, by 4%, from 13,60 EUR/kg to 14,16 EUR/kg; and in Italy, by 2%, from 19,17 EUR/kg to 19,48 EUR/kg.

⁵⁴ Data analysed in this chapter originate from representative household panels that record volumes and values of every item purchased. More details can be found in the Methodological background.

⁵⁵ For ten of these countries (namely Denmark, Germany, Spain France, Italy, Ireland, the Netherlands, Poland, Portugal and Sweden) as well as for Austria, Belgium, Greece, Finland and Romania, EUMOFA also collects online shops retail prices of a selection of products. Data can be consulted at https://eumofa.eu/online-retail-prices.
⁵⁶ EU expenditure data are provided by EUROSTAT. These data are compiled based on a common methodology elaborated within the "EUROSTAT – OECD PPP Programme" (http://www.oecd.org/std/prices-ppp/eurostat-oecdmethodologicalmanualonpurchasingpowerparitiesppps.htm). More details can be found in the Methodological background.

TABLE 12HOUSEHOLD CONSUMPTION OF FRESH FISHERY AND AQUACULTURE PRODUCTS, IN VOLUME (TONNES) AND NOMINAL VALUE (1.000 EUR)

Source: EUMOFA elaboration of Europanel/Kantar/GfK data. Possible discrepancies in totals and % changes are due to rounding.

Member state	202	:0	202	1	20	22	202	23	202	4	2024	2023
member state	Value	Volume	Value	Volume								
Spain	5.326.492	645.631	5.156.691	590.616	4.515.005	486.606	4.741.384	480.277	4.708.159	453.473	-0,7%	-5,6%
Italy	3.224.659	308.035	3.548.918	324.426	3.262.448	279.537	3.005.536	245.113	2.941.068	228.001	-2,1%	-7,0%
France	2.643.167	221.443	2.763.768	231.195	2.504.751	196.749	2.492.463	188.083	2.461.237	186.111	-1,3%	-1,0%
Portugal	506.155	76.966	504.384	73.639	466.015	61.736	464.999	60.072	462.894	56.273	-0,5%	-6,3%
Germany	1.189.691	78.626	1.217.255	84.157	975.530	60.892	988.593	57.437	960.970	55.062	-2,8%	-4,1%
Poland	310.104	48.862	344.837	50.186	341.925	44.252	405.872	43.132	464.205	44.041	<u>14,4%</u>	2,1%
Netherlands	611.861	38.039	665.126	40.532	638.665	35.331	641.157	32.766	604.675	30.279	-5,7%	-7,6%
Denmark	225.935	13.620	238.041	13.819	213.284	11.703	222.530	11.128	244.539	12.363	9,9 %	11,1%
Ireland	196.773	13.160	197.572	12.847	190.649	11.577	201.782	11.302	201.149	11.085	-0,3%	-1,9%
Sweden	153.626	12.385	145.468	11.016	114.718	7.745	116.341	7.474	121.610	7.966	<u>4,5</u> %	6,6%
Hungary	34.710	6.316	36.869	6.035	32.347	4.395	35.182	3.846	37.218	4.345	5,8 %	13,0%
Total	14.423.175	1.463.082	14.818.929	1.438.468	13.255.337	1.200.524	13.315.840	1.140.630	13.207.723	1.088.999	-0,8%	▼ -4,5%

FOCUS ON THE TOP THREE CONSUMING COUNTRIES

In 2024, Spain, Italy and France together accounted for 80% of the total volume and roughly 77% of the total value of fresh fishery and aquaculture products consumed by households in the 11 countries surveyed.

SPAIN

Spain alone accounted for 42% of the total volume and 36% of the total value of household consumption of fresh products in the 11 countries under analysis. In 2024, Spanish households consumed 453.473 tonnes of fresh fish with a value of EUR 4,71 billion. In the five-year period from 2020 to 2024, household consumption of fresh fishery and aquaculture products in Spain followed a clear downward trend, with volumes and value declining by 30% and 12%, respectively. Consumption had peaked in 2020, largely due to increased household demand during the COVID-19 lockdown. Volumes began to fall in 2021, with a 9% decrease that was followed by a sharp 18% contraction in 2022. The decline continued in the following years, though at a slower pace, with a further 1% drop in 2023 and 6% in 2024.

In value terms, household consumption decreased by 3% in 2021, dropped a further 12% in 2022, then recovered by 5% in 2023, but declined slightly again in 2024, by less than 1%.

When examining the consumption of key monitored species in Spain, trends diverged. Salmon, which was the most consumed species in Spain from 2021 to 2024, reached a peak of 68.449 tonnes in 2021, up 1% from 2020. Consumption then fell in 2022, by a staggering 28% in volume from the previous year, reaching just under 50.000 tonnes. This sudden decrease, observed in all the countries surveyed in 2022 for salmon, was mainly due to a price increase, driven by general inflation⁵⁷. Other contributing factors included a modest reduction in European salmon production, an increased share of that production being exported to non-EU markets, and the reopening of the HoReCa sector following the lifting of COVID-19 restrictions. By 2023, salmon's consumption showed signs of recovery, increasing in Spain by 4% The upward trend continued in 2024, with consumption increasing by a further 7%, reaching 54.920 tonnes. Of note, salmon imports into Spain rose by 13% between 2023 and 2024.

When looking at its unit value, it rose consistently from 2022 onwards, peaking, in 2024, at 14,16 EUR/kg, up 4% from 2023.

In 2024, sardines became the second most consumed fresh species in Spanish households, overtaking hake. Consumption increased by 7% from 2023, reaching 46.693 tonnes. This marked the first rise in sardine consumption since its peak in 2020, when it stood at 64.201 tonnes. The unit value decreased a slight 1% from 2023 to 2024, falling

⁵⁷ The average unit value for salmon, in the 11 countries included in this analysis, increased by 18% over 2022, reaching 16,70 EUR/kg.

to 6,23 EUR/kg, following a five-year peak of 6,29 EUR/kg in 2023. Over the five-year period, however, their unit value rose by 20%.

Sardines accounted for 10% of total consumption – slightly less than salmon's 12% but more than hake's 9%. In terms of value, they represented only 6% of the total, ranking below salmon and hake, which accounted for 17% and 10%, respectively, but equal to the 6% share of European seabass.

Hake consumption in Spanish households has declined steadily since 2021. From ranking as the most consumed fresh species in 2020, hake was overtaken by salmon in 2021 and, more recently, by sardine in 2024, making it the third most consumed species in Spain. Consumption fell from 71.862 tonnes in 2020 to 42.256 tonnes in 2024 – the lowest level recorded during the five-year period – which registered as a 41% decrease in volume.

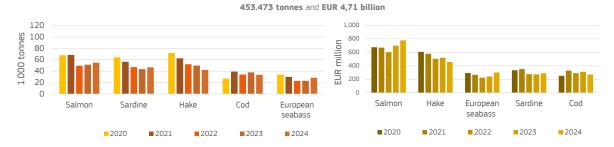
This sustained decline may be associated with rising prices, possibly driven by a reduction in the European hake quota and lower availability of imported hake. The unit value has increased each year since 2021, rising 28% from 8,46 EUR/kg in 2020 to 10,83 EUR/kg in 2024. Despite this price increase, the total value of hake consumption fell by 12% between 2023 and 2024, reaching its lowest point within the 2020-2024 period analysed. Cod and European seabass account for 7% and 6%, respectively, of total fresh fish consumption by Spanish households. In 2024, Cod consumption had decreased by 11% in volume from 2023, while its unit value experienced a slight 4% decrease, dropping to a five-year low of 8,07 EUR/kg. In contrast, consumption of European seabass rose sharply – increasing 23% from 2023 and reaching its highest level since 2020. Likewise, the unit value reached a five-year high in 2024, rising a slight 2% to 10,65 EUR/kg from 2023.

Gilthead seabream and sole, which together accounted for 9,5% of total consumption, both registered their lowest consumption levels of the 2020–2024 period. Consumption of gilthead seabream dropped sharply, decreasing 24% from 2023 to 2024, while its unit value reached a five-year high of 10,01 EUR/kg, up 12% from 2023. Sole experienced a more modest decline, with consumption falling by 5% over the same period. Its unit value also peaked in 2024, rising by 5% to 11,93 EUR/kg.

In 2024, consumption also declined for tuna, monk and mackerel, which together accounted for 7% of total consumption. Tuna consumption fell by 14% from 2023, while monk showed a more moderate decline of 5%. Despite the drop in volume, the unit value for both species rose by 8% in 2024, with tuna reaching 12,18 EUR/kg and monk reaching 14,14 EUR/kg. Mackerel, on the other hand, reached its lowest level of consumption in the five-year period, with a 23% decrease from 2023. Its 2024 unit value also dipped, dropping a slight 1% and arriving at 5,68 EUR/kg.

CHART 22
TOP-FIVE FRESH SPECIES (IN VOLUME AND NOMINAL VALUE) CONSUMED BY HOUSEHOLDS IN SPAIN Source: EUMOFA elaboration of Europanel/Kantar data

ITALY



TOTAL CONSUMPTION IN SPAIN 2024

Similarly to Spain, household consumption of fresh fish in Italy followed a continuous downward trend over the five-year period analysed, with the exception of a 5% uptick in 2021. Consumption declined by 14% in 2022 and by a further 12% in 2023. In 2024,

the pace of decline slowed, with volumes falling by 7% from 2023, reaching just over 228.000 tonnes. Between 2020 and 2024, household consumption of fresh aquatic products in Italy declined by 26%, mirroring the broader trend, though the decrease was slightly less pronounced than that recorded in Spain.

Among species, gilthead seabream – the most consumed in Italian households – recorded the largest decrease, falling by 11% from 2023 to reach a five-year low of 27.004 tonnes in 2024. Of note, after a 13% increase between 2020 and 2021, gilthead seabream consumption has declined steadily since 2022, at an average annual rate of 12%. Mussels *Mytilus* spp., the second most consumed species, also reached their lowest consumption level of the period analysed in 2024, dropping to 20.480 tonnes – 5% less than in 2023. However, they were not the species that contributed the most to the overall decline after gilthead seabream. That role was played by consumption of anchovies, which nearly halved from 2020. Between 2023 and 2024, anchovy consumption dropped 14%, reaching 8.837 tonnes. Hake, clam and swordfish also reached their lowest levels in 2024, by decreasing 8%, 6% and 2%, respectively, from the 2023 levels.

In contrast, the most significant increases were observed for European seabass consumption, which rose 8% from 2023 to reach 14.220 tonnes, and salmon, which increased by 2%, totalling 16.515 tonnes. Consumption of octopus and squid remained relatively stable, with only marginal increases of 1% each from 2023.

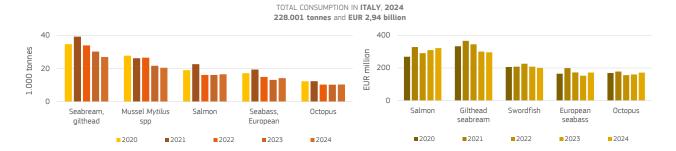
In 2024, the total value of in-house fish consumption in Italy reached EUR 2,94 billion, down 2% from 2023. This relatively limited decline in value, despite a 7% drop in volume, reflected a general increase in unit values that was observed across several species. These increases – particularly among high-value species – may have helped offset the impact of falling consumption volumes.

Swordfish was a notable exception, as it recorded a slight 1% decrease in unit value from 2023, reaching 21,66 EUR/kg, still close to its peak of 21,99 EUR/kg recorded in 2022. Clams also saw a substantial decline in unit value, falling by 22% to 7,58 EUR/kg from 2023. By contrast, all other species recorded increases. The highest relative growth was observed for squid and hake, with unit values rising by 9% and 11%, respectively, to 17,15 EUR/kg and 14,16 EUR/kg.

Household consumption of salmon in Italy, as in most of the countries analysed, peaked in 2021 and dropped to its lowest volume in 2022. While consumption remained stable in 2023, it resumed growth in 2024, increasing by 2% to reach 16.515 tonnes. Its unit value continued to rise throughout the period analysed, increasing by 2% from 2023 and peaking at 19,48 EUR/kg in 2024 for a total value of EUR 322 million. Of note, Italy as well as Portugal are among the few countries surveyed where salmon is not the most consumed species. However, in Italy, it ranks first in terms of total value, whereas in Portugal, it is surpassed by gilthead seabream and shrimps.

CHART 23

TOP-FIVE FRESH SPECIES (IN VOLUME AND NOMINAL VALUE) CONSUMED BY HOUSEHOLDS IN ITALY Source: FUMOFA elaboration of Europanel/GfK data



FRANCE

In 2024, household consumption of fresh fishery and aquaculture products in France reached 186.111 tonnes, with a total value of EUR 2,46 billion. This marked a five-year low, with both volume and value decreasing 1% from 2023.

While in 2023 all monitored species – except saithe – recorded a decline in consumption, more diverse trends emerged in 2024. Most high-value species either increased or remained relatively stable. Salmon remained the most consumed species, rising for the first time since 2021. Its consumption reached 29.745 tonnes, valued at EUR 618 million, accounting for over 15% of total volume and 25% of total value in French household consumption. Cod consumption remained stable in both volume and value, reaching 12.398 tonnes and EUR 262 million. Trout, after a 12% decline between 2022 and 2023, increased by 5% in 2024, reaching 5.841 tonnes. Its value also grew, increasing by 6% and reaching EUR 105 million.

In terms of unit value, salmon decreased by 3%, from 21,48 EUR/kg in 2023 to 20,77 EUR/kg in 2024. Cod and trout, on the other hand, each recorded a 1% increase, with cod reaching 21,11 EUR/kg and trout 17,90 EUR/kg.

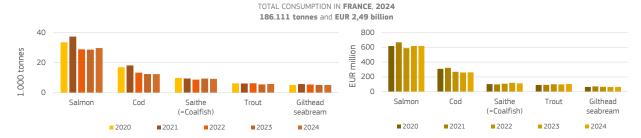
By contrast, sardine, whiting and mackerel – together accounting for 5% of the total volume and 4% of the total value – recorded the largest decreases in consumption volume.

While sardines began to decline in 2023, whiting and mackerel have shown a downward trend since 2022. Compared to 2023, their consumption volumes decreased by 7%, 18% and 20%, respectively.

All other monitored species also recorded a decrease in volume between 2023 and 2024. However, with the exception of saithe – and salmon, as noted above – their unit values increased, reaching their highest levels of the 2020–2024 period.

CHART 24

TOP-FIVE FRESH SPECIES (IN VOLUME AND NOMINAL VALUE) CONSUMED BY HOUSEHOLDS IN FRANCE Source: EUMOFA elaboration of Europanel/Kantar data



MAIN TRENDS IN OTHER COUNTRIES

In Portugal, household consumption of fresh fishery and aquaculture products continued its downward trajectory in 2024, a trend that had begun in 2021. Compared to 2023, consumption decreased by 6% in volume, reaching a five-year low of 56.273 tonnes. In terms of value, it remained relatively stable, decreasing by just 0,5%, in line with the modest 0,2% decline observed between 2022 and 2023.

PORTUGAL

The overall decrease was primarily driven by a significant reduction in consumption of gilthead seabream, which accounted for more than half of the total drop. While it remained the most consumed species, its volume fell by 21% from 2023, reaching 7.812 tonnes. Conversely, its unit value increased by 17%, peaking at 7,74 EUR/kg.

Growth in the consumption of other species helped to partially offset the decline in gilthead seabream. Consumption of shrimps generally increased over the period, except in 2022, when overall in-house consumption declined following the lifting of COVID-19 restrictions. In 2024, it reached a five-year peak of 5.671 tonnes, up 5% from 2023.

European seabass also registered strong growth from 2023 to 2024, with consumption increasing by 42% to 4.594 tonnes, making it the third most consumed species after gilthead seabream and shrimps. In terms of unit value, shrimps recorded a slight 1%

decrease, ending at 10,78 EUR/kg, while the unit value of European seabass declined a more substantial 8%, dropping to 7,91 EUR/kg which was its first decrease of the 2020–2024 period.

Although salmon is less popular in Portugal than in the other countries surveyed, its consumption rose by 9% between 2023 and 2024, after remaining relatively stable between 2022 and 2023. This may signal a recovery from the sharp 31% decline observed in 2022. Meanwhile, salmon's unit value decreased for the first time in the five-year period analysed, falling by 1% to 12,03 EUR/kg. Nevertheless, it remained the highest unit value among all monitored species.

GERMANY

In 2024, household consumption of fresh fishery and aquaculture products in Germany fell to its lowest level in five years, decreasing by 4% in volume and 3% in value from 2023. However, when considering volume trends, the 2024 decline represented a slowdown. After a sharp 28% drop in 2022, volume then decreased by 6% in 2023 and a more moderate 4% in 2024. Overall, in-house consumption in 2024 totalled 55.062 tonnes, valued at EUR 961 million.

A notable trend emerged in 2024. Salmon consumption – one of the main contributors to the 2022 decline and accounting for approximately 40% of total volume – rose 7% from 2023, reaching 21.909 tonnes. Its unit value decreased a slight 3%, from a peak of 21,02 EUR/kg in 2023 to 20,45 EUR/kg in 2024.

This growth in salmon consumption was offset by substantial declines in other key species. Volumes of mussels Mytilus spp. and Alaska pollock both fell by 39%, trout by 17%, and cod by 11% compared with 2023. All species except cod recorded increases in unit value. For both trout and mussels, these 2024 unit values represented the highest levels reached during the 2020–2024 period.

POLAND

Poland was one of the few countries surveyed that recorded an increase in household consumption of fresh fishery and aquaculture products from 2023 to 2024. In that time, consumption rose by 2% in volume and 14% in value, reaching 44.041 tonnes worth EUR 464 million.

Salmon and carp, accounted for 26% and 14% of the total consumption volume respectively with both recording notable increases -17% for salmon and 16% for carp. For carp, this marked the first increase in consumption over the period analysed. For salmon, the increase was accompanied by a 7% rise in unit value, which peaked at 17,46 EUR/kg.

By contrast, mackerel and trout – representing 20% and 11% of total consumption, respectively, saw 14% and 9% declines in consumption. As a result, both species reached their lowest consumption levels during the 2020–2024 period. Despite these declines in volume, their unit values rose to record levels: 10,26 EUR/kg for trout, up 10% from 2023, and 6,03 EUR/kg for mackerel, up 14%.

NETHERLANDS

Dutch household consumption of fresh fishery and aquaculture products reached a five-year low in 2024. Consumption in the Netherlands has been declining since 2022, and, in 2024, it fell 8% from 2023, reaching 30.275 tonnes. In terms of value, it decreased 6%, ending at EUR 605 million. This decline was driven by a general drop across all monitored species, with the sole exception of salmon. Salmon, which accounts for more than a third of total Dutch household consumption increased 5% from 2023 and then was the only species that saw a consumption increase in 2024. Its unit value, which peaked at 26,63 EUR/kg in 2023, dipped a slight 1% in 2024, settling at 26,23 EUR/kg. Of note, the Dutch unit value of salmon is the second highest among the countries surveyed, ranking just behind Denmark, which indicates that a high share of fresh salmon consumption was in the form of processed products.

Among the other species, mussel *Mytilus* spp. showed the largest decrease in consumption, down 16% from 2023. Herring and cod also had a strong impact on the overall trend, as they dropped 14% and 20%, respectively, from 2023. Their impact was less on volume but more on value, as each of theirs drop was worth more than EUR 8 million.

DENMARK

In 2024, Danish household consumption of fresh fishery and aquaculture products rose by 10% in volume and 11% in value from 2023, marking a five-year high. Consumption in Denmark is notably dominated by salmon, which accounts for more than one third of total fresh fish consumption. However, in 2022, salmon volumes dropped from 5.071 tonnes to 3.989 tonnes, a 21% decrease, and continued to decline, dropping by 5% in 2023 and settling at 3.778 tonnes. In 2024, however, salmon consumption increased by 13%, reaching 4.283 tonnes, the highest volume since 2020. To note, the price of fresh salmon in Denmark is the highest of the countries surveyed, indicating that a high share of fresh salmon is consumed in the form of processed products. In 2023, it had peaked at 28,51 EUR/kg, but in 2024 it dipped a slight 1% from 2023, reaching 28,12 EUR/kg, but still amounting to the highest among the countries surveyed.

Flounder is the second most consumed species in Denmark. Its consumption decreased consistently from 2021 to 2023, while in 2024 it increased by 13% in volume and 14% in value. Despite this growth, however, between 2020 and 2024, its consumption more than halved, plunging 52% in volume and 41% in value. Most of the surveyed species increased in volume from 2023 to 2024, with the exception of cod, which has continued its downward trend since 2020, and mussel *Mytilus* spp., which decreased for the first time since 2021.

IRELAND

Household consumption of fresh fishery and aquaculture products in Ireland has followed a downward trend in recent years, decreasing a slight 2% between 2020 and 2021, falling by 10% in 2022, and then declining by a further 2% in both 2023 and 2024. In terms of value, the trend has been more stable – after a 4% decline in 2022, value recovered in 2023 with a 6% increase. It then remained virtually unchanged in 2024, recording a marginal decrease of 0,3% from 2023. Overall, in-house consumption in 2024 totalled 11.085 tonnes, valued at EUR 201 million.

Salmon, which accounts for more than half of Irish household consumption and was a key contributor to the 2022 drop, remained stable in 2023 and increased by 3% in 2024. Its value also rose by 3% in 2024, reaching a five-year high. The unit value of salmon was 20,68 EUR/kg in 2024, nearly unchanged from its 2023 peak of 20,71 EUR/kg, which reflected a slight decline of 0,3%.

Cod, which accounts for 9% of Ireland's total consumption, fell to its lowest level over the period analysed, with both volume and value decreasing by 7% from 2023. In contrast, haddock and shrimps – each representing 8% of total consumption – recorded growth in 2024, with haddock increasing by 8% in volume and 10% in value, while shrimps rose by 9% in both indicators. Hake, which makes up 5% of total consumption, experienced a sharp decline from 2023 to 2024, with volume falling by 20% and value by 19%, reaching five-year lows.

Unit values remained largely stable from 2023 to 2024. Cod held steady at 14,62 EUR/kg, while haddock increased by 2% to 13,37 EUR/kg. Shrimps and hake saw slight 1%, decreases, reaching 20,96 EUR/kg and 13,91 EUR/kg, respectively.

SWEDEN

Consumption of fresh fish in Sweden followed a volatile trend over the period analysed. It declined a slight 5% in 2021, followed by a sharp 20% drop in 2022. In 2023, consumption stabilised and began to recover and, in 2024, it increased 5% from the previous year.

The main driver of fresh fish consumption in Sweden is salmon, which experienced significant declines of 12% between 2020 and 2021 and 25% between 2021 and 2022.

Signs of recovery emerged in 2023, with consumption increasing by 4%, followed by a further 5% rise in 2024. Salmon's share of total fresh fish consumption fell from 60% in 2020 to a low of 53% in 2022, before recovering slightly, reaching 55% in 2024.

HUNGARY

In 2024, household consumption of fresh aquatic food⁵⁸ reached 4.345 tonnes, marking a 13% increase from 2023. This growth represents a positive signal following the downward trend observed during the 2021–2023 period. After peaking in 2020 at 6.316 tonnes, consumption declined a slight 4% in 2021 to 6.034 tonnes, followed by a sharp 27% drop in 2022, arriving at 4.395 tonnes. A further 12% decrease was recorded in 2023, reaching 3.846 tonnes – the lowest level in the period surveyed. Despite the increase in 2024, consumption volumes remain 31% below 2020 levels.

In terms of value, household consumption increased by 6% from 2023, and reached EUR 37,2 million.

3.3 RETAIL SALES AND OUT-OF-HOME CONSUMPTION

The fishery and aquaculture industry supplies aquatic food to consumers through three sales channels: retail, which mostly includes fishmongers and large-scale retailers (LSRs); foodservice, which involves catering, restaurants and take-away sales; and institutional, which includes schools, canteens, hospitals and prisons. Foodservices and institutional channels are referred to as "out-of-home consumption".

This section⁵⁹ of The EU Fish Market analyses the consumption of processed⁶⁰ products through the retail and foodservice channels of all EU countries⁶¹. It also analyses unprocessed⁶² fishery and aquaculture products, through the retail, foodservice and institutional channels in five of the highest consuming EU countries – Spain, Italy, France, Germany, Poland – and in the UK.

PROCESSED PRODUCTS

In the EU, consumption of processed fishery and aquaculture products through foodservices and retail sales reached more than 2,1 million tonnes in 2024, an increase of 1% from 2023. This marked a continuation of the recovery initiated in 2021, after the drop registered in 2020 due to the outbreak of COVID-19. According to Euromonitor estimates⁶³, the upward trend is expected to continue, with a compound average growth rate of 0,7% from 2024 to 2029. The consumption is highly concentrated in Germany, Spain, Italy and France, the top four consuming countries which together accounted for 74% of the 2024 total. Germany alone accounted for 30% of the total, followed by Spain with 19%, France with 14% and Italy with 11%. In terms of per capita consumption, the situation was more diversified. The major consumers were Spain (just above 8 kg), Sweden (almost 8 kg) and Germany (close to 7,5 kg), followed by Denmark (just above 6 kg) and Croatia (slightly above 5 kg). France ranked fifth (close to 4,5 kg) followed by Italy (just above 4 kg), and then Poland at a distance (around 2 kg).

⁵⁸ For Hungary, total consumption is monitored without details by species. According to EUMOFA estimates on "apparent consumption", carp is by far the main species consumed in the country.

⁵⁹ Data analysed in this section are collected from Euromonitor international (https://www.euromonitor.com/). For more details, see the Methodological background.

⁶⁰ Processed products are defined as the aggregation of shelf-stable, chilled processed and frozen finfish, crustaceans, molluscs and cephalopods. Please note that this definition of processed products differs from the legal definition, as set out in Regulation (EC) No 852/2004 on the hygiene of foodstuffs, available at the following link: https://eur-lex.europa.eu/eli/reg/2004/852/oj/eng. For more details, see the Methodological background.

⁶¹ The UK is excluded from the EU aggregate each year.

⁶² Unprocessed products are defined as the aggregation of fresh, chilled and frozen finfish, crustaceans, molluscs and cephalopods, packaged and unpackaged. Please note that this definition of unprocessed products differs from the legal definition as set out in Regulation (EC) No 852/2004 on the hygiene of foodstuffs, available at the following link: https://eur-lex.europa.eu/eli/reg/2004/852/oj/eng. For more details, see the Methodological background.

⁶³ Euromonitor International blends statistical modelling with local market observations and judgment-based predictions. Euromonitor analysts firstly identify factors driving the growth in the past: both hard/macro drivers (demographics, GDP, taxation, inflation, population etc.) and soft drivers (category growth trends, product life cycle, consumer lifestyles, price, manufacturer perspective, weather, regulation etc.). Combined with their knowledge of the market, Euromonitor then speaks to the industry players about these factors along with gauging the potential for new factors to arise. Finally, the analysts further gather information about projected sales of major players in the next five years and/or projected forecasts of industry growth and begin to generate a consensus estimate of industry growth in the forecast period.

CONSUMPTION

CHART 25

LARGEST EU

CONSUMING

COUNTRIES OF

PROCESSED PRODUCTS

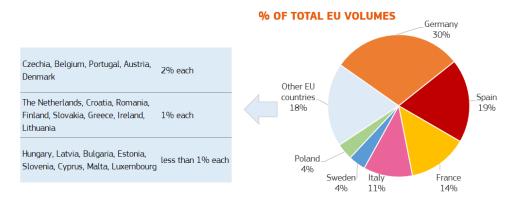
IN 2024: % OF TOTAL

VOLUMES SOLD

THROUGH RETAIL AND

FOODSERVICES

Source: Euromonitor International, Staple Foods, Industry Edition, 2025



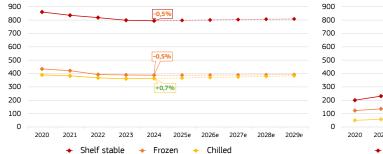
The retail channel accounted for the largest shares of total sales of processed fishery and aquaculture products in almost all countries, with coverage ranging from a minimum of 60% in Germany to a maximum of 90% in Romania. The only country where sales through foodservices were higher than retail was Greece, where retail was 44% and foodservices reached 56%.

At the same time that retail sales increased significantly from 2019 to 2020, there was a consistent drop in sales through foodservices due to the outbreak of COVID-19. As shown in Chart 26, opposite trends began in 2021. This meant that , along with gradual reopenings, as the foodservice channel started to grow, retail sales began a slow decline, driving volumes from their peak in 2020 down to their lowest level in 2024 (around 1,5 million tonnes). This represented a decrease of 0,2% from 2023. Indeed, retail sales remained similar in volume terms from 2023 to 2024 in almost all countries, with Italy and Germany – two of the six major consuming countries – influencing the overall trend at EU level, with decreases of 7,5% in Italy and 4,1% in Germany.

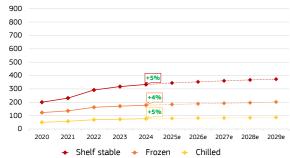
On the other hand, out-of-home consumption had dropped to its lowest point of around 370.000 tonnes in 2020, but started an upward trend in 2021. Most recently, from 2023 to 2024, it reached more than 587.000 tonnes for an increase of 4,7%. All countries recorded increases in out-of-home consumption, led by Germany where its increase of 13.100 tonnes or 5,4% surpassed its pre-pandemic level.

Euromonitor estimates⁶⁴ that out-of-home consumption will continue to increase in the next five years, and is expected to reach more than 660.000 tonnes by 2029.

CHART 26
SALES OF PROCESSED PRODUCTS THROUGH RETAIL (LEFT) AND FOODSERVICES (RIGHT) BY CATEGORY.
VOLUMES IN 1.000 TONNES. % VARIATIONS ARE FOR 2024 VS. 2023



Source: Euromonitor International, Staple Foods, Industry Edition, 2025



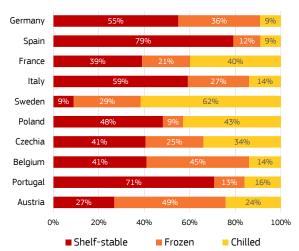
⁶⁴ Ibidem.

Shelf-stable products⁶⁵, the main category of processed fishery and aquaculture products sold via retail and foodservice channels, had more than 1,1 million tonnes of sales across the EU in 2024, followed by more than 565.000 tonnes of frozen products and more than 400.000 tonnes of chilled products. The median share of sales of shelf-stable products in EU countries in 2024 was 40%, indicating a broad preference for these products. In five out of the 27 EU countries, shelf-stable products covered more than half of retail sales and out-of-home consumption of processed aquatic products. In Spain, this was 79% of the total, in Portugal 71%, in Slovenia 63%, in Italy 59% and in Germany 55%. However, at the same time, the shelf-stable products were the least preferred in three of the 27 EU countries, namely Sweden, Croatia and Latvia, where they accounted for 9%, 11% and 29% of sales, respectively.

CHART 27

MAIN CATEGORIES OF PROCESSED PRODUCTS SOLD THROUGH RETAIL AND FOODSERVICES IN 2024 (% OF TOTAL VOLUMES IN TOP 10 EU COUNTRIES IN TERMS OF TOTAL CONSUMPTION) Source: Euromonitor

International, Staple Foods, Industry Edition, 2025



As for consumption of frozen and chilled products, their median shares of the total were 30% each. To note, Croatia, with 69%, was the only country where consumption of frozen products covered more than half of retail sales and out-of-home consumption of processed aquatic products. As for chilled products, this was the case for Estonia (69%), Lithuania (65%), Sweden (62%) and Slovakia (51%).

UNPROCESSED PRODUCTS

As mentioned at the beginning of this chapter, sales of unprocessed products through all channels – retail, foodservice, institutional – were analysed in Spain, Italy, Poland, France, Germany and the UK⁶⁶.

Finfish⁶⁷ had a pivotal role in all countries surveyed, followed at a distance by molluscs, which include cephalopods, and by crustaceans. The mollusc products played a more notable role in the southern Member States: cephalopods and mussels in Spain, oysters and mussels in France, and clams, mussels and cephalopods in Italy. Crustaceans, on the other hand, commanded relatively low shares.

⁶⁵ Shelf-stable products include products typically sold in cans, glass jars or aluminium/retort packaging and usually preserved in oil, brine, salt water or with a sauce. Pickled products sold ambient are also included.

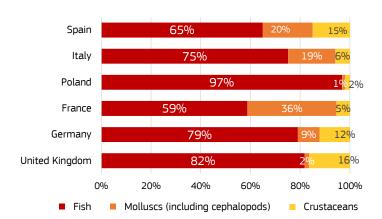
⁶⁶ Ranked in descending order in terms of 2024 sales

⁶⁷ Henceforth "Fish".

CHART 28

SALES OF UNPROCESSED PRODUCTS THROUGH RETAIL, FOODSERVICE AND INSTITUTIONAL CHANNELS IN 2024 (% OF TOTAL VOLUME)

Source: Euromonitor International, Fresh Food, Industry Edition, 2025

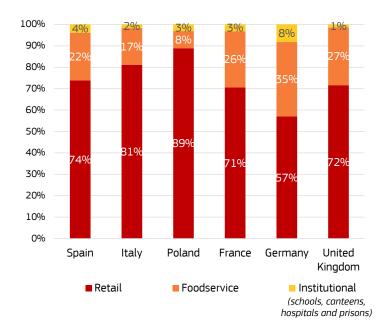


As with processed aquatic food, the retail channel accounted for the largest shares of total sales for unprocessed fishery and aquaculture products in all but one of the surveyed countries⁶⁸.

CHART 29

SALES OF
UNPROCESSED
FISHERY AND
AQUACULTURE
PRODUCTS BY
CHANNEL IN 2024
(% OF TOTAL
VOLUME)
Source: Euromonitor

Source: Euromonitor International, Fresh Food, Industry Edition, 2025



The impact of the COVID-19 pandemic is quite evident when looking at the annual evolution of retail sales and out-of-home consumption. As in the case of processed products, out-of-home consumption fell dramatically in 2020 in the six countries surveyed, before rising again in 2021. Although the trend since 2021 has generally been positive, total out-of-home consumption of unprocessed products in the surveyed countries reached only 665.000 tonnes by the end of 2024, compared with the pre-pandemic levels of more than 736.000 tonnes which, according to Euromonitor estimates, will not be reached again until 2029⁶⁹. Looking at country level, Italy's consumption in 2024 reached almost 110.000 tonnes, which was even higher than the 107.000 tonnes it reached in 2019. France is expected to reach just above pre-pandemic levels by the end of 2025, Spain by the end of 2026 and Poland by the end of 2029. Further, Germany and the UK are not expected to reach the pre-pandemic levels for the next four years.

The retail channel for unprocessed products has been following a downward trend since the lifting of the COVID-19 restrictions in 2021. As can be seen in Chart 30, the six countries surveyed recorded different trends from 2023 to 2024.

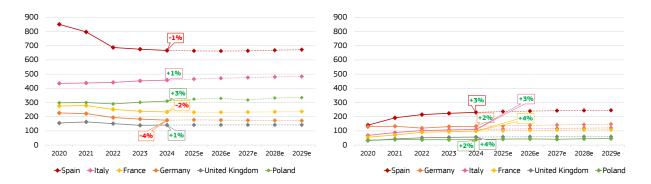
⁶⁸ No detail by sale channel is available for Poland.

⁶⁹ Euromonitor estimates are available up to 2029.

CHART 30

SALES OF UNPROCESSED PRODUCTS THROUGH RETAIL (LEFT) AND OUT OF-HOME CONSUMPTION (FOODSERVICE+INSTITUTIONAL CHANNELS, RIGHT). VOLUMES IN 1.000 TONNES. % VARIATIONS ARE FOR 2024 VS. 2023

Source: Euromonitor International, Fresh Food, Industry Edition, 2025



FOCUS ON ORGANIC PRODUCTS

Organic products represent a niche market for seafood in the EU. This section focuses on five EU countries among those with the highest consumption of fishery and aquaculture products – Germany, Spain, France, Italy and Poland – as well as the UK, which has a leading role in European production of organic salmon and is a major salmon supplier to the EU market.

According to Euromonitor⁷⁰, an average 1,5% of the total consumption of unprocessed⁷¹ aquatic products through retail, foodservice and institutional channels was organic in these six countries in 2024. More in detail, the coverage was 3,4% in Poland, 2,6% in the UK, 2,4% in France, 2,6% in Germany, 0,7% in Italy and 0,3% in Spain. According to Euromonitor, all these shares have shown increases in the last ten years and are expected to be higher by the end of 2029 with the exception of France, where it is expected to decrease to 2,3%. In absolute terms, 2024 sales of organic fish were the highest in Poland, corresponding to almost 12.000 tonnes, followed by France and Germany with 8.000 tonnes, and the UK with just above 5.000 tonnes. Italy and Spain followed at a distance with 3.700 tonnes and 2.700 tonnes, respectively.

On the production side, according to Eurostat⁷², the total organic aquaculture production⁷³ in the EU was 99.613 tonnes in 2022. This represented a decrease of 0,3% from 2021, accounting for 9% of the total EU aquaculture production. More than two thirds of organic production takes place in three countries: Ireland which produced 34.366 tonnes in 2022^{74} , mainly salmon and mussel; Italy produced 22.187 tonnes, mainly mussel and finfish⁷⁵; and the Netherlands produced 13.912 tonnes, mainly mussel.

⁷⁰ Source: Euromonitor International, Fresh Food, Industry Edition, 202

⁷¹ The most important organic species in these countries are salmon and trout, and to a lesser extent tropical shrimps and mussel, which are for a large share marketed as processed products (such as smoked salmon, smoked trout, cooked shrimp, etc.), so not included in the data analysed in this report.

⁷² Source: Eurostat (online data code: org_aqtspec)

⁷³ To note, organic fish and seafood is by definition farmed.

⁷⁴ According to more recent data available in Eurostat, organic production in Ireland was more than 54.600 tonnes in 2023.

⁷⁵ According to more recent data available in Eurostat, organic production in Italy was more than 17.069 tonnes in 2023.

3.4 EU QUALITY SCHEMES: GEOGRAPHICAL INDICATIONS AND TRADITIONAL SPECIALTIES

The quality schemes registered in the EU recognise and promote the geographical or traditional aspects of specific agricultural or food products. Currently, two of the quality schemes have geographical indications (GIs), namely the Protected Designations of Origin (PDOs) and Protected Geographical Indications (PGIs). A third scheme – the Traditional Specialties Guaranteed (TSG) – recognises the traditional methods of production and recipes. According to the EU's 2025^{76} register, of the 78 names registered under EU quality schemes in the fishery and aquaculture sector, 49 or 62,8% are PGIs, while 23 or 29,5% are PDOs, and 6 or 7% are TSGs. The number of registered names in the sector increases each year. In 2025, this number is more than three times higher than in 2011 when there were 23 names. Beyond the seafood sector, the number of GIs/TSGs registered across the EU has also risen for all agricultural and food products, increasing by a factor of 2,4 between 2011 and 2025, with 1.830 names registered in October 2025.

Two names were registered in 2025 for fishery and aquaculture products.

- « Caviar d'Aquitaine » (PGI, France). This covers sturgeon eggs produced in the South-West of France. The 2024 sales for this highly premium product reached 16 tonnes, of which a significant 24% share was exported⁷⁷. The PGI covers about one third of the French caviar production. Of note, France ranks third in EU caviar production, after Italy and Poland⁷⁸.
- "Pulpo Seco de Adra" (TSG, Spain). This covers a salted and dried octopus which
 is traditional in Adra city, in the Almeria area of South-West Spain. Each octopus,
 which will weigh between 1,5 kg and 3,5 kg, is cut, cleaned, frozen, defrosted,
 treated in brine, dried and packed. This is the first cephalopod registered under
 PDO, PGI or TSG.

In 2025, among the 72 registered GIs, 51 or 71% originated from EU countries and 21 or 29% originated from non-EU countries. All six TSG applications originated from EU countries. The EU countries with the largest number of names registered are France with 8 names, followed by Germany and Sweden with 7 names each, Spain and Italy with 6 names each, and then Romania with 5 names and Hungary with 4 names. These are followed by Czechia, Croatia, Latvia and Finland, which each have two names. Belgium, Ireland, Greece, the Netherlands, Poland and Portugal each have one name. In non-EU countries, 14 of the registered names come from the UK, followed by China with five, and Norway and Vietnam with one each.

Among the 78 current denominations, 57 or 73% cover finfish, 18 or 23% cover molluscs, and three or 4% cover crustaceans and cephalopods. Further, of these denominations, 35 or 46% refer to marine species, 31 or 40% refer to freshwater species, and ten or 13% refer to migratory species with life cycles that alternate between the marine environment and fresh water. One GI – the Belgian PGI "Escavèche de Chimay" – includes both marine and freshwater fish. The main species covered by GIs and TSGs include carp with 13 names registered, notably in Germany and Hungary; mussels with 8 names in France, Italy, Spain, Sweden, Croatia, the UK, and China; oyster with 6 names, notably in France

⁷⁶ Source: EU register eAmbrosia, October 2025 – https://ec.europa.eu/info/food-farming-fisheries/food-safety-and-quality/certification/quality-labels/geographical-indications-register/

⁷⁷ https://www.inao.gouv.fr/igp-caviar-aquitaine

https://feap.info/wp-content/uploads/2025/01/2025-01-22-production-report-2024-v1.pdf

CONSUMPTION

and the UK; salmon with 5 names, including 4 in the UK and 1 in Ireland; anchovy and vendace each with 4 products; and trout and tuna, each with 3 products.

QUALITY SCHEMES
REGARDING FISHERIES
AND AQUACULTURE
PRODUCTS REGISTERED
UP TO OCTOBER 2025
Source: based on eAmbrosia,

	Protected Designations of		Prote	ected Geographical	Tradit		
Country		Origin		Indications		Guaranteed	TOTAL
,		(PDO)		(PGI)		(TSG)	
	Number	Species concerned	Number		Number	Species concerned	
France	1	Mussel	6	Oyster, Anchovy, Scallop, Whelk, Sturgeon (caviar)	1	Mussel	8
Germany			7	Carp (5 PGIs), Herring, Trout			7
Sweden	6	Vendace (roes), whitefish (<i>Coregonus</i> spp.), oyster, mussel, sprat	1	Arctic char			7
Spain	1	Mussel	4	Tuna (mojama) (2 PGIs), Tuna, Mackerel	1	Octopus	6
Italy	3	Mussel, Tench, Anchovy	3	Trout, Arctic char, Anchovy			6
Romania			3	Carp, Pontic shad, other Danube delta species (roes)	2	Carp, sprat	5
Hungary	1	Carp	3	Brown trout, Carp, Carp & pike-perch			4
Czechia	1	Carp	1	Carp			2
Croatia	2	Oyster, mussel					2
Latvia			2	Lamprey			2
Finland	1	Vendace	1	Vendace			2
Belgium			1	Several species			1
Ireland			1	Salmon			1
Greece	1	Grey mullet (roes)					1
Netherlands					1	Herring	1
Poland	1	Carp					1
Portugal					1	Cod	1
United Kingdom	4	Pollan, Mussel, Oyster, Scallop	10	Salmon (4 PGIs), Sea trout, Eel, Sardine, Cod, Haddock, Oyster			14
China			5	Freshwater crayfish (2 PGIs), Mussel, Clam, Japanese seabass			5
Norway			1	Cod			1
Vietnam	1	Anchovy (sauce)					1
TOTAL	23		49		6		78

More than half or 54% of the products covered by GIs/TSGs are wild products consisting mainly of anchovy, cod, tuna and vendace, while 42% are farmed products, mainly including carp, shellfish and salmon⁷⁹. Three names or 4% cover both wild-caught and farmed products, these are all processed products. For instance, the Romanian PGI "Salată tradițională cu icre de crap" covers carp roes but also roes from other freshwater fish that are from either wild or farmed carp.

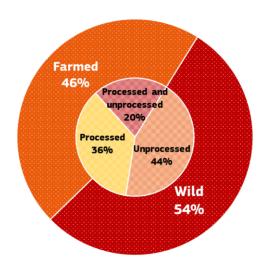
Further, 43,6% of the names refer to unprocessed products, such as the French PGI "Huîtres Marennes Oléron" (oyster). This is the case even if some of them may be used as ingredients in processed products, such as the Spanish PDO "Mejillón de Galicia" (mussel) used by the canning industry. More than one third or 35,9% of the names cover specifically processed products, such as the two new names registered in 2025: "Caviar d'Aquitaine" and "Pulpo Seco de Adra". Further, 20,5% of the names cover both processed and unprocessed products⁸⁰, such as the Czech PGI "Třeboňský kapr", which places live, fresh or processed (smoked or marinated) on the market.

⁷⁹ This includes three names which cover both farmed and wild fish.

⁸⁰ Processed products cover filleted, smoked, dried, salted or preserved products, as well as other types of preparations (for instance fish roes or fish-based products). Unprocessed products may be live, fresh (qutted or not) or frozen.

CHART 31TYPES OF PRODUCTS UNDER EU QUALITY SCHEMES IN THE SEAFOOD SECTOR (OCTOBER 2025)

Source: based on eAmbrosia, DG AGRI



	Unprocessed	Processed	Processed and unprocessed	Total
Wild	12	23	7	42
Farmed	22	5*	9	36
Total	34	27	16	78

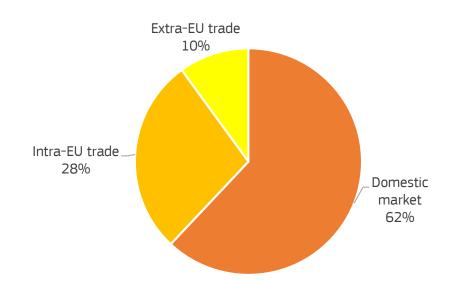
*The PGIs "London Cure Smoked Salmon" (2017, the United Kingdom), "Escavèche de Chimay" (2021, Belgium) and TSG "Salată tradițională cu icre de crap"(2021) are based on both wild caught and farmed products.

Sales of fishery and aquaculture products under GI/TSG reached an estimated 246.709 tonnes and EUR 1,42 billion at EU-28 level^{81,82} in 2017. This accounted for about 4% of the sales value in the EU-28 seafood sector⁸³. The domestic market accounted for EUR 0,88 billion or 62% of the sales value, followed by intra-EU trade which reached EUR 0,4 billion or 28%, and extra-EU trade which reported EUR 0,14 billion, or 10%.

CHART 32

SHARE OF SALES VALUE BY MARKET FOR FISH, MOLLUSCS AND CRUSTACEANS UNDER GI/TSG IN 2017 (EU-28)

Source: Study on economic value of EU quality schemes, geographical indications (GIs), and traditional specialties guaranteed (TSGs), AND International for DG AGRI, 2019



PGIs accounted for 71% of the sales value, followed by TSGs with 22% and PDOs with 7%. The average economic size of each TSG and PGI tended to be higher than the average size of each PDO, with TSGs amounting to EUR 36 million, PGIs to EUR 32 million, and PDOs to EUR 8 million in 2017.

⁸¹ Source: Study on economic value of EU quality schemes, geographical indications (GIs) and traditional specialties guaranteed (TSGs), AND International for DG AGRI, 2019 - https://op.europa.eu/en/publication-detail/-/publication/detail/-/publication/73ad3872-6ce3-11eb-aeb5-01aa75ed71a1/language-fr

⁸² This covers the 43 GIs/TSGs registered at EU-28 level before 2017.

⁸³ Based on EUROSTAT and EUMOFA data, sales value of the fishery and aquaculture sector at EU-28 level can be estimated between EUR 28 billion (processing and preserving activities only) and EUR 40 billion (processing and preserving activities + landings + aquaculture; this is however an overestimate with double counts).

More recent data are available in some Member States:

- France⁸⁴. Seafood products under quality schemes⁸⁵ reached sales of EUR 339 million in 2022, with significant products registered in the shellfish sector: PGI "Huîtres Marennes Oléron" (oyster), TSG "Moules de Bouchot" (mussel), PDO "Moules de bouchot de la baie du Mont-Saint-Michel" (mussel) and PGI "Huître de Normandie" (oyster).
- Spain⁸⁶. Seafood products under GIs reached sales values of EUR 44 million and volumes of 11.695 tonnes in 2023. This represented a strong decrease from previous years due to a continuous drop in the sales of the PGI "Mejillón de Galicia" which decreased from 42.665 tonnes sold in 2020 to 9.810 tonnes in 2023. This decrease occurred in a wider context of production decrease in the mussel sector in Spain which saw 204.466 tonnes produced in 2020 but dropped to 155.741 tonnes in 2023⁸⁷. In 2023, the most important GIs were the PGI "Mejillón de Galicia" with a value of EUR 20 million, followed by the PGI "Caballa de Andalucía" (preserved mackerel fillets) with a value of EUR 12 million. The other names registered are PGIs for tuna products "Melva de Andalucía", "Mojama de Barbate" and "Mojama de Isla Cristina" with sales values ranging from EUR 2 million to EUR 6 million for each of them.

⁸⁴ Source : INAO - https://www.inao.gouv.fr/economie

⁸⁵ PDO, PGI, TSG and the French scheme « Label Rouge », which may be used jointly with a PGI.

⁸⁶ Source : Ministerio de Agricultura, Pesca y Alimentación - https://www.mapa.gob.es/es/alimentacion/temas/calidad-diferenciada/

⁸⁷ EUMOFA, based on EUROSTAT

4/ IMPORT - EXPORT

In the decade from 2015 to 2024⁸⁸, the value of EU trade flows⁸⁹ of fishery and aquaculture products increased at a compound annual growth rate of 2% in real terms. This included imports and exports between the EU and the rest of the world, as well as exchanges between EU Member States.

Compared with 2015, the value in 2024 was 18% higher in real terms⁹⁰, while total traded volume grew by only 2%. Between 2023 and 2024, trade volume declined a slight 0,5%, while nominal value fell by 1%, resulting in a 4% decrease in real terms.

Intra-EU exchanges reached 5,8 million tonnes in 2024, with a value of EUR 31,7 billion, representing 45% of the total trade value and 42% of the total volume. Volumes were 1% lower than in 2015, which made 2024 the second consecutive year to show the lowest level of the decade. This trend has persisted since 2022. However, in real value terms, intra-EU trade grew by 16% during the decade's ten years.

EU trade flows declined in both volume and value between 2023 and 2024.

Of note, this compares with a staggering 48% increase in the value of extra-EU exports and a 13% increase in value of extra-EU imports over the same period. It is also worth noting that in 2024, intra-EU trade exceeded extra-EU imports in value for the second year in a row – for only the third time in the 2015–2024 decade, the first having been in 2021.

Extra-EU imports in 2024 accounted for 43% of the value and volume of all fishery and aquaculture products of EU trade flows. The value of these imports reached EUR 29,9 billion, marking a slight 1% decrease from 2023. On the other hand, volume remained stable from 2023 at 5,9 million tonnes, increasing only 0,3%, which was still well below pre-pandemic levels. However, extra-EU imports was the only trade flow recording an increase in volume from 2023 to 2024.

At the same time, extra-EU exports played a far less important role, making the EU a net importer. In 2023, their value reached more than EUR 8 billion, and increased another 1% in 2024 reaching EUR 8,3 billion, which represented only 12% of the total value of EU trade. This was the only trade flow to increase in value, between both 2022-2023 and 2023-2024, rising by 1% each year. However in terms of volume, extra-EU exports decreased by 1% to 2,2 million tonnes, reaching the lowest level since 2019.

The 2024 figures, which showed a decrease in both volume and value for almost all EU trade flows, need to be interpreted in the wider context of the economic and geopolitical climate of recent years.

The 2021–2022, trade flows had shown a 20% increase in value but a 2% decrease in volume, reflecting rising inflation caused by a number of factors⁹¹. Inflation started to ease in 2023 and by December, the EU inflation rate stood at 3,4, well below the 10,4 recorded in

⁸⁸ In line with Eurostat's guidelines on the production and dissemination of statistical data by Commission services after the UK withdrawal from the EU, since the most recent reference period is year 2024, UK is excluded from the EU aggregations of each year. This means that UK is dealt with as country of origin/destination of EU imports and exports.

⁸⁹ Sum of extra-EU imports, extra-EU exports and intra-EU exchanges. Intra-EU exchanges are based on intra-EU exports. For more details, please refer to the Methodological background.

⁹⁰ In this report, value and price variations for periods longer than five years are analysed by deflating values using the GDP deflator (base=2015). For shorter periods, nominal value and price variations are analysed.

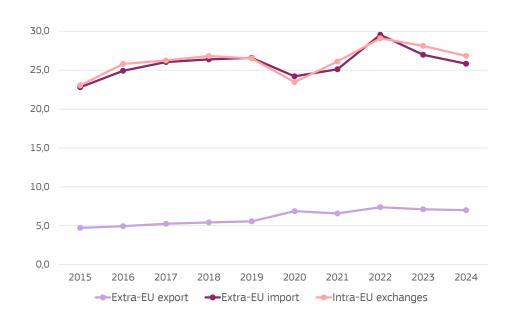
⁹¹ The increase of demand and prices during the post COVID-19 recovery, coupled with reduced supply due to lower quotas of major species and heightened competition for raw materials. In addition, the Russian military invasion of Ukraine which began in February 2022 heavily contributed to the rise in value, affecting energy costs, therefore affecting production costs and contributing to the spike in inflation.

December 2022^{92} . In line with the positive trend, the EU inflation rate stood at 2,7% in December 2024^{93} , but softened to around 2,4% 94 across early 2025.

As for the total value, even though it was slightly lower in 2024 than in the previous year, it was still the third highest total value of the last ten years. On the other hand, 2024 volumes followed the downward trend that had begun in 2022, and reached one of the lowest levels of the decade, and the lowest since 2016.

CHART 33
EU TRADE FLOWS
OF FISHERY AND
AQUACULTURE
PRODUCTS, IN
VALUE (EUR
BILLION)

BILLION)
Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409). Values are
deflated by using the
GDP deflator
(base=2020).



This chapter of The EU Fish Market provides detailed data and analyses of extra-EU imports, extra-EU exports and intra-EU exchanges, focusing on the major species traded and countries involved. Throughout the year, EUMOFA publishes dedicated trade case studies in its Monthly Highlights, as well as thematic analyses that complement the broader EU Fish Market review, all of which are available under the *Studies and Reports* section of the EUMOFA website⁹⁵. Before moving on, it is also important to note that the value of imports and exports in this report is presented in EUR, regardless of the currency used in the transactions. Indeed, these purchases can be made in different currencies. The charts below show the trend of the USD/EUR exchange rate during the 2020–2024 period. Further, given the relevance of EU imports from Norway, they also show the NOK/EUR exchange rate.

Charts 34 and 35 illustrate the trends of monthly exchange rates. In 2022, the EUR experienced a sharp depreciation against the USD, partly driven by fears of an economic recession linked to Russia's war of aggression against Ukraine. In September and October 2022, the USD/EUR exchange rate fell below parity (1:1) for the first time since the early days of the euro. Since then, the euro gradually recovered, remaining relatively stable throughout 2023 and strengthening further in 2024 and early 2025. By June 2025, the exchange rate had reached 1,14 – returning to levels last seen in 2021.

The NOK/EUR exchange rate followed a different trajectory. After peaking at 11,84 in April 2025 – the highest rate recorded in four years – the Norwegian krone depreciated slightly, reaching 11,52 in June 2025. Nonetheless, the NOK has shown a gradual appreciation since 2020, despite periodic volatility.

⁹² Eurostat, "Annual inflation up to 2.9% in the euro area", January 2024: 9d885442-f323-cdde-e149-17ed99a63a6f (europa.eu)

⁹³ Eurostat, "Annual inflation up to 2.4% in the euro area", January 2025: https://ec.europa.eu/eurostat/web/products-euro-indicators/w/2-17012025-ap

⁹⁴ Eurostat, "Annual inflation up to 2.2% in the euro area", May 2025: https://ec.europa.eu/eurostat/web/products-euro-indicators/w/2-19052025-ap

⁹⁵ The section can be accessed here. https://eumofa.eu/market-analysis

CHARTS 34 AND 35 EXCHANGE RATES US DOLLAR/EUR

Source: European Central Bank

2,00

0,00

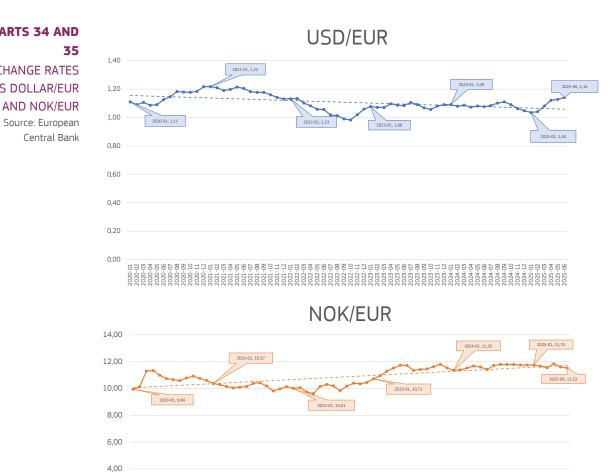


CHART 36

TOP-10 EXTRA-EU TRADE FLOWS IN 2024, IN NOMINAL VALUE (EUR BILLION)

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: ds-045409).

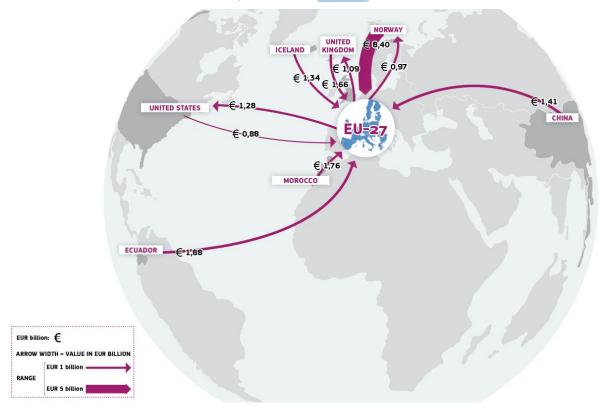
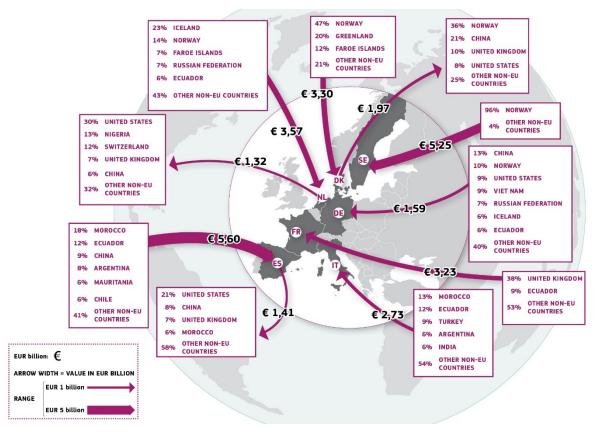


CHART 37

MOST RELEVANT EXTRA-EU TRADE FLOWS BY MEMBER STATE IN 2024, IN NOMINAL VALUE (EUR BILLION) Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: <u>ds-045409</u>).



4.1 EXTRA-EU TRADE BALANCE

In 2024, the extra-EU trade balance 96 recorded a smaller deficit than in 2023, driven by a 1% decrease in the value of imports, while exports rose by 1%. As a result, the overall EU trade deficit narrowed by 2%, dropping to EUR 0,43 billion from 2023. In terms of volume, imports remained broadly stable with a slight increase of 0,3%, whereas export volumes declined by 1%.

At Member State level, trends varied⁹⁷. Among the countries with a trade deficit exceeding EUR 1 billion, Spain recorded the largest deficit increase, with France, Italy and the Netherlands also seeing their deficits worsen. In contrast, Denmark, Sweden and Germany recorded improvements in their trade balances compared with 2023.

To note, the countries listed in Table 14 are also major entry points for high-value products originating outside the EU and destined for the internal market. Sweden, for example, is the key entry point for high-value Norwegian products destined for the EU market. In some cases, catches by the EU external fleet are processed at source, although a significant share will be imported into the EU as prepared-preserved products or frozen loins – landings that are likewise recorded as exports.

In the longer perspective, the deficit grew by 4% in real terms from 2015 to 2024.

TABLE 14

EXTRA-EU TRADE

BALANCE FOR

FISHERY AND

AQUACULTURE

PRODUCTS OF THE

EU AND MAIN EU

NET IMPORTERS

(NOMINAL VALUE

IN

EUR BILLION)

Source: EUMOFA

elaboration of Eurostat
COMEXT data

(online data code: ds-

045409).

	Extra-EU trade balance 2023	Extra-EU trade balance 2024	Variation 2024–2023
EU-27	-22,05	-21,61	+0,43
Sweden	-5,47	-5,16	+0,31
Spain	-3,95	-4,19	-0,25
France	-2,76	-2,78	-0,02
Italy	-2,25	-2,34	-0,09
Netherlands	-2,15	-2,24	-0,09
Denmark	-1,90	-1,34	+0,57
Germany	-1,33	-1,18	+0,15

The United States and Japan – the second and third largest net importers of fishery and aquaculture products after the EU – showed diverging trends in 2024. While the trade deficit worsened for the United States compared with 2023, it improved for Japan. It is worth noting that, in absolute terms, China ranks as the world's third largest importer after the EU and the US. However, it is not included in this comparison, as it remains a net exporter overall.

For a more detailed comparative analysis of EU trade and the trade of other main players in the world, see Chapter 1.3.

⁹⁶ Extra-EU exports minus extra-EU imports.

⁹⁷ These calculations do not take into account the intra-EU exchanges flow.

TABLE 15

TRADE BALANCE FOR FISHERY AND **AQUACULTURE** PRODUCTS OF **MAJOR NET IMPORTERS** (NOMINAL **VALUE IN EUR BILLION)** Source: EUMOFA elaboration of Eurostat-COMEXT (online data code:: ds-<u>045409</u>) and Trade

Data Monitor data.

	Trade balance Trade balance 2023 2024		Variation 2024-2023	
EU-27	-22,05	-21,61	+0,43	
United States	-17,11	-18,03	-0,63	
Japan	-10,63	-10,31	+0,35	

The improvement of the EU-27 trade balance is more evident when looking at the breakdown by commodity group, as shown in Table 16. Most groups reduced their trade deficits, contributing to the overall positive trend at EU level. In particular, groundfish and non-food use categories followed this general pattern, showing clear improvements in their trade balances. The non-food use category even recorded a surplus, pointing to a degree of selfsufficiency not observed in most other product groups. The miscellaneous aquatic products category98 also maintained a positive balance, standing out as another exception to the overall deficit trend.

That said, not all categories followed this positive trajectory. The 2024 trade balance for tuna and tuna-like species worsened significantly, due to a combination of rising imports and falling exports compared with 2023.

TABLE 16 TRADE BALANCE FOR FISHERY AND AQUACULTURE PRODUCTS BY COMMODITY **GROUPS (NOMINAL VALUE IN**

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: ds-045409).

EUR BILLION)

	Trade balance 2023	Trade balance 2024	Variation 2024-2023	
EU-27	-22,05	-21,61	+0,43	
Salmonids	-7,24	-7,23	+0,01	
Non-food use	-0,33	+0,12	+0,45	
Tuna and tuna-like species	-2,05	-2,38	-0,33	
Small pelagics	-0,18	-0,19	-0,01	
Crustaceans	-3,81	-3,79	+0,02	
Other marine fish	-0,84	-0,95	-0,11	
Miscellaneous aquatic products	+0,17	+0,22	+0,06	
Groundfish	-4,20	-3,76	+0,44	
Flatfish	-0,17	-0,15	+0,01	
Cephalopods	-2,45	-2,50	-0,05	
Bivalves and other molluscs and aquatic invertebrates	-0,48	-0,50	-0,02	
Freshwater fish	-0,47	-0,49	-0,03	

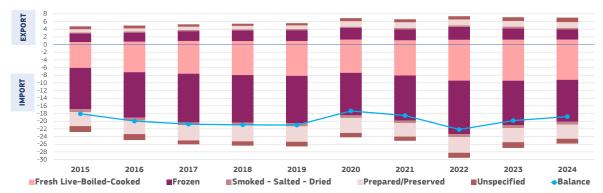
⁹⁸ This commodity group includes surimi, caviar, livers and roes, seaweed and other algae and other products.

Frozen products accounted for the largest deficit, reaching EUR 8,3 billion or 44% of the total. They were closely followed by fresh products which, with a deficit of EUR 7,9 billion, covered 42% of the total. The prepared-preserved category contributed a smaller share, with a deficit of EUR 2,2 billion – around 12% of the total. Of note, the trade deficit decreased across all categories between 2023 and 2024, with the exception of prepared-preserved products, which remained almost unchanged.

CHART 38

EXTRA-EU TRADE BALANCE FOR FISHERY AND AQUACULTURE PRODUCTS BY PRESERVATION STATE, (EUR BILLION)

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: <u>ds-045409</u>. Values are deflated by using the GDP deflator (base=2020).



4.2 COMPARISON BETWEEN IMPORTS OF FISHERY AND AQUACULTURE PRODUCTS AND MEAT

In 2024, the combined value of extra-EU imports of agri-food *plus* fishery and aquaculture products reached EUR 201,75 billion⁹⁹. Of this, fishery and aquaculture products accounted for 12% and meat for 3%¹⁰⁰. The EU is a net importer of fishery and aquaculture products, but a net exporter of meat.

Chart 39 compares the values of fish and meat imports from 2015 to 2024, excluding prepared and non-edible products¹⁰¹. It also illustrates, via the blue line, the evolution of the ratio between fish and meat import values. This ratio dropped sharply in 2022 to just below 5, indicating that the value of imported fish was nearly five times higher than that of imported meat.

The rising trend observed from 2018 to 2021 was driven by a sharper decline in the value of meat imports compared with fish. In 2022, both categories saw notable growth, but meat imports' growth of 45% was significantly higher than the 23% growth seen for fish. This shift contributed to a marked drop in the ratio. In 2023, the value of meat imports fell only 2%, while fish imports by 7%, leading to a further, though more moderate, reduction in the ratio. The trend continued in 2024, with meat import values increasing by 4% and fish imports decreasing by a slight 1%, bringing the ratio back to levels observed prior to the COVID-19 pandemic.

⁹⁹ This includes extra-EU imports of the items referring to fishery and aquaculture products monitored by EUMOFA (list by CN-8 code available at the link https://eumofa.eu/documents/20124/35680/Metadata+2+-+DM+-+Annex+4+Corr+CN8-CG-MCS.pdf/ae431f8e-9246-4c3a-a143-2b740a860291?t=1697717528452) and extra-EU imports of agri-food products (source: DG AGRI).

¹⁰⁰ For the sake of clarity, the comparison refers to "Fish" (which includes all items reported under chapter "03 - Fish and crustaceans, molluscs and other aquatic invertebrates" of the Combined Nomenclature commodities) and "Meat" (which includes all items reported under chapter "02 - Meat and edible meat offal") of Section I "Live animals: animal products" of the Combined Nomenclature commodities.

¹⁰¹ For methodological issues, this paragraph compares EUROSTAT codes 02 (meat) and 03 (fish) and not other codes for prepared and non-edible products.

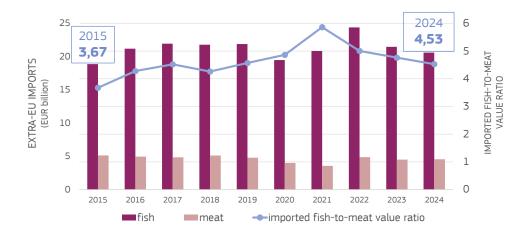
EXTRA-EU IMPORTS TREND AND RATIO OF IMPORTED FISHERY AND

CHART 39

FISHERY AND
AQUACULTURE
PRODUCTS VS.
MEAT, IN VALUE
(EUR BILLION)
Source: EUMOFA
elaboration of Eurostat-

COMEXT
(online data code: ds045409) and DG AGRI
data.
Values are deflated by

using the GDP deflator (base=2020).



4.3 EXTRA-EU IMPORTS

In 2024, extra-EU imports of fishery and aquaculture products totalled EUR 29,87 billion and 5,95 million tonnes. This was a modest 1% decrease in value from 2023 and represented the second consecutive year of decline in value. Of note, however, the decreases followed a sharp increase observed in 2022. In contrast, import volumes rose a slight 0,3 %, reversing the downward trend seen since 2022.

Most key imported species – such as salmon, shrimps, tuna, squid and octopus – recorded a slight increase in value in 2024. However, one of the main drivers behind the overall decline in import value from 2023 to 2024 was the sharp drop in the value of other major species. Notably, the value of Alaska pollock fell by 32%, cod by 7%, and fishmeal and fish oil by 25% and 14% respectively.

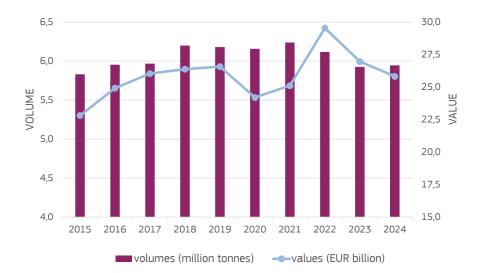
These species also saw their import volumes decline, though to a lesser extent, which explains the more stable overall trend observed in total import volumes.

In recent years, the EU had seen a general trend of falling import volumes combined with rising values, largely due to widespread price increases during 2022 and part of 2023. However, this trend has since reversed, with import values decreasing more significantly than volumes – a pattern that continued in 2024.

This shift can be attributed to several factors, including fluctuations of the EUR against the USD and the NOK in recent years. As a significant share of extra-EU imports originates from Norway, these exchange rate movements played a key role in the value increases from 2022 onwards. To note, the EU market of fishery and aquaculture products relies heavily on imports from third countries, especially for the raw material used in the processing sector, such as canned tuna and sardines, frozen tropical shrimps, frozen cod and Alaska pollock, as well as fresh salmon, fresh cod and fresh saithe.

CHART 40
EXTRA-EU IMPORTS
OF FISHERY AND
AQUACULTURE
PRODUCTS

Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409). Values are
deflated by using the
GDP deflator
(base=2020).



Salmon, by far the main species imported in the EU, accounts for 28% of the total value and 17% of the volume of extra-EU imports of fishery and aquaculture products. These imports come primarily from Norway, followed by the United Kingdom and the Faroe Islands. After reaching a peak in 2021, import volumes declined in both 2022 and 2023, returning to pre-COVID levels, but increased again in 2024. The value, on the other hand, reached its highest point in 2022, dipped the following year, and returned to that peak in 2024.

On a longer perspective, the volume of salmon imports grew by 13%, while their value rose by 53% in real terms between 2015 and 2024.

Shrimps are the next most imported species, both in volume and value. This category includes warmwater shrimps (frozen shrimps of the genus *Penaeus*, mainly imported from Ecuador), as well as miscellaneous shrimps and prawns¹⁰². It does not include the Pandalidae, *Crangon*, deep-water rose shrimps (*Parapenaeus longirostris*) or *Pandalus* species, which primarily originate from Argentina, India, Vietnam and Greenland.

Norway is the most important country of origin of EU imports of fishery and aquaculture products, thanks mainly to salmon, but also herring and cod. It is followed by Ecuador¹⁰³, Morocco and the United Kingdom. Imports from Ecuador consist mainly of warmwater shrimps and tuna¹⁰⁴. Those from Morocco include mostly fishmeal in volume, and octopus and squid, which largely originate from the Falkland Islands, in value. Imports from the United Kingdom are mostly fresh salmon.

In 2024, EU imports from the Russian Federation represented 3% of total extra-EU import volume and 2% of total value, amounting to 179.807 tonnes and EUR 710 million. This marked a decrease of 8% in volume and 18% in value from 2023. Frozen cod and frozen Alaska pollock, the main products imported, accounted for 45% and 42% of the total volume, respectively. In value terms, frozen cod made up 58%, and frozen Alaska pollock accounted for 26% of the total.

Following Russia's illegal, unprovoked and unjustified war of aggression against Ukraine, an import ban on certain seafood from Russia, specifically crustaceans, caviar and caviar substitutes¹⁰⁵, entered force in July 2022. However, Russia has never been a significant supplier of these products to the EU.

¹⁰² No detail is available in terms of species

¹⁰³ A case study on the development of trade flows of fishery and aquaculture products between the EU and the Andean community has been published on the EUMOFA'S Monthly Highlights n.7/2025, available here: https://eumofa.eu/documents/20124/188978/MH+7+2025_Final_EN.pdf/4e6e7545-6d84-8deb-ee3b-3fb5e370b3ad?t=1754035384684

¹⁰⁴ Skipjack tuna makes up for 80% of the total tuna extra-EU imports from Ecuador, while yellowfin tuna accounts for 13% of the total, and the remainder is miscellaneous tuna, for which no information is available.

¹⁰⁵ CN codes of banned products: 0306: Crustaceans, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine; smoked crustaceans, whether in shell or not, whether or not cooked before or during the smoking process; crustaceans, in shell, cooked by steaming or by boiling in water, whether or not chilled, frozen, dried, salted or in brine; 1604 31 00: Caviar, 1604 32 00: Caviar substitutes.

That said, imports that had been around 500 tonnes in both 2019 and 2020 dropped by 48% to 270 tonnes in 2021 and then surged to 992 tonnes in the months leading up to the ban in 2022. Despite these fluctuations, Russian crustaceans had never accounted for more than 0,2% of the EU's total crustacean imports in the 10-year period surveyed.

From 2019 to 2022, Russia's share of caviar and caviar substitute imports to the EU increased but remained minimal. In 2019 and 2020, imports from Russia accounted for less than 1% of the total, accounting for 9 and 14 tonnes, respectively. By 2021, those imports reached 40 tonnes, representing 1,8% of the total, and in 2022, the volume rose to 54 tonnes, making up 3,3% of the EU's caviar and caviar substitute imports, with most of them going to Germany. According to Eurostat-COMEXT, no imports from Russia were recorded in 2023 and 2024.

CHART 41

TOP EXTRA-EU
COUNTRIES OF
ORIGIN IN 2024
(IN VALUE)
Source: EUMOFA

(IN VALUE)
Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409)

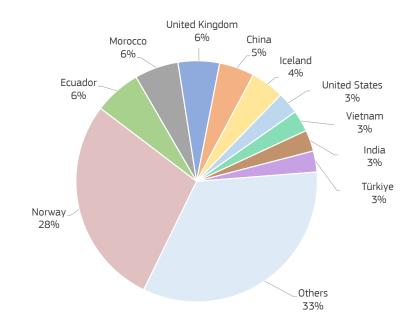
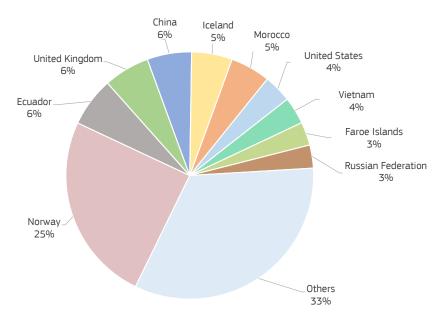


CHART 42

TOP EXTRA-EU COUNTRIES OF ORIGIN IN 2024 (IN VOLUME)

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: <u>ds-</u> 045409)



As mentioned, import values continued their downward trend from 2023 to 2024, following the steep price increases experienced in 2022. Chart 43 illustrates the trend from 2020 to 2024, showcasing the average import prices of the top-valued main commercial species

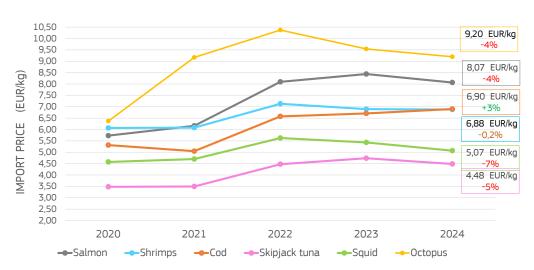
imported in the EU. In 2022, most of the top species considered had reached their highest prices of the last five years, with salmon, cod and skipjack tuna increasing once again in 2023. However, by 2024, most import prices declined.

Salmon saw its first price drop in five years, falling by 4% to 8,07 EUR/kg, its lowest since 2021. This decline came as import volumes increased, while the total value remained unchanged. Prices for octopus, squid and skipjack tuna also declined – by 4%, 5% and 7%, respectively. Shrimps remained stable and sold at 6,88 EUR/kg. Cod stood out as the only species to register a price increase, rising by 3% to 6,90 EUR/kg. This caused a sharper drop in import volume than in value, which had decreases of 10% and 7%, respectively.

NOMINAL UNIT
VALUE OF SOME
OF THE TOP
VALUED MAIN
COMMERCIAL
SPECIES IMPORTED
IN THE EU
AND % VARIATIONS
2024/2023

CHART 43

AND % VARIATIONS
2024/2023
Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409)



It is important to underline that imports are reported by Eurostat-COMEXT according to flows recorded by national customs. However, in many cases, the corresponding EU Member States are not the actual final destinations. Rather, these importing countries are points of entry for the fishery and aquaculture products imported to the EU, which are then traded in the internal market¹⁰⁶.

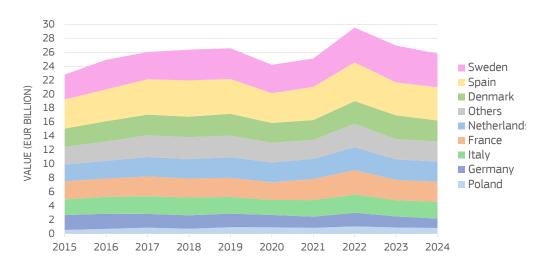
Taking this into account, the top five EU importers are Spain, Sweden, the Netherlands, Denmark and France. The precise amounts of the main EU importing Member States are shown in Charts 45 and 46. In 2023, Sweden surpassed Spain to become the top extra-EU importer in terms of value, primarily due to a rise in the value of salmon imports from Norway, Sweden's exclusive fresh salmon supplier. However, in 2024, Spain regained the top position, driven by a 4% increase in the value of Spanish imports and a 6% decline in Sweden's.

As shown in Chart 45, Sweden, along with Denmark, Germany and Belgium, were the only Member States to register a consistent decline in the nominal value of imports between 2023 and 2024. A similar trend is evident in Chart 46, which highlights corresponding decreases in import volumes for the same countries.

¹⁰⁶ This phenomenon is known as "the Rotterdam effect".

IMPORT-EXPORT

CHART 44 VALUE OF EXTRA-**EU IMPORTS** PER MEMBER **STATE** (EUR BILLION) Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: ds-045409). Values are deflated by using the GDP deflator (base=2020).





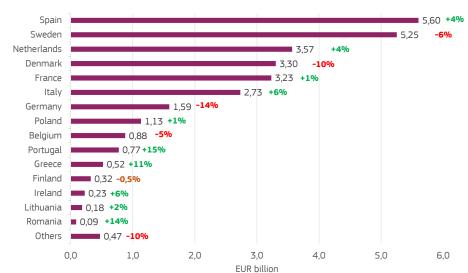
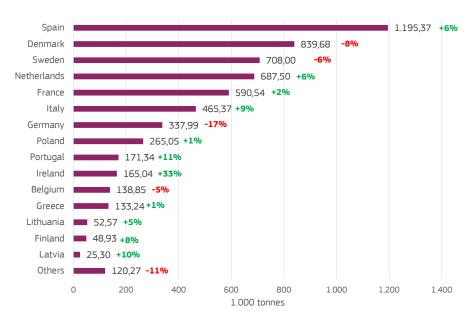


CHART 46 VOLUME OF EXTRA-EU IMPORTS BY MEMBER STATE IN 2024 AND % **VARIATION** 2024/2023 Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: ds-045409)



4.3.1 ANALYSIS BY MAIN SPECIES

SALMONIDS

Salmon, the main species imported in the EU, was responsible for 28% of the total value of extra-EU imports of fishery and aquaculture products in 2024, and 17% of the total volume. Among imports of salmonids, which also include trout and other salmonid species, salmon represented 97% of the total in both volume and value.

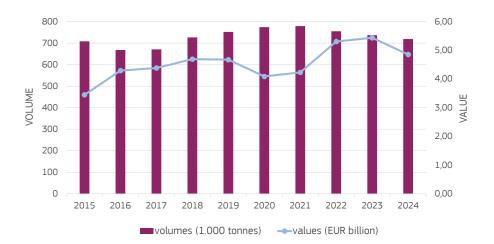
SALMON In 2024, imports of salmon reached 1,04 million tonnes, which was 5% higher than in 2023. This marked a return to growth after two consecutive years of decline. In contrast, the total value remained almost unchanged at EUR 8,38 billion, rising by just 0,1%. As a result, the unit value of salmon decreased by 5%, reaching 8,07 EUR/kg - the lowest level since 2021. Salmon is primarily imported as fresh whole fish, which accounted for 82% of salmon's total import volume. Fresh fillets accounted for 7% of the total, frozen fillets for another 7%, and frozen whole salmon for 3%. The remaining share comprised processed products, such as prepared/preserved and smoked salmon.

> Salmon imports are largely sourced from Norway, with volumes in 2024 amounting to 827.171 tonnes, worth EUR 6,65 billion. Sweden served as the main point of entry. Norway alone accounted for 80% of the volume and 79% of the value of all extra-EU salmon imports. Compared with 2023, the value of imports from Norway decreased by 3%, while volume rose by a slight 0,5%. During the period from 2015 to 2024, salmon imports from Norway grew at a compound annual rate of 5% in value and 1% in volume. The United Kingdom and the Faroe Islands were the second and third largest suppliers of salmon to the EU, together accounting for 11% of total volume and 13% of total value. After a decline in 2023 that was due to production drops, both countries recorded strong increases in 2024 due to improved productivity and, consequently, a rise in production in both countries. Imports from the UK rose by 39% in volume and 32% in value, reaching 66.669 tonnes worth EUR 616 million. Imports from the Faroe Islands grew by 27% in volume and 12% in value, totalling 47.931 tonnes valued at EUR 436 million. For the Faroe Islands, this marked a ten-year high in both volume and value, while for the UK it was a ten-year high in value only.

> Chart 47 provides an overview of extra-EU imports of fresh whole salmon from Norway over the past decade, highlighting shifting trends. Between 2017 and 2022, volumes rose more quickly than values. From 2022 onwards, volumes declined while values surged, peaking at the highest levels since 2015. In 2024, a new pattern emerged, with volumes remaining stable and values declining. The declining volume trend observed in the 2022 to 2024 period must be seen in relation to biological production challenges which lowered Norway's harvest volumes. Between 2023 and 2024, the average unit price of Norwegian salmon fell by 4%, from 8,35 EUR/kg to 8,04 EUR/kg. All major partner countries recorded a decline in unit value, except Iceland, which saw a 5% increase from 2023, reaching 8,02 EUR/kg. The highest 2024 average unit price was recorded for imports from the United Kingdom, at 9,24 EUR/kg, despite a 5% decrease from the previous year. The lowest came from China, where the average price dropped by 35% to 4,91 EUR/kg.

CHART 47
FRESH WHOLE
SALMON IMPORTED
IN THE EU FROM
NORWAY

Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409). Values are
deflated by using the
GDP deflator
(base=2020).



CRUSTACEANS

EU imports of crustaceans recorded a slight increase in 2024, partly offsetting the drop observed in 2023. However, their total value showed a decrease of 1% from 2023. In total, they amounted to 665.651 tonnes worth EUR 4,55 billion in 2024. Shrimps represent more than 90% of total volumes and 84% of total values of crustacean imports in the EU. They mostly include warmwater shrimps, as well as miscellaneous shrimps and prawns, ¹⁰⁷ but not including the *Pandalidae*, *Crangon*, deep-water rose shrimps "*Parapenaeus longirostris*" or "*Pandalus*" species.

WARMWATER SHRIMPS

Warmwater shrimps imported in the EU consist of frozen shrimps of the genus *Penaeus*. These alone accounted for 49% of the total volume and 44% of the total value of extra-EU crustacean imports. In 2024, imports reached 329.487 tonnes, worth EUR 2 billion – representing a 3% increase in volume but a 1% decrease in value from 2023. The average import price declined for the second consecutive year, falling by 4% to 6,06 EUR/kg, namely the lowest level recorded in the 2020–2024 period. This drop in unit prices in the EU also related to a fall in shrimp prices on the global market. Even with unit prices lower than in 2022, the decrease in volume recorded in 2023 was linked to a low demand for shrimps on the EU market due to wide inflation¹⁰⁸. Of note, in 2024, warmwater shrimps reached their highest import volume of the 2015–2024 decade, while also registering their lowest value. Indeed, the demand in the EU remained stable in 2024, but lower prices were recorded due to the reduced demand in China and the US¹⁰⁹.

EU imports of warmwater shrimps in 2024 came primarily from Ecuador, which supplied 54% of total imported volumes. Other key suppliers included India with 13%, Venezuela with 12%, Vietnam with 8% and Bangladesh with 4%. Most of these countries recorded larger increases in volume than in value, with the exception of Venezuela, where value grew more than volume, and Bangladesh, which registered declines in both.

Imports from Ecuador rose by 6% in volume, while their value increased by just 2% compared with 2023. The unit price stood at 5,14 EUR/kg, one of the lowest among the top five suppliers, and 4% lower than the previous year. Imports from India grew by 5% in volume, while their value remained nearly unchanged, decreasing by only 0,5%. This led to a 5% drop in unit price, which reached 6,99 EUR/kg. The steepest decline in unit value was recorded for imports from Vietnam, down 6% from 2023, selling at 7,94 EUR/kg – one of the highest among the main suppliers. In 2024, Vietnamese shrimp imports rose by 13% in volume and 6% in value compared with the previous year.

¹⁰⁷ No detail is available in terms of species.

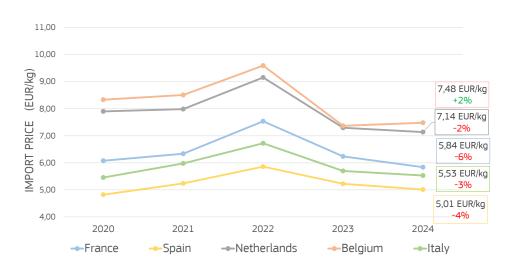
¹⁰⁸ Shrimp market bleak | GLOBEFISH | Food and Agriculture Organization of the United Nations (fao.org)

¹⁰⁹ GLOBEFISH | Quarterly Shrimp analysis - May 2025

Shrimps from Vietnam and India are primarily destined for the Netherlands and Belgium¹¹⁰ and have higher prices than those from Ecuador. Indeed, Ecuador only produces whiteleg shrimp (*Penaeus vannamei*), while India and Vietnam also export the higher value giant tiger shrimp (*Penaeus monodon*). In addition, most of the shrimps exported from Ecuador are head-on-shell-on (HOSO), while the majority of shrimps exported from India are peeled. The first points of entry for warmwater shrimps in the EU were Spain, France and the Netherlands, although it should be noted that these may not have been the final destinations especially those entering through the Netherlands. Indeed, Vigo in Spain and Rotterdam in the Netherlands are often transit points for further distribution to other EU Member States.

CHART 48

NOMINAL IMPORT
PRICES OF
WARMWATER
SHRIMPS IN THE
TOP FIVE EU
IMPORTERS AND %
VARIATIONS
2024/2023
Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409)



MISCELLANEOUS SHRIMPS

After two years of decline, EU imports of shrimps and prawns – not including the *Pandalidae*, Crangon, deep-water rose shrimps "*Parapenaeus longirostris*" and "*Pandalus*" species – returned to growth in 2024. Volumes increased 8% from 2023, reaching 215.473 tonnes, while the total value increased 2%, amounting to EUR 1,50 billion.

This growth was driven mostly by an increase in imports from the top five countries of origin, with the exception of Greenland, which recorded a decline of 19% in value and 18% in volume compared with 2023. In contrast, Argentina, Vietnam, India, Greenland and China all showed increases in their exports, both in volume and value. Argentina, which alone accounted for more than one third of total extra-EU imports of miscellaneous shrimps, registered a 12% increase in volume and a 10% increase in value over 2023. The average unit value of shrimps and prawns declined across all main countries of origin – except for Greenland, where it rose by 1% to 7,30 EUR/kg. Overall, the average unit price reached 6,96 EUR/kg in 2024, representing a 5% decrease compared with 2023.

GROUNDFISH

In 2024, the EU imported 1,07 million tonnes of groundfish with a value of EUR 4,43 billion. Cod and Alaska pollock are the main species imported within this category. Accounting together for 52% of the total volume and 64% of the total value, they are also two of the EU's most imported fishery and aquaculture products. However, they recorded some of the largest decreases of imported species from 2023 to 2024, surpassed only by fishmeal. Hake followed as the third most important species for this category, accounting on its own for 17% of both the volume and value of groundfish imports.

In 2024, extra-EU imports of cod amounted to 319.115 tonnes, worth EUR 2,20 billion, a decrease of 10% in volume and 7% in value from 2023. This decline was in line with the 2020–2024 trend, during which cod imports decreased by an average of 6% per year – decreases linked to a reduction of cod quotas at global level¹¹¹. When looking at a longer

¹¹⁰ The Netherlands and Belgium might not be the final destinations. Indeed, Rotterdam (NL) and Antwerp (BE) are important ports for landings of frozen fishery and aquaculture products from Far East suppliers, and these ports act as "hubs" for shrimps arriving in the EU, so the "actual" destinations might be other countries.
111 GLOBEFISH | Quarterly Groundfish analysis - May 2025

perspective, cod imports decreased by 24% in volume but only 2% in value in the 2015-2024 decade.

Despite this drop, cod remained one of the EU's most imported and highest-value groundfish species, with an average unit price of 6,90 EUR/kg, up 3% from 2023. In 2024, it dropped from third to fourth position among the most imported species by volume, overtaken by skipjack tuna. However, in terms of value, cod remained the EU's third most valuable import, following salmon and shrimps.

Norway, Russia, Iceland and China together account for 84% of the EU's extra-EU cod import volume and 88% of its value. Norway is the leading supplier, representing 29% of the volume and 34% of the value, followed by Russia with 24% and 19%, Iceland with 23% and 28%, and China with 9% and 7%, respectively. In 2024, cod imports from most of its major suppliers decreased. Imports from Norway reached 91.470 tonnes and EUR 742 million, a decrease of 21% in volume and 12% in value compared with 2023. Imports from Russia also dropped, by 16% in value and 15% in volume, reaching 75.525 tonnes and EUR 619 million. Imports from China were reported at 27.537 tonnes worth EUR 156 million. This represented a decrease of 22% in value and 11% in volume. The drop in import volumes from Norway and Russia (and to a large extent from China) must be addressed to the declining Norway/Russia joint managed cod stock in the Barents Sea. On the other hand, cod imported from Iceland increased 9% in volume and 7% in value, reaching 73.897 tonnes and EUR 412 million.

Cod imports from Norway and Iceland are more diversified, with similar shares of fresh, frozen, and salted products. In contrast, imports from Russia and China are predominantly frozen. These differences in product composition contributed to notable variations in unit prices. Among frozen cod imports, Russia recorded the lowest unit price at 5,14 EUR/kg, down 4% from 2023, with the average across major suppliers at 5,66 EUR/kg. As for fresh cod, Iceland registered the highest unit value at 10,23 EUR/kg, down 3% from 2023 against an average of 8,01 EUR/kg. In the salted and dried segment, the average unit price was 8,73 EUR/kg, with Norway standing out at 11,01 EUR/kg, which represented a 10% increase from 2023.

ALASKA After peaking in 2023, imports of Alaska pollock fell by 17% in 2024, reaching 237.394 tonnes POLLOCK - the lowest level recorded in the past decade. The value of these imports declined even more sharply, down by 32% to EUR 634 million, also marking a ten-year low. The average unit price dropped by 18%, settling at 2,67 EUR/kg.

> Alaska pollock is primarily imported as frozen fillets. Over the past decade, China had been the main supplier, consistently accounting for around 50% of total extra-EU imports. However, in 2024, a significant shift occurred, with imports from China dropping 51% in volume and 62% in value, thus reducing its share to just 30%. Fall in imports from China must be seen in relation to an increase in Chinese consumption of Alaska pollock and more products being exported to neighbouring markets, as well as African countries and Brazil. Meanwhile, imports from the United States surged, rising by 75% in volume and 40% in value, making it the leading supplier with a 36% share of total imports, mainly due to an increase in production in Alaska. China was also overtaken by the Russian Federation, which accounted for 34% of the volume, despite a slight decline of 4% in volume and a 30% drop in value.

> In terms of unit value, Alaska pollock imported from the United States was the most expensive, at 3,22 EUR/kg, down 20% from 2023. Unit values from Russia and China were lower, at 2,31 EUR/kg and 2,44 EUR/kg respectively, representing decreases of 27% and 22% below

> Germany was by far the main EU destination of all these main origin countries, covering 43% of the total volume of Alaska pollock imports, followed at a distance by France, the Netherlands and Poland, which accounted for 18%, 14% and 12% of the total, respectively.

TUNA-LIKE **SPECIES**

TUNA AND This group includes tunas and swordfish species. In 2024, the extra-EU imports of both totalled 675.707 tonnes, marking an 18% increase from 2023 and their highest level since 2020. In value terms, imports amounted to EUR 3,17 billion - up 7% from 2023 - marking the secondhighest level recorded of the 2020-2024 period.

> The main driver behind this growth was the sharp increase in imports of skipjack tuna, supported by a smaller rise in imports of yellowfin tuna. Processed tuna made up the majority of imports, with 23% as frozen products and 73% as prepared-preserved goods, mainly canned.

> Skipjack tuna alone accounted for 55% of the total imported volume, followed by yellowfin tuna at around 27%. To be noted, these imports partly consist of tuna caught and landed by the Spanish and French fleets in remote places close to the fishing areas of Ecuador, El Salvador, Guatemala, Seychelles, Mauritius, Côte d'Ivoire and Ghana. The catches were processed in those countries and then imported into the EU as prepared-preserved products.

SKIPJACK TUNA Almost all skipjack tuna imported in the EU is imported as prepared-preserved products. After three consecutive years of decline, extra-EU imports of skipjack tuna rebounded strongly in 2024, reaching a ten-year high of 385.471 tonnes and EUR 1,73 billion in value. In 2024, it became the third most imported species by volume, following salmon and shrimps.

> This growth was driven primarily by increases in import volumes from the two main supplier countries. Ecuador remained by far the largest source, accounting for over 40% of total extra-EU imports of prepared-preserved skipjack tuna. Imports from Ecuador surged to 151.603 tonnes worth EUR 690 million, up 54% in volume and 46% in value compared with 2023.

> China ranked second, surpassing the Philippines, Papua New Guinea and Mauritius, thanks to a 54% increase in volume and a 40% rise in value. In 2024, the EU imported 37.632 tonnes of skipjack tuna from China, worth EUR 144 million. Nevertheless, China's share remained significantly lower than Ecuador's, representing just 11% of total volume and 9% of total value.

> Its main importers are Spain, Germany and the Netherlands, followed by Italy and France. Between 2023 and 2024, Spain and the Netherlands recorded the largest increases in volume, up 29% and 32% respectively. Spain alone accounted for 38% of total extra-EU imports of skipjack tuna by volume. The Netherlands, which had seen notable declines in 2021 and 2022, bounced back in 2023 and continued to do so in 2024. It is worth noting that much of the skipjack tuna entering through Dutch ports is re-exported or processed further before reaching its final EU destinations.

YELLOWFIN In 2024, after reaching their lowest level in 2023, extra-EU imports of yellowfin tuna TUNA rebounded, increasing by 17% in volume and 3% in value to reach 185 021 tonnes worth EUR 861 million. Nevertheless, these figures still marked the second-lowest levels of the past decade in both volume and value.

> Yellowfin tuna is primarily imported as prepared-preserved products, which accounted for 73% of total volume in 2024. Frozen products made up 25%, while the remaining share was imported as fresh. These differences in product form impacted unit prices: prepared-preserved products sold at 6,14 EUR/kg, down 4% from 2023, while frozen products were priced at 2,68 EUR/kg, down 8% from the previous year.

> The leading countries of origin in 2024 included Seychelles, which contributed 16% of import volume and 15% of value, followed by Ecuador, Papua New Guinea, the Philippines and Mauritius. Imports from Seychelles continued to decline, falling by 4% in volume and 25% in value from 2023. Imports from Ecuador remained stable in volume, up 1% from 2023, but declined by 8% in value. In contrast, imports from Papua New Guinea and Mauritius recorded an increase of around 50% in volume while their value rose at a slower pace, together accounting for 15% of total volume and 17% of value. Imports from the Philippines have shown a volatile trend over the last decade. After hitting a ten-year low in 2023, they surged

in 2024, recording a 179% increase in volume and a 142% increase in value - the highest level since 2021 for volume, and a five-year peak for value.

Spain is by far the main importer of yellowfin tuna and plays a key role in re-exporting within the EU. Together with Italy, it accounted for 97% of frozen yellowfin tuna imports. Preparedpreserved products, by contrast, were more diversified in distribution, with Spain, Italy and France together representing 93% of the total.

PRODUCTS

NON-FOOD USE In 2024, extra-EU imports of non-food use products totalled 698.473 tonnes, worth EUR 1,14 billion – an 11% decrease in volume and a 17% drop in value compared with 2023¹¹². The previous year had marked the highest import value of the past decade, driven largely by a sharp increase in fish oil prices. In 2023, the average unit price of fish oil surged by 55%, reaching 3.855 EUR/tonne, amid limited availability linked to reduced anchovy fishing quotas in Peru, one of the world's main fish oil suppliers¹¹³. In 2024, prices rose a further 8%, while import volumes fell to their lowest level in ten years.

> Fishmeal and fish oil made up the bulk of non-food use imports, accounting for 29% and 21% of the volume respectively. The remaining share consisted of other products not intended for human consumption, such as fish waste and seaweed. According to available level of detail of data, however, it is not possible to identify the products included in this latter category more precisely.

FISHMEAL In 2024, extra-EU fishmeal imports fell to 199.909 tonnes, their lowest level since 2017 and a 20% decline from 2023. In value terms, imports amounted to EUR 323 million, down 25% from the previous year.

> Most of the EU's main fishmeal suppliers recorded declines in both volume and value between 2023 and 2024. Notably, the Faroe Islands and Iceland saw the sharpest drops, with volumes falling by 54% and 69%, and values declining by 57% and 73%, respectively. Morocco, which accounted for over one guarter of total imports by both volume and value, registered a 6% decrease in volume and an 11% decrease in value. Norway, Chile and Peru – together representing just under 30% of fishmeal imports – saw their volumes decrease by an average of 4.478 tonnes. South Africa was the only major supplier to buck the trend, increasing by 60% in volume and 40% in value, thus rising to the second-largest supplier in 2024.

> The average import price of fishmeal stood at 1.615 EUR/tonne, 6% lower than in 2023. Prices varied significantly by origin, with Norway registering the highest at 2.179 EUR/tonne and Morocco the lowest at 1.459 EUR/tonne.

> Spain was the largest EU importer of fishmeal both in 2023 and in 2024, with 62.638 tonnes imported in 2024 – 6% less than 2023. Imports also declined in Denmark and Germany, falling by 9% and 8% respectively. Spain, together with Germany and Denmark, are major entry points to the EU market, primarily due to the logistics of its harbours that have overseas routes and trading partnerships. Germany is also a hub for the further distribution of fishmeal, primarily for the aquafeed segment.

FISH OIL In 2024, EU imports of fish oil fell to 144.227 tonnes, their lowest level in a decade. In contrast, their value stood at EUR 560 million, the second highest of the period. This marked a 20% drop in volume and a 14% drop in value compared with 2023. The average unit price continued an upward trend that began in 2022, increasing by 8% from 2023 to 4.159 EUR/tonne in 2024 - 67% higher than in 2022.

> Norway and Peru were the EU's main suppliers, together accounting for 42% of total import volume and 37% of total value. After two consecutive years of sharp decline - 43% in 2022 and 92% in 2023 – imports from Peru rebounded in 2024, rising from 2.909 tonnes in 2023

¹¹² EUMOFA has recently published the "Fishmeal and fish oil" 2025 update which can be accessed here:

 $https://eumofa.eu/documents/20124/35725/Fishmeal+ and + fish+oil+ study_2025+ Edition.pdf/cfae4d0a-4568-277c-cce0-33ebce2f3a00? t=1754035427117$ 113 A case study on the development of trade flows of fishery and aquaculture products between the EU and the Andean community has been published on the EUMOFA'S Monthly Highlights n.7/2025, available here: https://eumofa.eu/documents/20124/188978/MH+7+2025_Final_EN.pdf/4e6e7545-6d84-8deb-ee3b-3fb5e370b3ad?t=1754035384684

to 23.167 tonnes in 2024. The US origin also recorded strong growth, more than doubling its export volume to the EU and reaching 12.491 tonnes.

In contrast, imports from Norway, Chile and Panama fell steeply, decreasing by 21%, 45% and 57% respectively. Among the top five suppliers, only Norway saw a modest 1% increase in unit value, but still recorded the lowest price at 2.322 EUR/tonne. Peru recorded the highest, at 5.750 EUR/tonne.

Denmark remained the main entry point for fish oil imports into the EU, receiving 54.137 tonnes worth EUR 222 million, followed at a distance by France and Spain.

4.4 EXTRA-EU EXPORTS

In 2024, EU exports of fishery and aquaculture products to third countries declined a slight 1% in volume from 2023, reaching 2,20 million tonnes. This continued the gradual downward trend observed since the 2020 peak. In contrast, export values increased a slight 1% over 2023, reaching EUR 8,25 billion which was the highest level recorded of the past five years. The divergence between value and volume seen in recent years may be linked to a range of structural and external factors. While the initial post-pandemic recovery played a role in reshaping global trade dynamics, new key drivers appear to have influenced the recent evolution. Among these, supply constraints due to reduced quotas and limited raw material availability have contributed to upward pressure on prices. Geopolitical developments have also had an impact. The Russian invasion of Ukraine, in particular, contributed to rising energy and input costs across the value chain, which, together with inflation and currency fluctuations, likely influenced trade flows and values.

Taken together, these elements may help explain the contrasting trend of decreasing export volumes alongside increasing values. As illustrated in Chart 49, volume and value followed a similar pattern until 2021. From 2022 onwards, however, volume started declining while export values continued to rise through 2023 and 2024.

CHART 49

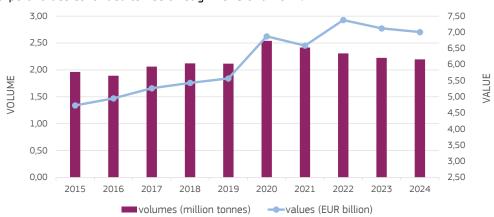
EXTRA-EU EXPORTS

OF FISHERY AND

AQUACULTURE

PRODUCTS

Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409). Values are
deflated by using the
GDP deflator
(base=2020).



In terms of volume, the EU mainly exports herring, blue whiting, fishmeal and fish oil not destined for human consumption, skipjack tuna, mackerel and salmon. Of note, extra-EU exports of tuna partly comprise tuna caught by the Spanish and French fleets in remote places. The catch is processed where caught and then, a significant share is imported into the EU as prepared-preserved products or frozen loins. In both cases, these landings are also recorded as exports.

Salmon exports, by far the first in terms of value in extra-EU exports, have been on a fluctuating trend in recent years. In 2022, the United States became the top destination in terms of value, while Norway and Nigeria ranked highest by volume. After a partial recovery in 2022, salmon exports declined again in 2023, before increasing a slight 1% in 2024. Compared with 2020, export volumes in 2024 were 32% lower, while values were 22% higher. Also of note, the US is the largest recipient of extra-EU salmon exports, having

imported 35.971 tonnes worth EUR 596 million in 2023. Salmon accounted for slightly less than half of extra-EU exports to the US in value and for slightly less than a quarter of their value.

Exports to Norway were mainly composed of fishmeal and fish oil, which together represented more than 65% of the total volume. In contrast, EU exports to Nigeria were dominated by blue whiting and herring, which together made up over 90% of the volume exported to the country.

CHART 50

TOP EXTRA-EU
COUNTRIES OF
DESTINATION IN
2024
(IN VOLUME)
Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409)

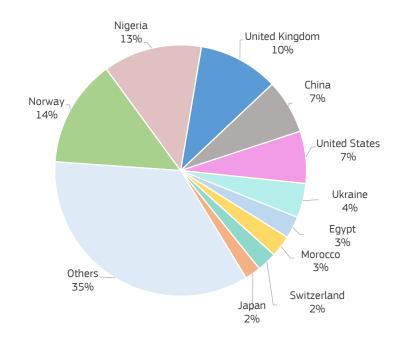


CHART 51

TOP EXTRA-EU
COUNTRIES OF
DESTINATION IN
2024
(IN VALUE)
Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409)

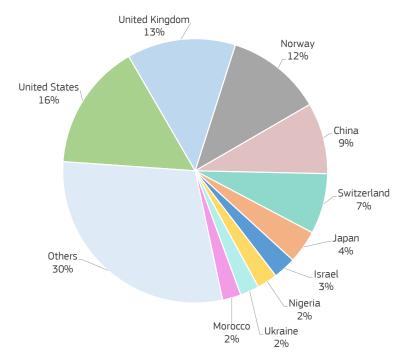


CHART 52

VALUE OF EXTRAEU EXPORTS
BY MEMBER STATE
(EUR BILLION)
Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409). Values are
deflated by using the
GDP deflator
(base=2020).

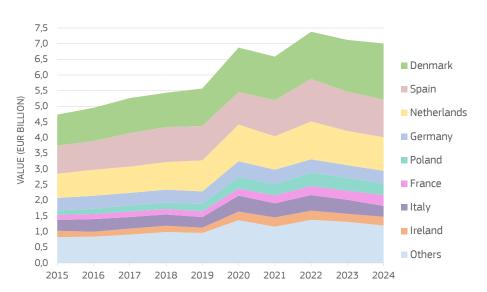


CHART 53
NOMINAL VALUE OF
EXTRA-EU EXPORTS
BY MEMBER STATE
IN 2024 AND %
VARIATION
2024/2023
Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409)

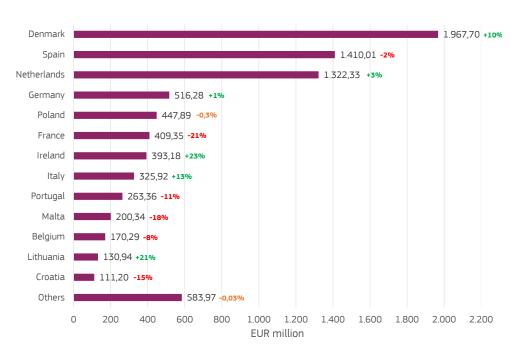
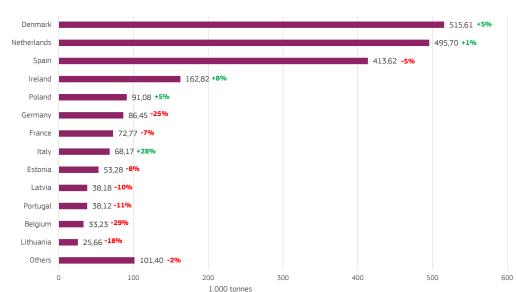


CHART 54
VOLUME OF EXTRAEU EXPORTS BY
MEMBER STATE IN
2024 AND %
VARIATION
2024/2023
Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409)



SALMONIDS

Salmon is by far the most valued species exported by the EU. In 2024, it represented 91% of the total volume and 94% of the total value of extra-EU exports of salmonids, a group that also includes trout and other salmonid species. Overall, they accounted for 4% of volume and 16% of value of total extra-EU exports in 2024.

SALMON

In 2024, extra-EU exports of salmon reached 88.383 tonnes, worth EUR 1,28 billion. During the past five years,, from 2020 to 2024, salmon exports decreased by 32% in volume but increased by 22% in value, while the average unit value soared by 78%, reaching 14,67 EUR/kg. This decline in volume was largely driven by a sharp reduction in exports of fresh whole or gutted salmon, which dropped 91% in 2021. Between 2020 and 2024, the unit value of this specific product category increased 66%, reaching 11,67 EUR/kg.

In 2020, nearly half of extra-EU salmon exports consisted of fresh whole or gutted products. By 2024, this share had declined to just 8%. In contrast, the share of fillets – including fresh, frozen and smoked – rose from 43% in 2020 to 79% in 2024. Switching from fresh gutted salmon to fillets is also a major driver behind the steep increase in salmon export value.

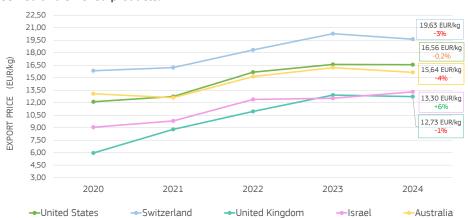
The main EU exporter of salmon is the Netherlands, which primarily supplies fresh fillets and smoked salmon. Poland and Denmark follow closely, both exporting mostly frozen fillets and smoked products, while Denmark also exports fresh fillets.

Chart 55 shows the five-year trend in average unit values of salmon exported to the main extra-EU destinations. From 2021 onwards, they increased, with average unit values growing by 23% in 2022 and 11% in 2023. Unit values largely stabilised in 2024, with all destinations recording slight decreases except the United Kingdom, which showed a moderate increase.

The highest unit value in 2024 was recorded in exports to Switzerland, where demand is concentrated on high-quality fresh and smoked fillets, including Label Rouge and organic salmon. The United States followed, with a unit value of 16,56 EUR/kg for mainly fresh fillet imports. Australia ranked third at 15,64 EUR/kg, primarily importing smoked and frozen salmon. Israel, where exports consist mainly of fresh products, ranked fourth, while the United Kingdom ranked fifth, recording a unit value of 12,73 EUR/kg, mostly importing prepared-preserved and smoked products.

CHART 55

NOMINAL EXPORT
UNIT VALUES OF
SALMON TO THE
TOP-5 EXTRA-EU
DESTINATIONS
AND % VARIATIONS
2024/2023
Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409)



SMALL PELAGICS

In 2024, EU exports of small pelagics to third countries fell to 457.248 tonnes, their lowest level of the decade, with a value of EUR 853 million. In real terms, this also marked the lowest value recorded over the ten-year period. Small pelagics accounted for more than 20% of the total volume and just over 10% of the total value of all fishery and aquaculture products exported by the EU in 2024.

Herring and mackerel, the two main species in this category, made up a combined total of 343.950 tonnes, corresponding to 10% and 5% respectively of the total extra-EU export volumes of fishery and aquaculture products.

HERRING

In 2024, EU exports of herring totalled 224.949 tonnes, valued at EUR 236 million. This represented an increase of 25% in volume and 18% in value compared with 2023, marking

the highest export volume since 2020. Since peaking in 2018, herring exports have followed a volatile trend. As shown in Chart 56, volumes and values dropped sharply in 2021, rebounded in 2022, declined again in 2023, and then rose once more in 2024. By contrast, unit values increased steadily between 2020 and 2023, rising from 0,88 EUR/kg to 1,11 EUR/kg, an overall growth of 26%. In 2024, however, the unit value declined by 6%, settling at 1,05 EUR/kg. The general trend is mainly driven by exports from the Netherlands, by far the major EU supplier of herring to third countries. In 2024, this accounted for almost two thirds of herring exports, but it was also related to reduced quotas from 2020 to 2021. Overall, most EU exports of herring are destined for Nigeria which imported 83.511 tonnes in 2024, followed at a distance by Egypt with 42.432 tonnes, and by Ukraine and Norway, each with up to 25.000 tonnes.

CHART 56

HERRING
EXPORTED FROM
THE EU TO THIRD
COUNTRIES

COUNTRIES
Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409). Values are
deflated by using the
GDP deflator
(base=2020).



MACKEREL

Between 2015 and 2024, extra-EU exports of mackerel showed a fluctuating trend. After a sharp drop in 2017 and 2018 – in line with a fall in EU catches – volumes began to recover between 2019 and 2021. This was followed by another decline in 2022, a brief rebound in 2023, and then a significant 22% fall in 2024. Overall, mackerel exports in 2024 were 51% lower than in 2015.

In value terms, exports reached EUR 287 million in 2024, 9% less than the previous year. However, the average unit value rose by 17%, reaching a five-year high of 2,41 EUR/kg. The main destinations for EU mackerel exports were the Faroe Islands¹¹⁴ and Nigeria, which together received about 37% of the total volume. In 2024, exports to these countries dropped considerably, with volumes falling 25% and 42%, respectively.

CHART 57

MACKEREL
EXPORTED FROM
THE EU TO THIRD
COUNTRIES
SOUTCE: FUMOFA

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: <u>ds-</u> <u>045409</u>). Values are deflated by using the GDP deflator (base=2020)



¹¹⁴ These exports could represent EU landings to the Faroe Islands, but this cannot be confirmed due to the reporting system.

GROUNDFISH

In 2024, extra-EU exports of groundfish species remained pratically unchanged, only increasing 1% from 2023 and reaching 352.643 tonnes. Their value, on the other hand, decreased for the second year in a row, dropping 4% from 2023, arriving at EUR 671 million. Cod accounted for almost 50% of the total value but only 14% of the total volume. In volume terms, blue whiting prevailed in the export of this group of species, accounting for 64% of the total volumes, but was second to cod in value, with a share of almost 20% of the total.

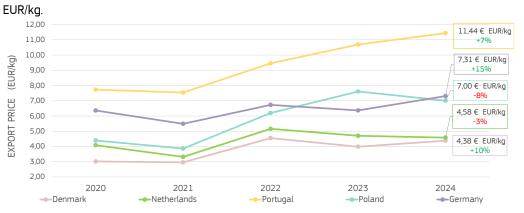
COD In 2024, EU exports of cod increased for the first time since 2021, rising a slight 1% from 2023 and reaching 49.756 tonnes. Despite this uptick, it remained the second-lowest volume of the past decade. In contrast, the value of exports declined by 6%, totalling EUR 331 million. The slight rise in volume was largely driven by an increase in exports from Denmark, which primarily markets frozen whole or gutted cod. Since 2023, Denmark has overtaken the Netherlands as the main EU exporter, accounting for 33% of total cod exports in 2024. Its main destination was China. Among the top exporters, Denmark recorded the lowest unit value, at 4,38 EUR/kg – a 10% increase from 2023. Further, Danish exports increased by 62%

in volume and 81% in value over the year.

This growth was partially offset by declines in Portugal, Germany and, to a lesser extent, Poland, Lithuania and Latvia. In Portugal, volume and value of cod fillet exports fell by 22% and 16%, respectively. These products tend to be the most expensive among EU cod exports, a trend that continued in 2024. Portugal's cod exports sold at 11,44 EUR/kg – up 7% from the previous year and nearly double the price of cod exported from Germany, the second most expensive. This price difference reflects the added value of the processing steps involved, as Portugal mainly exports processed cod, especially salted and dried products, whereas others focus on fresh products. Germany also recorded notable declines, with volumes down 45% and value down 37%. Its unit value, however, rose by 15% to 7,31

CHART 58

NOMINAL EXPORT
UNIT VALUES OF
COD FROM MAIN EU
EXPORTERS AND %
VARIATIONS
2024/2023
Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409)



BLUE WHITING

In 2024, extra-EU exports of blue whiting totalled 224.858 tonnes, a slight 1% decrease compared from 2023. Their value dropped to EUR 125 million, down 10% from the same period. Blue whiting is almost exclusively exported frozen, either whole or gutted.

Nigeria remained the primary destination for EU exports of this species, while the Netherlands continued to be the leading EU exporter. In 2024, Dutch exports reached 182.379 tonnes, representing approximately 80% of total extra-EU blue whiting exports. The overall decline observed in 2024 was largely driven by a 3% drop in volume and a 14% drop in value of Dutch exports to Nigeria.

The average export unit price stood at 0,55 EUR/kg, marking the lowest level recorded over the 2020–2024 period.

NON-FOOD **PRODUCTS**

In 2024, exports of fishery and aquaculture products not intended for human consumption represented 23% of the total volume and 15% of the total value of extra-EU exports. These products reached 499.358 tonnes and EUR 1,26 billion, marking the highest levels recorded over the 2015-2024 decade in both nominal and real terms. Compared with 2023, volumes declined by 9%, while values rose a significant 21%. The average unit price also increased, reaching 2.514 EUR/tonne, 11% higher than in 2023.

FISHMEAL After two consecutive years of decline and dropping to a decade low in 2023, extra-EU exports of fishmeal rebounded in 2024, increasing by 15% in volume and totalling 175.763 tonnes. In value terms, exports rose by 24% over the previous year, amounting to EUR 367 million – the highest level recorded in the 2015–2024 decade, both in nominal and real terms. More than half of these exports were destined for Norway. Denmark remained the leading EU exporter, accounting for approximately 77% of total extra-EU exports in 2024. Following a decline in 2022, Danish exports began to recover in 2023 and recorded significant growth in 2024, increasing by 28% in volume and 42% in value, thus matching the peak levels observed in 2021.

FISH OIL

After recording a downward trend since 2021, volume of EU exports of fish oil increased 7% from 2023 to 2024. Their value also continued to grow, consistent with the longer-term trend. The value of fish oil exports more than doubled from 2021 to 2024, increasing by 124%, while volumes declined by 15%. This divergence has driven a significant increase in the average unit price, which reached 4.807 EUR/tonne in 2024 - more than twice the level recorded three years earlier.

In total, extra-EU exports of fish oil amounted to 137.070 tonnes, valued at EUR 659 million. Denmark, the leading exporter, accounted for over 77% of the total volume. In 2024, Danish exports rose by 24% in volume and 48% in value compared with 2023, with Norway and the United Kingdom continuing to be the main destinations.

4.5 INTRA-EU TRADE

In 2024, intra-EU trade¹¹⁵ of fishery and aquaculture products amounted to 5,8 million tonnes worth EUR 31,7 billion. As shown in Chart 59, this corresponded to a 1% decrease from 2023, in both volume and value.

To be noted, exchanges within the EU largely consist of re-exports of products originally imported from third countries¹¹⁶. After entering the EU market, these products may also be traded and processed several times in different Member States. The creation of added value along the often complex supply chains and the multiplication of cross-border flows contribute to inflating the value of intra-EU exports.

The 15 flows with the highest value at country and main commercial species levels in 2024 are shown in Chart 60. Of note, in 2024, the combined value of intra-EU exchanges of salmon and cod accounted for almost 40% of the total value of intra-EU trade flows of fishery and aquaculture products. Moreover, after being overtaken by Sweden in 2023, the Netherlands regained its position as the EU Member State with the highest value of intra-EU trade in 2024, reaching EUR 5,4 billion, up 2% from 2023.

¹¹⁵ Intra-EU trade analysis is based on intra-EU exports only, due to the fact that intra-EU imports and intra-EU exports should coincide. For more details, please refer to the Methodological background.

¹¹⁶ It has to be underlined that despite "exports" are reported as such by Eurostat-COMEXT according to flows recorded by national customs, in most cases the northern EU Member States are not the actual exporters but rather countries through which products are transported.

IMPORT-EXPORT

CHART 59 INTRA-EU TRADE OF FISHERY AND AQUACULTURE PRODUCTS

PRODUCTS
Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409). Values are
deflated by using the
GDP deflator
(base=2020).

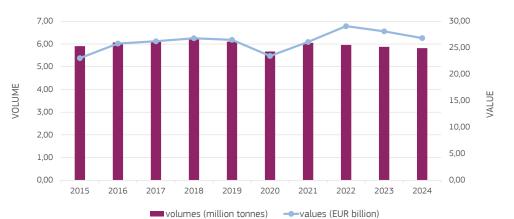


CHART 60

TOP 15 FLOWS OF FISHERY AND AQUACULTURE PRODUCTS WITHIN THE EU IN 2024 (IN NOMINAL VALUE) Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: ds-045409).

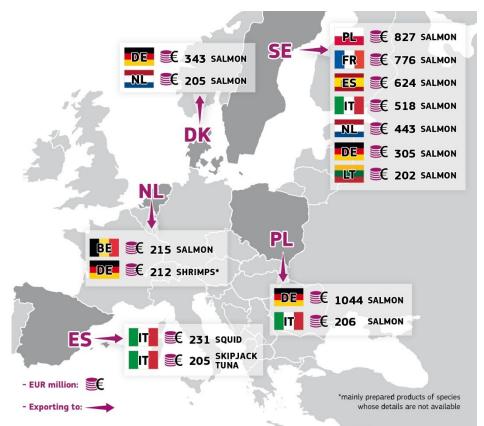
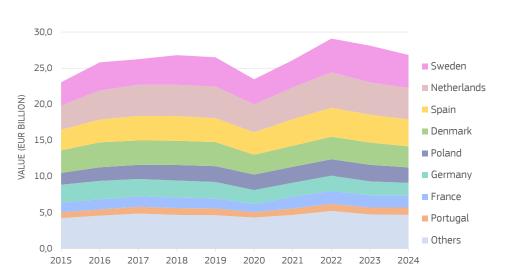


CHART 61

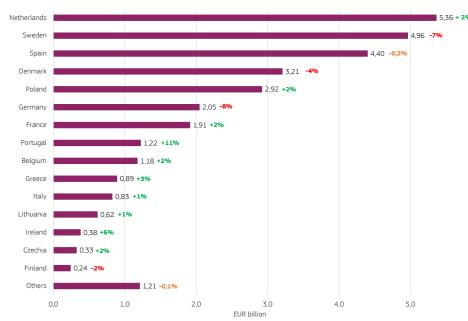
VALUE OF INTRA-EU EXPORTS PER MEMBER STATE (EUR BILLION) Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: ds-045409). Values are deflated by using the GDP deflator (base=2020).





NOMINAL VALUE OF INTRA-EU EXPORTS
BY MEMBER STATE
IN 2024 AND %
VARIATION
2024/2023
Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409)

CHART 62



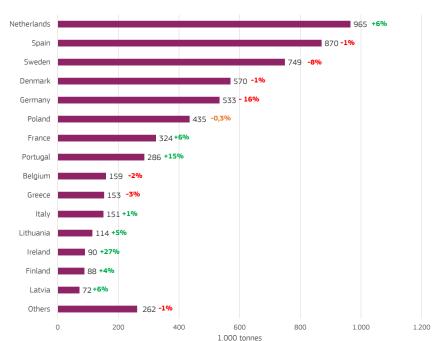
VOLUME OF INTRA-EU EXPORTS BY MEMBER STATE IN 2024 AND % VARIATION 2024/2023 Source: EUMOFA elaboration of Eurostat-

(online data code: ds-

CHART 63

COMEXT data

045409)



4.5.1 ANALYSIS BY MAIN SPECIES

SALMONIDS

Exports of salmon prevail in the intra-EU trade of fishery and aquaculture products¹¹⁷. In 2024, intra-EU exchanges of salmon amounted to 1,02 million tonnes worth EUR 10,1 billion. This represented 32% of the total intra-EU trade in value and 18% of the total in volume.

Among salmonids, which also include trout and other salmonid species, salmon represented 92% of total volume and 94% of total value.

SALMON

According to Eurostat-COMEXT, Sweden alone contributed almost half of the intra-EU exports volume of salmon in 2024, and accounted for 42% of their total value¹¹⁸. Denmark and

¹¹⁷ Ibidem.

¹¹⁸ Ibidem.

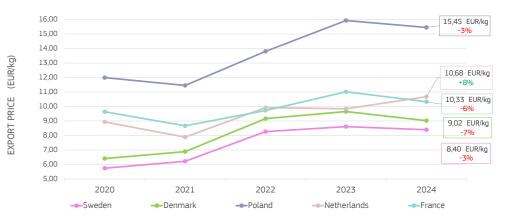
Poland followed, representing 15% and 11% of the volume and 13% and 18% of the value, respectively. Since Poland has a thriving smoking industry – mainly for salmon from Norway – its exports mainly include smoked products and, to a lesser extent, fresh products. On the other hand, exports from Denmark and Sweden consist almost entirely of fresh products. This is reflected in the unit values, as shown in Chart 64, with Poland registering the highest at 15,45 EUR/kg, which is 3% less than 2023.

Since peaking in 2021, intra-EU exchanges of salmon have shown a gradual downward trend, a pattern confirmed in 2024. Although volumes declined a slight 1%, from 2023, they remained above pre-pandemic levels. The decline was largely driven by Norway, which saw volumes traded within the EU drop 5%, arriving at 504.961 tonnes. Denmark also recorded a decrease, with exports falling by 2% to 149.757 tonnes. Among the main exporters, only Poland recorded growth, with its volume rising by 7% to 116.714 tonnes.

In terms of value, a shift emerged in 2024. For the first time since 2020, intra-EU trade in salmon declined in nominal terms, falling by 2% or EUR 250 million from 2023, to a total of EUR 10,1 billion. This decrease was linked to a 2% drop in the average export unit value, from 10,13 EUR/kg in 2023 to 9,94 EUR/kg in 2024. As illustrated in Chart 63, all key Member States recorded peak unit values in 2023, with most experiencing decreases in 2024. The only exception was the Netherlands, where unit values continued to rise in 2024, to reach 10,68 EUR/kg.

CHART 64

NOMINAL UNIT
VALUE OF SALMON
IN THE INTRA-EU
TRADE BY THE TOP
EXPORTERS IN 2024
AND
% VARIATIONS
2024/2023
Source: EUMOFA
elaboration of EurostatCOMEXT data
(online data code: ds045409)



GROUNDFISH

In 2024, intra-EU trade of groundfish totalled 747.294 tonnes worth EUR 3,8 billion, a decrease of 4% in volume and 5% in value from 2023. This corresponded to the lowest volume recorded over the decade and, in real value terms, the lowest value since 2015. The main contributor to this category was cod, which accounted for a significant portion of the groundfish traded in the EU and drove the overall trend.

COD Cod is the second most valued species among all fishery and aquaculture products traded in the EU¹¹⁹.

In line with the general trend observed for groundfish, intra-EU exports of cod reached a decade low in 2024, totalling 286.657 tonnes, valued at EUR 2,1 billion. This represented a 4% decrease from 2023, in both volume and value.

The Netherlands¹²⁰, the main EU exporter of cod, accounted for more than 35% of total intra-EU cod exports. In 2024, its exports amounted to 196.782 tonnes worth EUR 808 million, marking a 5% decline from 2003. Around one third of this volume was shipped to Spain, primarily as frozen fillets, sold at 5,84 EUR/kg, which was down 2% from 2023. Portugal used to be another key destination, traditionally importing salted whole or gutted cod, dried cuts and frozen fillets. However, from 2023 to 2024, Dutch exports to Portugal dropped sharply, with volumes down by 49% and values by 40%. These products tend to fetch higher unit

¹¹⁹ Ibidem.

¹²⁰ Ibidem.

prices due to their processing level and variation. In 2024, the average unit value of Dutch cod exports to Portugal was 9,37 EUR/kg, up 17% from 2023.

Denmark and Sweden, also among the top exporters, together accounted for 33% of the total volume and 32% of the total value of intra-EU cod exports. Both followed an overall declining trend: Danish exports decreased by 12% in volume and 8% in value, while Swedish exports dropped 18% in volume and 14% in value.

Denmark exported 58.133 tonnes of cod in 2024, valued at EUR 408 million. These exports mainly consisted of fresh whole or gutted cod to the Netherlands and fresh fillets to France. Prices for both products increased by 5% over 2023, reaching 5,68 EUR/kg for whole/gutted cod and 13,71 EUR/kg for fresh fillets, reflecting the higher value of the latter.

Sweden exported 36.394 tonnes of cod worth EUR 271 million, primarily to Portugal, where products are marketed as dried and salted cod. In 2024, average prices for dried cod increased by 8%, reaching 12,40 EUR/kg, while salted cod, which remained relatively stable, declined a slight 0,3% to 5,14 EUR/kg.

OTHER SPECIES

The other major species that dominate intra-EU trade flows are primarily imported species that will be re-exported within the EU market.

In 2024, following cod and salmon, the most traded species within the EU were shrimps – particularly miscellaneous and warmwater shrimps – and skipjack tuna. These species are largely reliant on extra-EU imports. Intra-EU exchanges of warmwater and miscellaneous shrimps reached a decade high of 228.443 tonnes, valued at EUR 2 billion. This represented increases of 6% in volume and 3% in value from 2023. Skipjack tuna also recorded growth, with volumes up by 5% and value by 1%, reaching 200.459 tonnes and EUR 1,08 billion – the highest value observed in the 2020–2024 period.

By contrast, intra-EU exchanges of trout declined slightly in 2024, decreasing 1% from 2023 in both volume and value. Volumes reached 87.380 tonnes, with a total value of EUR 661 million. Unlike other key traded species, trout is largely produced within the EU, which has historically maintained a high level of self-sufficiency. Alongside mussels, trout remains one of the most widely farmed species in the EU aquaculture sector.

5/ LANDINGS IN THE EU

5.1 OVERVIEW

TOTAL EU

The data on landings¹²¹ analysed in this report cover the initial unloading of any fishery products, including algae and seaweed, from fishing vessels in each EU Member State¹²². In addition to landings of species destined for human consumption, it includes products intended for industrial uses¹²³.

In 2023, the volumes of landings in the EU reached their lowest point of the past decade.

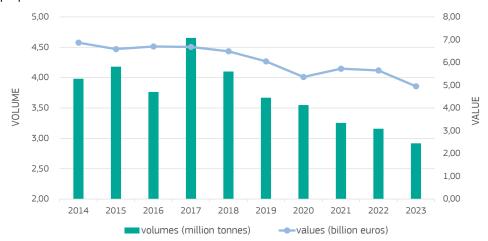
In 2023¹²⁴, total EU landings reached 2,92 million tonnes, valued at EUR 5,59 billion, which was the lowest volume level of the 2014–2023 decade. The decline also marked the continuation of a downward volume trend that began in 2018.

Between 2019 and 2023, EU landings fell by 20% in volume and 6% in value. As for the longer ten-year period, landings in 2023 were 27% lower than in 2014, which represented a decrease of 1,06 million tonnes and EUR 1,92 billion in real terms. Further, a comparison with 2022 shows that the landings decreased by 8% in both volume and value in 2023, which equalled a drop of more than 240.000 tonnes and EUR 467 million.

In 2023, 75% of EU landings of aquatic animals were destined for human consumption, close to one quarter went for industrial purposes, and the remaining share was for animal feed or unknown purposes. Seaweeds and algae accounted for 2% of total EU landings, most of which were intended for human consumption, with around 5% used for industrial purposes.

CHART 65 TOTAL LANDINGS IN THE EU

Source: EUMOFA, based on EUROSTAT (online data code: fish ld main) and national sources' data. More details on the sources used can be found in the Methodological background. Values are deflated by using the GDP deflator (base=2015).



As shown in Chart 66, only two of the most landed species in the EU, namely herring and blue whiting, showed increased landings from 2022 to 2023. Blue whiting landings grew mainly due to higher landings in the Netherlands and Denmark, while herring landings grew due to increased landings in the Netherlands, Estonia and Finland.

¹²¹ In line with Eurostat's guidelines on the production and dissemination of statistical data by Commission services after the UK withdrawal from the EU, since the most recent reference period is year 2023, UK is excluded from the EU aggregations of each year. In addition, EU data include Croatia since 2013, date of the EU's enlargement to this country.

¹²² Data regarding landings do not refer to landlocked countries (Czechia, Luxembourg, Hungary, Austria and Slovakia). The data analysed in this report cover products landed in EU by vessels of: EU Member States, Canada, Faroe Islands, Greenland, Kosovo, Iceland, Norway and the UK.

¹²³ It is worth underlying that the data on fishery production included in the supply balance regard catches for human consumption, which is thus different from the data on landings analysed in Chapter 5 of this report. For the definitions, please refer to the Methodological background.

¹²⁴ The reader should bear in mind that 2023 data for several species landed in Ireland and Denmark are confidential, thus excluded from the analysis.

LANDINGS

At the same time, all other main commercial species landed in the EU reported decreases, especially hake and clam which registered the sharpest decreases among the EU's most landed species. For hake, the decrease was driven almost entirely by Spain, which accounted for roughly two thirds of EU hake landings and recorded a sharp fall of 27.361 tonnes, down to 68.572 tonnes, its lowest level of the past decade. This should be seen in relation to the entry into force of management measures in the Mediterranean – mainly the reduction of the number of fishing days and the implementation of closure areas. For clam, the most significant EU landing decrease was observed in the Netherlands, where it dropped by more than 30%.

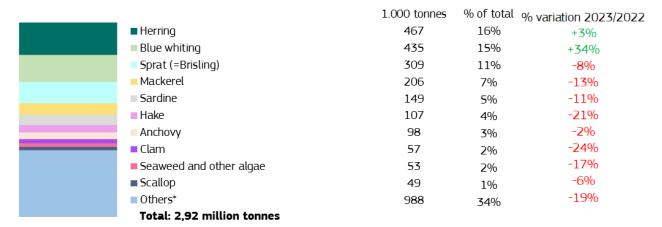
Overall, there were reductions in Total Allowable Catches (TACs) for mackerel and horse mackerel in the EU, which are continuing in 2025.

CHART 66

MOST IMPORTANT MAIN COMMERCIAL SPECIES LANDED IN THE EU

VOLUME IN 2023, % OF TOTAL AND % VARIATIONS 2023 / 2022

Source: EUMOFA, based on EUROSTAT (online data code: <u>fish_ld_main</u>) and national sources' data. More details on the sources used can be found in the Methodological background.



*Others largely include the EUMOFA aggregation "other groundfish" – mainly comprising sandeels that covered alone 5% of total volumes landed.

Although frozen skipjack tuna is not one of the top 10 species landed in the EU in volume terms, its recorded decrease is worth mentioning. Landings of frozen skipjack tuna in Spain dropped by 85%, from around 140.000 tonnes to just over 20.000 tonnes. However, it should be specified that Spanish catches only decreased marginally in 2023 and that the sharp fall in Spanish landings of skipjack tuna mainly reflects a shift in where the fish were landed rather than a drop in production. Indeed, Spanish tuna vessels operate in distant waters and, likely driven by logistical and economic factors, they often land their frozen catches in foreign ports, notably in the Western Indian or Atlantic Oceans. In addition to the dramatic skipjack tuna drop, Atlantic horse mackerel also recorded a notable drop. Overall, its landings dropped more than 50%, reflecting reduced activity in Spain and the Netherlands.

As opposed to these decreases, a notable increase was observed for landings of sandeels¹²⁵ in the EU. Despite not being listed among the EU's main commercial species, its trend is worth analysing, due to its strong influence on total EU volumes. Nearly all sandeel caught in the EU is landed in Denmark, which holds the highest quota for this species. In Denmark, sandeel is primarily used for industrial purposes, particularly in the production of fishmeal. In 2023, Danish landings reached 139.810 tonnes, up 64% from 2022 and representing more than 99% of the EU total. This marked a strong rebound

¹²⁵ Sandeel does not constitute a "main commercial species" because of its limited market for human consumption. It thus falls under the aggregation "other groundfish".

after two consecutive years of decline. Over the past decade, sandeels' landings have been highly variable, largely driven by fluctuating industry demand, ranging from a low of 40.947 tonnes in 2016 to a peak of over 391.930 million tonnes in 2017. These fluctuations were influenced by adjustment of TACs and changes in stock biomass in the North Sea, as well as lower fishing mortality rates, which together supported the high catch levels in 2017¹²⁶. The 2023 increase partially offset the sharp decreases recorded since 2021, yet overall volumes remained well below the highs observed earlier in the decade and underscored the cyclical and highly regulated nature of the fishery. In value terms, as shown in Chart 67, the decreases registered for almost all major species

In value terms, as shown in Chart 67, the decreases registered for almost all major species landed in the EU were offset by a strong increase in the value of herring landings in Denmark.

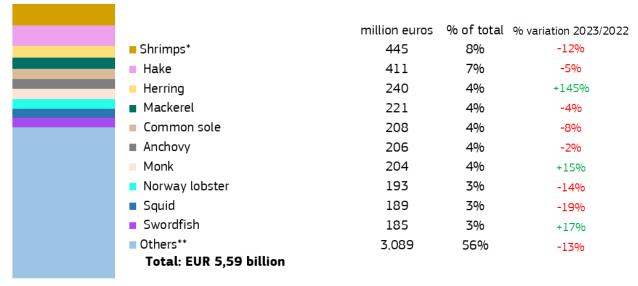
CHART 67

MOST IMPORTANT MAIN COMMERCIAL SPECIES LANDED IN THE EU

NOMINAL VALUE IN 2023, % OF TOTAL AND % VARIATIONS 2023 / 2022

Source: EUMOFA, based on EUROSTAT (online data code: fish ld main) and national sources' data.

Source: EUMOFA, based on EUROSTAT (online data code: <u>rish to main)</u> and national sources of More details on the sources used can be found in the Methodological background.



^{* &}quot;Shrimps" includes Crangon spp., coldwater shrimps, deep-water rose shrimps, warmwater shrimps and miscellaneous shrimps.

For other species, the declines reflected both lower volumes for most main commercial species and weaker market prices following the price spikes of 2022. With inflation stabilising and energy costs easing, the fall in value could point to a return to more moderate market conditions. The steepest drops in value were recorded for skipjack tuna which dropped by EUR 209 million or 82%, and for yellowfin tuna which dropped by EUR 98 million or 50%. The value of hake, one of the EU fleet's most valuable species, decreased by EUR 22 million reflecting lower Spanish landings.

^{**}Among other main commercial species, the ones with the highest landing value in 2023 were herring, blue whiting and clam, each covering 3% of the total.

¹²⁶ The EU Fish Market, 2019 edition: https://eumofa.eu/documents/20124/48460/EN_The+EU+fish+market_2019.pdf/6d17b377-282d-d37c-7d0c-9393add41357?t=1593074325939

TABLE 17
AVERAGE NOMINAL
PRICES AT LANDING
STAGE OF TOP MAIN
COMMERCIAL SPECIES
IN THE EU (EUR/KG)

Source: EUMOFA, based on EUROSTAT (online data code: fish ld main) and national sources' data. More details on the sources used can be found in the Methodological background. Possible discrepancies in % changes are due to rounding.

Main commercial species	2019	2020	2021	2022	2023	2023/2022	2023/2019
Anchovy	1,75	1,46	1,93	2,11	2,09	-1%	+20%
Atlantic horse mackerel	0,90	1,04	1,31	1,02	1,22	+20%	+36%
Blue whiting	0,31	0,41	0,57	0,35	0,38	+9%	+23%
Clam	2,82	2,38	2,34	2,42	2,60	+7%	-8%
Cod	3,21	3,95	4,14	4,97	4,74	-5%	+48%
Crab	2,59	2,22	2,41	3,21	2,83	-12%	+9%
European plaice	2,44	2,62	2,37	3,48	3,03	-13%	+24%
Haddock	2,08	1,79	1,83	1,79	1,76	-2%	-15%
Hake	3,05	3,01	3,07	3,20	3,85	+21%	+26%
Herring	0,33	0,41	0,51	0,21	0,51	+140%	+57%
Mackerel	1,13	1,08	1,23	0,97	1,07	+10%	-5%
Monk	5,34	4,93	5,41	5,82	5,41	-7%	+1%
Mussel Mytilus spp.	0,25	0,29	0,31	0,28	0,39	+39%	+53%
Norway lobster	9,27	9,37	9,98	11,69	10,48	-10%	+13%
Sardine	0,98	0,86	0,99	0,98	0,91	-7%	-7%
Scallop	2,69	2,81	2,61	2,77	2,75	-1%	+2%
Seaweed and other algae	0,07	0,07	0,06	0,07	0,07	+4%	-2%
Shrimp Crangon spp.	2,89	3,60	4,11	5,63	6,57	+17%	+127%
Skipjack tuna	1,18	1,22	1,44	1,75	1,69	-3%	+43%
Sprat (=Brisling)	0,24	0,23	0,25	0,28	0,39	+38%	+64%
Yellowfin tuna	2,12	1,82	2,48	3,09	3,08	-0,1%	+45%

BY MEMBER STATE

In 2023, Denmark recorded the highest landing volume in the EU, reaching 689.163 tonnes worth EUR 505 million. This reflected an increase of 15% in volume and 61% in value 127 compared with 2022. The increase was mainly driven by strong growth in sandeel, blue whiting and herring, which together accounted for most of the overall rise and more than offset declines in sprat, plaice and cod. In contrast, Spain reported landings of 494.923 tonnes worth EUR 1,65 billion, down 29% in volume and 20% in value from 2022. The drop was largely due to a sharp contraction in tuna landings, especially skipjack and yellowfin, both of which recorded significant reductions. Hake also fell to its lowest level of the past decade, while modest increases in swordfish and sardine only partly mitigated the overall decline.

Meanwhile, France landed 275.638 tonnes worth EUR 883 million, which indicated drops of 12% and 9%, respectively, from 2022. The decrease followed a strong previous year and, despite stable or slightly higher landings of hake and cuttlefish, the decrease reflected lower volumes of several major species, such as Albacore tuna, blue whiting, sardine, clams and scallop.

¹²⁷ However, this takes into consideration herring, for which 2022 data for value are confidential. Without weighting in herring in the year-on-year comparison, the value of landings in Denmark increased 29% from 2022 to 2023.

CHART 68

VOLUMES OF LANDED PRODUCTS IN MAIN EU COUNTRIES IN 2023 AND % VARIATIONS 2023 / 2022

Source: EUMOFA, based on EUROSTAT (online data code: fish ld main) and national sources' data. More details on the sources used can be found in the Methodological background.

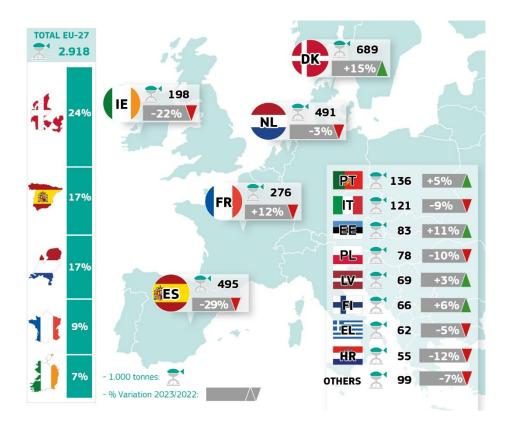


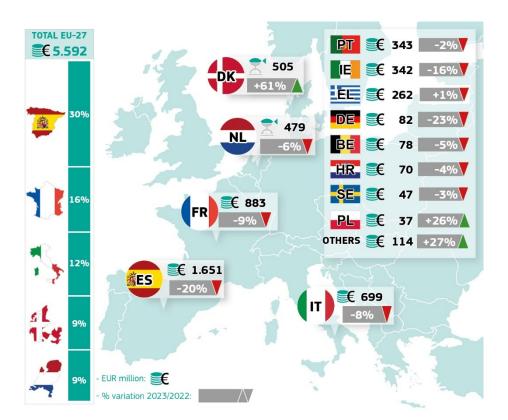
CHART 69

NOMINAL VALUES OF LANDED PRODUCTS IN MAIN EU COUNTRIES IN 2023 AND % VARIATIONS 2023 / 2022 Source: EUMOFA, based on

EUROSTAT (online data code:

fish ld main) and national
sources' data.

More details on the sources
used can be found in the
Methodological background.



5.2 ANALYSIS BY MAIN SPECIES

SMALL PELAGICS

In 2023, EU landings of small pelagics totalled 1,30 million tonnes, with a value of EUR 999 million. Their volumes indicated an 8% decline from 2022, which represented the lowest level of the decade. They also continued the downward trend that began in 2018, while their overall value increased by 9%¹²⁸.

The fall in volume was mainly driven by lower landings of mackerel and Atlantic horse mackerel, with smaller declines recorded for sprat and sardine. Values largely followed the same pattern, decreasing for species that also saw lower volumes. Notably, the five main small pelagic species – herring, sprat, mackerel, sardine and anchovy – together accounted for more than 40% of total EU-landed volume but represented around 15% of their total value.

HERRING

In 2023, landings of herring, the most landed main commercial species, totalled 467.133 tonnes which accounted for 16% of the total volume of fish landed in the EU. This increase of 10.000 tonnes from 2022 reversed the decline that had persisted since 2019. In value terms, herring landings totalled EUR 240 million. This was more than double the 2022¹²⁹ value, mainly due to the recovery of prices in key producing countries.

The Netherlands remained the largest EU producer, and it is also worth noting that the Dutch market is export oriented. In 2023, Dutch herring landings amounted to 149.217 tonnes, which represented one third of the EU total. Although the volume decreased a slight 3% from 2022, the landing value increased by 51%, reaching EUR 69 million. Of note, the increase was driven by a recovery in the unit price from 0,30 EUR/kg in 2022 to 0,46 EUR/kg in 2023, after the sharp drop recorded in 2022, as seen in Chart 70. The Danish fleet followed closely, landing 138.358 tonnes which amounted to 30% of the EU total. When value data again became available in 2023, it showed landings worth EUR 106 million, the highest among all Member States.

Other northern Member States contributed smaller shares: Finland accounted for 54.419 tonnes worth EUR 16 million, up 8% in volume and 41% in value from 2022, confirming its position as the third-largest EU producer with 12% of total landings. Estonia landed 43.985 tonnes of herring, up 26% from 2022, with a total value of EUR 14 million which was double its 2022 value. At the same time, Latvia recorded 34.422 tonnes, a 9% increase, worth EUR 11 million, up 28% from 2022.

The overall increase in value was driven by higher unit prices across all main producing countries, reflecting a market recovery from the sharp declines of 2022. Notably, unit prices rose from 2022 to 2023 not only in the Netherlands, but in: Finland, where unit prices grew from 0,23 to 0,30 EUR/kg; in Estonia, from 0,21 to 0,33 EUR/kg; and in Latvia, from 0,28 to 0,33 EUR/kg. Of note, most of the herring landed in EU countries is intended to be sold fresh. Only the landings in the Netherlands are processed and sold as frozen products.

It should also be recognised that landings of herring originate from different stocks, including the North Sea stock, the Atlantic spring-spawning stock and the Baltic stock. Each of these stocks has unique characteristics that cater to specific market preferences. Thus, they bring different prices on the market. Of note, the share of landings destined for industrial use and those destined for human consumption vary from year to year, resulting in significant price differences, which is especially relevant for Denmark and Sweden.

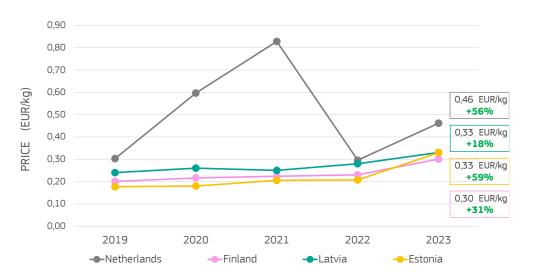
¹²⁸ However, this takes into account Danish landings of herring, for which 2022 data for value are confidential. Without weighting in Danish landings of herring in the year-navear comparison, the value of FIL landings for small pelanics decreased 9% from 2022 to 2023

year-on-year comparison, the value of EU landings for small pelagics decreased 9% from 2022 to 2023.

129 However, this takes into account Danish landings of herring, for which 2022 data for value are confidential. Without weighting in Danish landings of herring in the year-on-year comparison, the value of EU landings of herring increased 41% from 2022 to 2023.

CHART 70 AVERAGE NOMINAL PRICES OF HERRING LANDED IN MAIN EU MEMBER STATES (EUR/KG)

Source: EUMOFA, based on EUROSTAT (online data code: fish ld main) and national sources' data. More details on the sources used can be found in the Methodological background.



SPRAT

In 2023, EU landings of sprat totalled 308.991 tonnes worth EUR 120 million. Compared with 2022, volumes fell by 8%, while value increased by 27%. As illustrated in Chart 71, this reflected a strong recovery in prices across major producing countries. In a longer decade perspective, comparing 2023 to 2014, volumes decreased 22%, while their value in real terms grew by 4%.

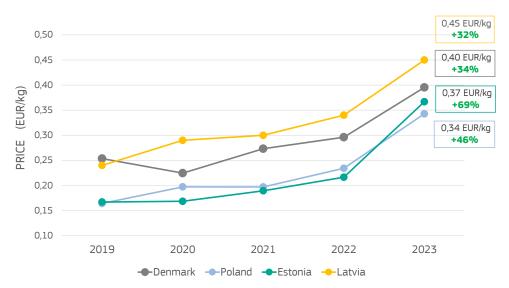
Denmark, Poland, Estonia and Latvia together accounted for close to 95% of total EU sprat landings, both in volume and value. Denmark remained by far the largest producer, landing 173.002 tonnes which was 57% of the EU total. Although volumes fell by 7% from 2022, the value rose by 25% to EUR 68 million, a growth driven by an increase in the average unit price from 0,30 to 0,40 EUR/kg. Danish landings are mainly intended for production of fishmeal¹³⁰, while Poland and Latvia have well established canning industries for sprat and are the largest producers of canned sprat in the EU.

Poland ranked second, landing 46.260 tonnes which was 15% below 2022, but its value rose 24% to EUR 16 million, as prices strengthened from 0,23 to 0,34 EUR/kg. In Estonia, volumes were relatively stable dropping only 1% to 35.958 tonnes, while value surged 67% to EUR 13 million, due to a sharp rise in prices from 0,22 to 0,37 EUR/kg. Similarly, Latvia recorded 31.906 tonnes, down 2%, but value increased 30% to EUR 14 million, with the highest average unit price among the main producers at 0,45 EUR/kg.

CHART 71

AVERAGE NOMINAL PRICES OF SPRAT LANDED IN MAIN EU MEMBER STATES (EUR/KG)

Source: EUMOFA, based on EUROSTAT (online data code: <u>fish ld main</u>) and national sources' data. More details on the sources used can be found in the Methodological background.



¹³⁰ More information on this can be found in the EUMOFA study on EU fishmeal and fish oil production available at the link https://www.eumofa.eu/market-analysis#thematic.

MACKEREL In 2023, EU landings of mackerel totalled 206.343 tonnes worth EUR 221 million, which represented the lowest levels recorded in the past decade and marked decreases of 13% in volume and 4% in value compared with 2022.

> Mackerel landings in the EU have shown marked volatility over the past decade, reflecting: fluctuations in stock availability, a clear decrease in TACs in recent years, and the redistribution of fishing opportunities following Brexit. Periods of recovery in landings, such as those in 2020 and 2022, have alternated with sharp contractions, such as in 2021 and again in 2023, when reduced fishing effort significantly affected landings.

> The Netherlands remained the leading EU producer, landing 60.491 tonnes, which accounted for close to 30% of the total. Although this represented a 24% decrease in volume compared with 2022, the total value increased by 25%, reaching EUR 52 million, driven by a recovery in the average unit price from 0,52 EUR/kg in 2022 to 0,86 EUR/kg in 2023. However, due to the vertical integration recorded in the Dutch supply chain, where multiple stages of production and distribution are controlled by the same company, it should be noted that the unit value may be underestimated because internal pricing between different stages may not reflect true market prices.

> Ireland and Spain ranked second and third, with 2023 landings of 41.322 tonnes and 39.981 tonnes, respectively, both down from 2022. They also registered decreased values, reaching EUR 62 million and EUR 42 million, respectively, in 2023. In Spain, the reduction was linked to lower prices, which fell from 1,40 EUR/kg to 1,06 EUR/kg on average, while in Ireland, the price was stable at 1,50 EUR/kg. It is worth mentioning that Ireland dealt with a general reduction in TACs for the most important species, including mackerel. From 2021 to 2024, these species saw consistent reductions in advised TACs, with stock advice for 2025 indicating that this decline is likely to continue. Portugal followed, with mackerel landings increasing a significant 55% in volume, reaching 31.490 tonnes, and a 57% increase in value, reaching EUR 16 million. This resulted in a stable unit price of 0,51 EUR/kg, which was up 2% from 2022.

SARDINE In 2023, EU landings of sardine dropped to 148.595 tonnes worth EUR 135 million, marking the lowest level in both volume and value of the past decade. Compared with 2022, volumes declined by 11% while value fell by 17%, continuing a trend that has been constant since 2019, except for a temporary increase in 2020.

> Spain and Croatia remained the two main producers, together accounting for almost half of total EU sardine landings. Spain landed 35.088 tonnes, representing 24% of the EU total, up 4% from 2022, but the total value dropped 21% to EUR 33 million. Croatia followed closely with 32.093 tonnes, or 22% of the EU total, marking a sharp 19% decline from 2022, while value decreased by 15% to EUR 19 million. The decline is related to the entry into force of the multiannual management plan for small pelagic fisheries in the Adriatic Sea. This plan, which established management measures for sardine and anchovies, included the reduction of catch limits for sardine and anchovy in its first three years of 2022 to 2024¹³¹.

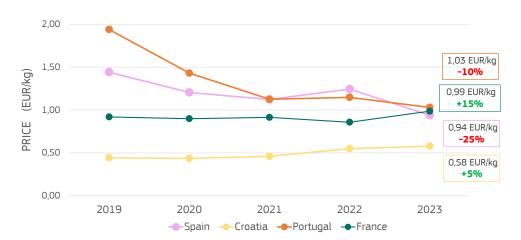
> Portugal landed 26.011 tonnes, equivalent to 18% of the total, a 5% increase over the previous year, though value dropped 5% to EUR 27 million. France accounted for 22.582 tonnes or 15% of total volume, down 10% from 2022, while value increased a slight 4% reaching EUR 22 million.

> The unit value of sardines varied significantly across producing countries. Spain, which traditionally records the highest price among major producers, saw its average unit value drop from 1,24 EUR/kg to 0,94 EUR/kg, a 24% decrease from 2022 to 2023. Portugal followed a similar trend, with a 10% decline from 1,15 EUR/kg to 1,03 EUR/kg. In Croatia, the average unit price increased 5% from 0,55 EUR/kg to 0,58 EUR/kg, while France recorded a stronger 15% rise from 0,86 EUR/kg to 0,99 EUR/kg.

¹³¹ Source: https://www.fao.org/gfcm/managementplan-smallpelagic-adriatic/en/

CHART 72 AVERAGE NOMINAL PRICES OF SARDINE LANDED IN MAIN EU MEMBER STATES (EUR/KG)

Source: EUMOFA, based on EUROSTAT (online data code: <u>fish_ld_main</u>) and national sources' data. More details on the sources used can be found in the Methodological background.



ANCHOVY

In 2023, EU anchovy landings were below 100.000 tonnes for the first time in ten years. They totalled 98.385 tonnes worth EUR 206 million, both down 2% from 2022. This result was consistent with the gradual downward trend in volume observed since 2019, interrupted only by a brief recovery in 2021.

Spain, the leading producer, accounted for almost half of total EU anchovy landings. Spanish volumes increased a moderate 3%, reaching 45.208 tonnes, while value grew 11% to EUR 91 million. Portugal, which contributed 5% of total EU landings, also recorded a strong recovery, with volume up 29% to 4.567 tonnes and value up 30% to EUR 16 million.

These increases in Spain and Portugal were offset by decreases in Italy and Greece 132 , while Croatia maintained stable volumes. Italy, representing 20% of total landings, recorded steep declines of 19% in volume and 23% in value, dropping to 19.567 tonnes worth EUR 63 million. Greek landings, accounting for 12% of the total, fell by 10% in volume and 3% in value, to 11.527 tonnes and EUR 19 million. Croatia, which made up 14% of the total, recorded only a slight decrease of 1% in volume and 3% in value, totalling 13.833 tonnes worth EUR 13 million.

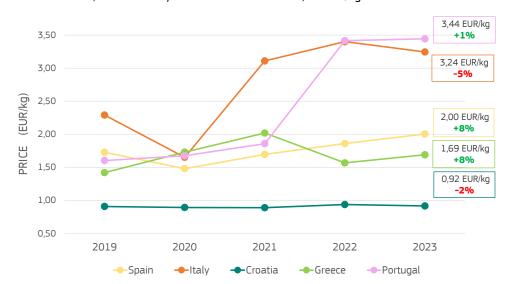
The value of anchovy landings varies considerably among EU Member States, even when similar volumes are landed. In 2023, the unit value of anchovy in Portugal reached 3,44 EUR/kg, up 1% from 2022 – the highest unit price in 5 years, while in Greece it was 1,69 EUR/kg, up 8% from 2022. The unit price for anchovies in Croatia, generally lower than in other countries, decreased by 2% and amounted to 0,92 EUR/kg.

CHART 73 AVERAGE NOMINAL PRICES OF ANCHOVY LANDED IN MAIN EU MEMBER STATES

(EUR/KG)

Source: EUMOFA, based on EUROSTAT (online data code: fish ld main) and national sources' data.

More details on the sources used can be found in the Methodological background.



¹³² The decrease in the Mediterranean countries is mainly related to the multiannual management plan, as explained above

GROUNDFISH

In 2023, the volume of EU groundfish landings increased for the first time since 2020, rising by 21% from 2022, while overall value increased by 3%.

The main commercial species in this grouping are blue whiting, hake, cod, haddock, redfish, saithe, whiting, pouting, ling, pollack, grenadier and toothfish, while the remaining species, including sandeels, are aggregated under "other groundfish". During the past decade, landings of lower-priced species, such as sandeel and blue whiting, increased, while landings of higher value species, such as hake, declined. Historically, the volume of groundfish landings in the EU has been closely tied to sandeel landings. Since 2016, sandeel landings have fluctuated dramatically, with volumes ranging from around 40.000 tonnes to just under 400.000 tonnes from year to year. As mentioned above, this variability is due to sandeel landings being driven by industry demand, with only a few vessels targeting them at specific times of the year for a specialized market.

BLUE WHITING

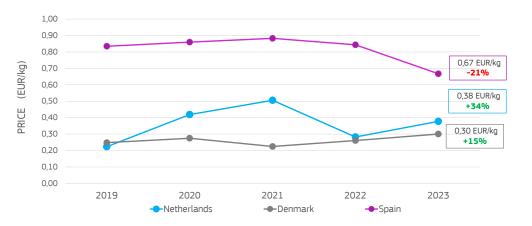
Among groundfish, blue whiting is the most landed main commercial species in the EU. In 2023, it accounted for more than half of total volumes of its commodity group, at 56%. It is worth noting that most of the blue whiting landings in the EU are not destined for human consumption. The exceptions are Mediterranean catches and a small share of Atlantic catches destined for the export markets involved in production of surimi. However, most landings of this species are used to produce fishmeal and fish oil¹³³.

In 2023, EU landings of blue whiting reached 434.519 tonnes worth EUR 164 million, up 34% in volume and 46% in value from 2022. This sharp increase was mainly driven by higher landings in the Netherlands and in Denmark, the major landing countries for this species.

The Netherlands' blue whiting landings reached a decade-high 177.778 tonnes in 2023, up 47% from 2022, while the total value almost doubled to EUR 67 million. Its unit price increased 34%, from 0,28 EUR/kg in 2022 to 0,38 EUR/kg in 2023. Denmark also saw a sharp recovery matching 2019 levels both for volume and value, with landings nearly doubling to 138.183 tonnes, up 97%, and value increasing 126% to EUR 42 million. Their unit value also increased, growing by 15% from 0,26 EUR/kg to 0,30 EUR/kg. By contrast, landings in Ireland decreased by 28% in volume and 27% in value, reaching 70.194 tonnes worth EUR 19 million. Spain landed 28.547 tonnes, up 14% but the value dropped 10% to EUR 19 million. The unit value of Spanish landings of blue withing is usually higher than in Denmark and the Netherlands, as was seen in 2023 when, even after decreasing 21% in 2022, unit value dropped from 0,84 EUR/kg to 0,67 EUR/kg.

CHART 74 **AVERAGE NOMINAL** PRICES OF BLUE WHITING LANDED IN MAIN EU MEMBER STATES (EUR/KG)

Source: EUMOFA, based on EUROSTAT (online data code: <u>fish_ld_main</u>) and national sources' data. More details on the sources used can be found in the Methodological background.



¹³³ More information on this can be found in the EUMOFA study on EU fishmeal and fish oil production available at the link https://www.eumofa.eu/marketanalysis#thematic

HAKE In 2023, EU hake landings totalled 106.641 tonnes worth EUR 411 million, marking decreases of 21% in volume and 5% in value compared with 2022. This brought hake to its lowest level of the past decade, both in volume and in real terms value. The average unit value nevertheless increased by 21%, from 3,20 EUR/kg to 3,85 EUR/kg, marking a 5-year

European hake (*Merluccius merluccius*), the main species landed, accounted for 72% of the total, while 18% of the total was Argentine hake (*Merluccius hubbsi*), which was exclusively landed in Spain by a long-distance fleet. The remainder were Benguela hake and silver hake which each accounted for 5% of the total.

Spain remained by far the leading producer, accounting for two-thirds of total EU hake landings. Spanish volume fell a sharp 29% to 68.572 tonnes, while value decreased 10% to EUR 240 million, reflecting the reduced landings of Argentine hake, which had decreased by 66% from 2022 to 2023. The increases recorded in France, Ireland and Italy, which ranked after Spain, were not enough to offset the decrease recorded in Spain. To note, Italy has historically had the highest unit value for hake landings. In 2022, this value reached 6,62 EUR/kg, down 5% from 2022. Conversely, Spain had the lowest unit value, at 3,50 EUR/kg, because of the lower price of frozen whole Argentine hake, which in 2023 amounted to 2,02 EUR/kg, up 6% from 2022.

CHART 75 AVERAGE NOMINAL PRICES OF HAKE LANDED IN MAIN EU MEMBER STATES (EUR/KG)

Source: EUMOFA, based on EUROSTAT (online data code: <u>fish_ld_main</u>) and national sources' data. More details on the sources used can be found in the Methodological background.



In 2023, the volume of EU cod landings remained broadly stable, decreasing only 0,5% from 2022 and arriving at 16.591 tonnes, while the value dropped 5% to EUR 79 million. Volumes and values continued to hover at historically low levels following a prolonged decline over the past decade. Indeed, when comparing 2014 with 2023, cod landings dropped 81% in volume and 64% in real terms value.

When looking at Member States, however, contrasting trends emerged. The EU countries with the highest landings of cod in the EU – Denmark, Spain, Portugal and Germany – contributed 47%, 17%, 17% and 13% of the total volume, respectively. Denmark and Portugal both saw their landings of cod increase sharply in 2023, up 50% and 58% respectively. In value terms, Denmark recorded a strong 122% increase reaching EUR 32 million, while Portugal nearly doubled to EUR 8 million, driven by higher volumes and stronger market prices. On the other hand, Spain and Germany both registered declines. Spanish landings fell 15% in volume and 22% in value, arriving at 2.794 tonnes worth EUR 16 million. In Germany, landings decreased 39% to 2.214 tonnes, with value halved to EUR 13 million. The average unit value of cod across the EU was 4,74 EUR/kg in 2023, down 4% from 4,94 EUR/kg in 2022, reflecting the larger share of lower-priced landings from Denmark and Portugal.

CRUSTACEANS

In 2023, landings of crustaceans in the EU declined by 11% in volume and 13% in value compared with 2022, dropping to 98.203 tonnes worth EUR 802 million. This marked the first decrease after two years of growth and the lowest level of the decade, in both volume and real value.

SHRIMPS

Shrimps, presented here as all shrimp species combined, are the highest valued product landed in the EU¹³⁴.

In 2023, landings declined to the lowest levels of the decade, dropping to 47.341 tonnes with a total value of EUR 445 million. This reversed the recovery observed in 2022, when volumes increased for the first time since 2018 and returned to pre-pandemic levels.

Deep-water rose shrimp (*Parapenaeus longirostris*) surpassed *Crangon* shrimp as the most landed shrimp species for the first time, accounting for 35% of total EU shrimp landings. Italy, Spain and Greece continued to dominate, together representing more than 90% of total EU deep-water rose shrimp volumes. Overall, landings of this species decreased by 7% in both volume and value from 2022. Italy still led the ranking despite volume decreasing 4% to 5.944 tonnes and a 12% fall in value that dropped it to EUR 32 million. The average unit value was 5,41 EUR/kg, 9% lower than in 2022. Spain followed closely with 5.759 tonnes, down 7% in volume and 6% in value to EUR 50 million. Its unit value increased 1%, from 2022, arriving at 8,63 EUR/kg. Greece recorded a steeper decline, with landings dropping 18% to 3.215 tonnes and value down 10% to EUR 17 million. The unit value reached 5,19 EUR/kg, for a 9% increase from 2022.

Crangon shrimp, which is only landed in the northern Member States, accounted for 31% of the total volume of shrimps landings in the EU in 2023, a share that had been at 43% in 2022. As the leading producer, the Netherlands saw landings fall by 54% to 6.437 tonnes, with value decreasing 47% to EUR 44 million. The unit value was 6,79 EUR/kg, 15% higher than in 2022. Germany followed with 6.305 tonnes worth EUR 38 million, down 29% and 23% respectively, while its unit value of 6,02 EUR/kg was 8% higher than in 2022.

Coldwater shrimp other than *Crangon* were mainly landed in Denmark and Sweden. Denmark recorded that its volume dropped 25% to 1.775 tonnes, and its value decreased 11% to EUR 8 million, while its unit value rose to 4,57 EUR/kg, which was 19% higher than 2022. Sweden, with 1.131 tonnes, recorded a decrease of 14% in volume and of 25% in value, attesting at EUR 9 million, with a unit value of 8,23 EUR/kg, which was 13% less than 2022.

The group "miscellaneous shrimps" mainly includes giant red shrimp (*Aristaeomorpha foliacea*), blue and red shrimp (*Aristeus antennatus*), and striped red shrimp (*Aristeus varidens*). Italy and Spain together accounted for around 90% of all these shrimps landed in the EU in 2023, both in volume and value. While landings in Italy mainly included giant red shrimp, those in Spain mostly comprised striped red shrimps, blue and red shrimps, and striped soldier shrimp. Spanish landings of "miscellaneous shrimps" grew 18% to 3.573 tonnes, and value increased 3% to EUR 77 million, with a unit value of 21,58 EUR/kg, a 13% drop from 2022. Italian landings dipped a slight 2% to 2.736 tonnes, and value decreased 12% to EUR 67 million, with a unit value of 24,54 EUR/kg which was a 10% drop from 2022.

¹³⁴ The aggregation "Shrimps" includes the species: Shrimp Crangon spp.,coldwater shrimps (mainly Nothern prawn "Pandalus borealis"), deepwater-rose shrimps ("Parapenaeus longirostris"), warmwater shrimps (mainly Camarote prawns "Penaeus kerathurus") and miscellaneous shrimps (mainly giant red shrimps "Aristaeomorpha foliacea", blue and red shrimps "Aristeus antennatus" and striped red shrimps "Aristeus varidens").

TABLE 18 AVERAGE NOMINAL PRICES OF SHRIMPS IN THE EU COUNTRIES WHERE MOST LANDINGS WERE RECORDED IN

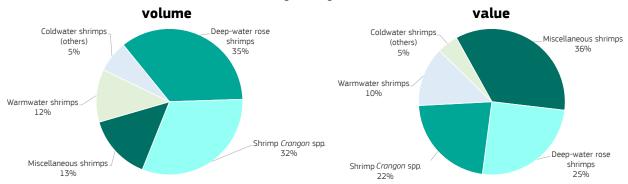
Source: EUMOFA, based on EUROSTAT (online data code: fish ld main) and national sources' data. More details on the sources used can be found in the Methodological background.

Main commercial species	Member State	2019	2020	2021	2022	2023	2023/2022	2023/2019
Shrimp <i>Crangon</i> spp.	Netherlands	2,77	3,25	3,79	5,96	6,79	+14%	+145%
	Germany	2,72	3,70	4,06	5,53	6,01	+9%	+121%
Other coldwater shrimps mainly Northern prawn (Pandalus borealis)	Denmark	4,97	3,55	4,51	3,89	4,57	+17%	-8%
	Sweden	11,92	10,97	11,90	9,41	8,23	-13%	-31%
Deep-water rose shrimps (Parapenaeus longirostris)	Italy	6,84	6,56	5,12	5,90	5,41	-8%	-21%
	Spain	8,95	9,64	10,11	8,59	8,63	+0,5%	-4%
	Greece	4,36	4,11	4,70	4,73	5,20	+10%	+19%
Warmwater shrimps mainly caramote prawn (<i>Penaeus kerathurus</i>)	Spain	20,35	11,23	15,91	10,09	9,91	-1%	-51%
	Italy	15,60	15,92	17,87	18,50	13,00	-30%	-17%
Miscellaneous shrimps mainly giant red shrimp (Aristaeomorpha foliacea), blue and red shrimp (Aristeus antennatus), and striped red shrimp (Aristeus varidens)	Spain	21,38	20,97	23,61	24,66	21,59	-12%	+1%
	Italy	21,73	27,15	22,32	27,24	24,54	-10%	+13%

CHART 76

LANDINGS OF SHRIMPS IN THE EU IN 2023

Source: EUMOFA, based on EUROSTAT (online data code: fish ld main) and national sources' data. More details on the sources used can be found in the Methodological background.



TUNA AND TUNA-LIKE SPECIES

In 2023, EU landings of tuna and tuna-like species dropped to 152.210 tonnes worth EUR 617 million, down 51% in volume and 36% in value from 2022, the lowest levels of the decade. The contraction was driven by Spain, which accounted for 77% of EU volume and 70% of EU value for this group. Landings in Spain fell by 57% to 116.660 tonnes and the value dropped by 45% to EUR 429 million from 2022. The sharp drop was driven by tropical tunas: from 2022 to 2023, skipjack decreased a steep 85% to 21.200 tonnes and its value fell 86% to EUR 35 million, while yellowfin fell 54% to 28.975 tonnes with value down 57% to EUR 81 million. Bigeye halved in volume, dropping to 13.913 tonnes and its value fell 51% to EUR 35 million.

At EU level, yellowfin tuna represented 21% of total landings in 2023, followed by swordfish at 19%, skipjack at 18% which was down from 46% in 2022, albacore at 17%, bigeye at 11%, and bluefin at 7%.

YELLOWFIN TUNA

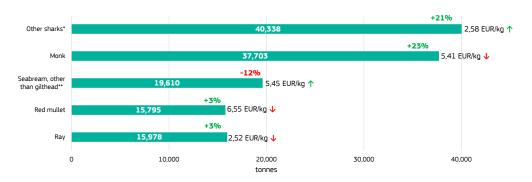
In 2023, landings of yellowfin tuna in the EU totalled 31.942 tonnes, worth EUR 99 million, down 50% in volume and 49% in value compared with 2022. This marked the lowest level in a decade, continuing the downward trend observed since 2017. Of the total volume, 91% was landed in Spain and mainly included frozen whole products. Spain thus determined the overall EU trend, with yellowfin tuna landings falling by 54% to 28.975 tonnes, while value decreased by 57% to EUR 81 million.

OTHER MARINE FISH

The landings of the group "Other marine fish" have been trending downward since 2021. In 2023, they reached 213.187 tonnes, the lowest volume recorded in the past 10 years, for a total value of EUR 905 million. Chart 77 provides an overview of the landings of main commercial species belonging to this group.

CHART 77 MAIN SPECIES OF "OTHER MARINE FISH": VOLUME LANDED IN 2023, % VARIATIONS 2023/2022 AND NOMINAL PRICES AT LANDING STAGE

Source: EUMOFA, based on EUROSTAT (online data code: <u>fish_ld_main</u>). More details on the sources used can be found in the Methodological background.



*The grouping "Other sharks" mainly includes blue shark (68% of the total), small-spotted catshark (12%), smooth-hounds (9%), shortfin mako (4%), nursehound (3%) and tope shark, catsharks nei and catsharks and smooth-hound (1% each).

**The grouping "Seabream, other than gilthead" mainly includes bogue (29% of the total), black seabream (15%), common pandora (12%), red porgy and white seabream (7% each), axillary seabream (6%), blackspot and saddled seabream (4% each), sand steenbras and common dentex (3% each), common two-banded seabream and sargo breams nei (2% each), large-eye dentex, annular seabream, pink dentex and pandoras nei (1% each).

MONK

In 2023, landings of monk in the EU increased for the first time since 2018, reaching 37.703 tonnes and EUR 204 million. Compared with 2022, these represented significant increases of 23% in volume and 15% in value.

Of the total volume, 45% was reported under "monkfishes" and "anglerfishes nei¹³⁵" (*Lophius spp and Lophiidae*), 29% under "angler" (*Lophius piscatorius*), and 2,5% under "blackbellied angler" (*Lophius budegassa*). The remaining share was reported under "shortspine African angler" (*Lophius vaillanti*) and "American angler" (*Lophius americanus*). Spain maintained its position as the largest producer, accounting for 36% of total EU monkfish landings and 37% of total value. Spanish volumes rose a sharp 56%, from 7.696 tonnes in 2022 to 11.976 tonnes in 2023, and the value increased by 54%, from EUR 45 million to EUR 69 million. This strong recovery drove the overall increasing trend and returned Spanish landings and value close to the levels recorded in 2019, when the country landed 11.243 tonnes worth EUR 70 million.

France contributed 33% of total EU volume and value. French landings declined a slight 5% in 2023 to 11.011 tonnes, while value fell 7% to EUR 61 million. Despite this small contraction, France maintained stable production levels overall compared with the previous five years.

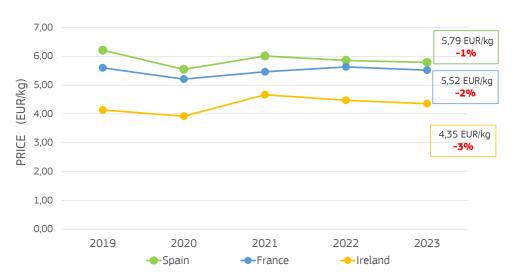
Ireland is the third-largest producer. After three years of decline, landings of monk in the country registered a 15% increase in volume and a 12% increase in value, ending at 9.527 tonnes worth EUR 41 million.

¹³⁵ Not elsewhere included

LANDINGS

CHART 78 AVERAGE NOMINAL PRICES OF MONK LANDED IN MAIN EU MEMBER STATES (EUR/KG)

Source: EUMOFA, based on EUROSTAT (online data code: fish ld main) and national sources' data. More details on the sources used can be found in the Methodological background.



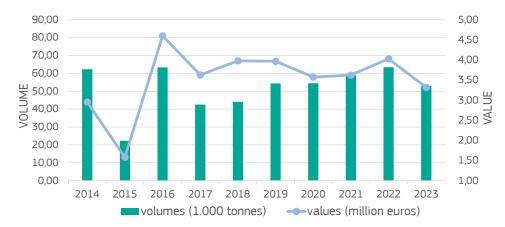
SEAWEED AND OTHER ALGAE

Seaweeds and other algae account for minor shares of total landings of fishery products in the EU.

In 2023, their landings settled at 52.866 tonnes and EUR 3,71 million, most of which was landed in France, with Spain following far behind.

CHART 79 TOTAL LANDINGS OF SEAWEED AND OTHER ALGAE IN THE FU

Source: EUMOFA, based on EUROSTAT (online data code: <u>fish_ld_main</u>) and national sources' data. More details on the sources used can be found in the Methodological background



In 2023, EU seaweed landings amounted to 52.796 tonnes with a value of EUR 3,7 million, which signified decreases of 16% in volume and 13% in value compared with 2022. Despite this contraction, total landings remained within the range observed since 2019, with fluctuations largely linked to variations in production in France and Spain, which together accounted for over 95% of the EU total.

France continued to dominate EU seaweed production, with 49.881 tonnes landed in 2023, down 17% or 9.864 tonnes from 2022. The decline was mainly driven by lower landings of tangle (*Laminaria digitata*), which fell by 14% to 36.435 tonnes, and North European kelp (*Laminaria hyperborea*), which decreased by 23% to 13.373 tonnes. Combined, these two species represented nearly all French production. In value terms, French landings fell by 17%, from EUR 2,48 million in 2022 to EUR 2,07 million in 2023, reflecting stable but low unit prices averaging around 0,04 EUR/kg.

Spain ranked second, accounting for 6% of total EU volume but 44% of total value. Spanish landings totalled 2.987 tonnes in 2023, down 10% from 2022, while value decreased 8% to EUR 1,64 million. Despite lower volumes, Spain maintained a much higher unit value of 0,55 EUR/kg which was more than ten times higher than the French average. Of note, the Spanish unit value was supported by the production of premium edible species such as wakame (*Undaria pinnatifida*), which reached 0,78 EUR/kg in 2023.

6/ AQUACULTURE¹³⁶

6.1 OVERVIEW

TOTAL EU In 2023, EU¹³⁷ aquaculture production reached 1,04 million tonnes with a total value of EUR 4,76 billion. This represented a 4% or 44.693-tonne drop in volume from 2022, and a 1% or EUR 68 million decrease in value. In terms of volume, 2023 was the second lowest production year, but also the second highest in value in the 2014-2023 period.

> Mussels remained the EU's top species by volume, covering more than one third of total production, though its 10% drop in volume from 2022 to 2023 significantly impacted total production volume. Trout led in value, with a share of slightly less than 20% of the total and recorded a 16% growth from 2022.

> While the data show increases in the value of aquaculture production, it is important to note that this trend largely reflects higher production costs and subsequent rises in unit prices. These rises occurred as producers adjusted to inflation in raw materials rather than purely volume-driven growth.

Indeed, taken from the longer decade perspective 138, EU aquaculture production grew by 21.180 tonnes or 2% from 2014 to 2023, while its value surged an impressive EUR 1,09 billion or 35% in real terms. Most of this value growth occurred between 2014 and 2017 but this was followed by declines in both volume and value until 2020. However, the strongest growth of the decade was seen in the upward trends from 2020 to 2021, with volume increasing 4% and reaching 1,13 million tonnes, and value increasing 14% and reaching EUR 4,17 billion in nominal terms. This was largely driven by increased production tied to recovery from the COVID-19 market downturn. In 2022, the positive trend in value continued, reaching its highest point in a decade, namely EUR 4,84 billion in nominal terms, which was up 16% from 2021, even as production volumes began to decline again. The trend shifted in 2023, with volumes continuing to fall and values decreasing, after two years of growth. It's worth noting that Chart 80 and other charts covering periods longer than five years illustrate the deflated values.

From 2022 through 2023, the main driver of the overall decline in volume was the reduction in mussel production, alongside decreases in European seabass, eel and gilthead seabream. In value terms, however, mussels recorded an increase from 2022 to 2023, while the other key species were the primary contributors to the overall fall. Notably, a significant factor behind the decline - particularly in value, but also in volume - was the reduction in production of marine fishes nei (not elsewhere specified), of the "other marine fish" category, for which no further detail is available.

After two years of growth, the value of EU aquaculture production decreased in 2023.

¹³⁶ The main source of data for EU aquaculture production is EUROSTAT. The data cover the aquaculture sector from the point of view of farm-gate production available for human consumption. It is important to note that the production is accounted for at first sale. Thus, production for own consumption is not reported, nor eggs and hatchlings produced for on-growing on the same farm without selling. An exception from the "for human consumption" criteria is being made since the reference year 2016 for aquatic plants, which are included regardless of their final use.

Data were integrated using FAO, FEAP and national sources for several Member States: more details on the integrations made and on data collected for each country can be found in the Methodological background.

¹³⁷ In line with Eurostat's guidelines on the production and dissemination of statistical data by Commission services after the UK withdrawal from the EU, since the most recent reference period is year 2023, UK is excluded from the EU aggregations of each year. In addition, EU data include Croatia since 2013, date of the EU's enlargement to this country

¹³⁸ In this report, value and price variations for periods longer than 5 years are analysed by deflating values using the GDP deflator (base=2020); for shorter periods, nominal value and price variations are analysed.

AQUACULTURE

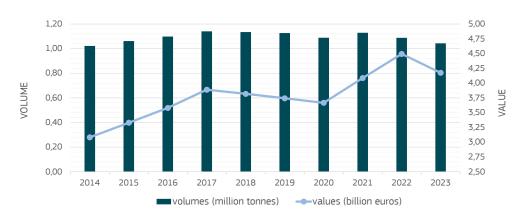
CHART 80 AQUACULTURE PRODUCTION IN THE

FU

Source: EUMOFA, based on EUROSTAT (online data code: fish aq2a), FAO, national administrations and FEAP data.

Details on the sources used can be found in the Methodological background.

Values are deflated by using the GDP deflator (base=2020).



The most important groups of species farmed in the EU are shown in Charts 81 and 82. As illustrated, bivalves and other molluscs and aquatic invertebrates make up just under half of the EU's aquaculture production volume, primarily driven by mussel farming in Spain and oyster farming in France. Spanish production of mussels covers around 15% of the total EU farming production, while French oyster production accounts for 9% of the total.

The categories "other marine fish", including gilthead seabream and European seabass accounted for 21% of the total farmed volumes in 2023, while "salmonids", which include trout and salmon, accounted for 18%. As the main producer of gilthead seabream, Greece is responsible for around two-thirds of the EU's production and produces more than half of its European seabass.

In 2023, Italy led EU trout production, followed closely by France and Denmark, together accounting for half of total EU production, while almost all the EU's farmed salmon came from Ireland. Freshwater species, particularly carp, also contribute to EU aquaculture, accounting for 9% of total volume, with Poland, Czechia and Hungary as the main producers. The remaining portion of EU aquaculture, which is distributed among other species groups, recorded an average annual production of around 40.000 tonnes between 2019 and 2023. In terms of volume, all major species groupings saw declines from 2022 to 2023, as shown in Chart 81. However, each of these groups, except for "other marine fish", experienced an increase in value during this period. The "other marine fish" category recorded a 7% decrease in volume and a 18% decrease in value, mainly driven by the decrease of *marine fishes nei*, for which no other detail is available. Imports, mainly from Türkiye, account for around half of the EU market supply for this category. However, imports also recorded a slight 1% decrease in volume while their value increased by 1%.

Overall, most aquaculture products saw value increases without a matching rise in volume, primarily due to higher unit prices.

Rising production costs – driven by the high energy costs and inflation, and further intensified by the war in Ukraine – significantly increased expenditures for inputs such as feed and transport, and were also linked to lower production volumes, which further amplified unit costs.

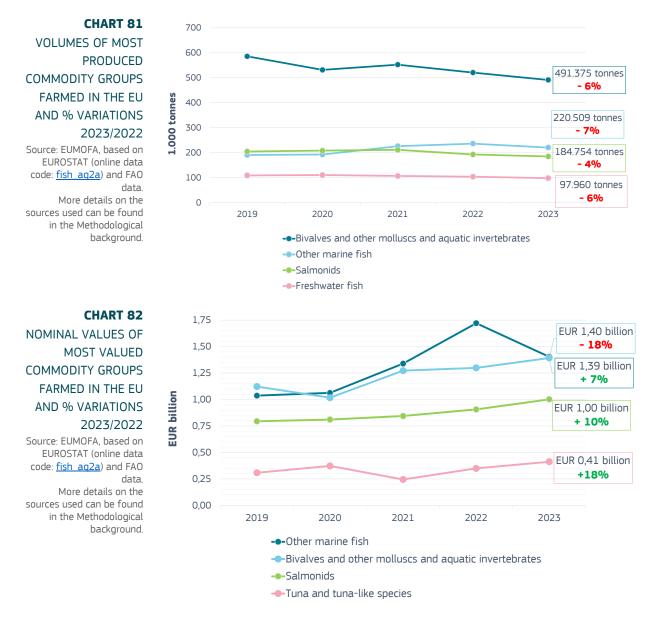


CHART 83 COMPOSITION OF EU AQUACULTURE PRODUCTION BY MAIN COMMERCIAL SPECIES (IN VOLUME): 2014 VS. 2023 Source: EUMOFA, based on EUROSTAT (online data code: fish_aq2a), FAO and FEAP data.

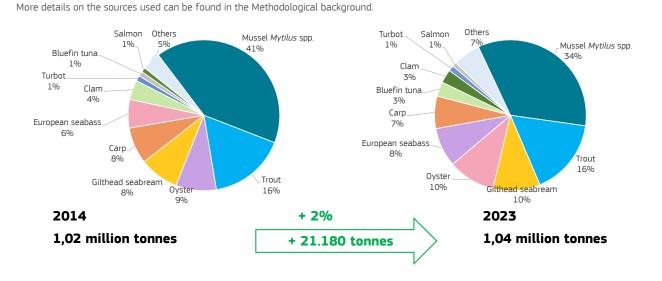
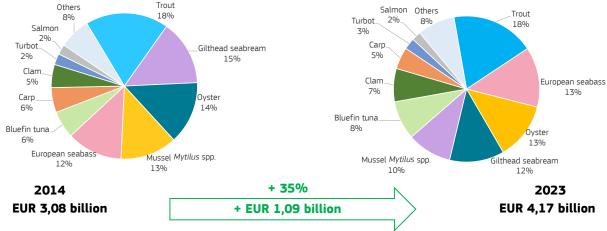


CHART 84

COMPOSITION OF EU AQUACULTURE PRODUCTION BY MAIN COMMERCIAL SPECIES – IN REAL VALUE (BASE=2020)
2014 VS. 2023

Source: EUMOFA, based on EUROSTAT (online data code: <u>fish_aq2a</u>), FAO and FEAP data. More details on the sources used can be found in the Methodological background. Values are deflated by using the GDP deflator.



The species composition of EU aquaculture production in 2023 remained similar to that of the previous ten years in terms of both volume and value, with mussels being the most farmed species and trout the most valuable. However, some minor changes in the structure of EU aquaculture production can still be observed.

In volume terms, mussels continued to dominate EU aquaculture production, although they were among the few species that recorded volumes lower in 2023 than in 2014. Notably, these declines concerned some of the sector's largest contributors, as mussels' share of the EU total production in volume dropped from 41% in 2014 to 34% in 2023, while carp, clams and salmon also saw their relative weight decline. Gilthead seabream and European seabass, on the other hand, both increased their share by 2%. Trout maintained a 16% share of volumes, confirming its importance as a key freshwater species, while oysters increased their share from 9% to 10%.

Between 2014 and 2023, the real value of EU aquaculture rose by 35%, adding about EUR 1,09 billion to reach roughly EUR 4,17 billion. Trout stayed firmly in first place at 18%, valued at about EUR 770 million. European seabass share grew from 12% to 13% and now sits alongside oysters – whereas gilthead seabream, despite a 13% or EUR 60 million rise in value since 2013, saw its share of total EU aquaculture value decline from 15% to 12%. Mussels lost ground in share, down from 13% to 10%, though their value still increased by 6%, or EUR 24 million. Clams, on the other hand, saw their share in value increase, from 5% to 7%, which resulted in an absolute growth of EUR 124 million, or 94%.

Bluefin tuna, although still a niche species, showed sustained growth between 2014 and 2023, with its shares in both value and volume rising by 2%, driven by Maltese production and significant price increases. The growth of bluefin tuna's share of the total was mainly linked to an exceptional trend in Maltese production from 2014 to 2023¹³⁹, when it soared 242% in volume and 77% in value. This meant an increase of around 13.000 tonnes and EUR 72 million, reaching 18.624 tonnes valued at EUR 167 million in 2023. Spain also strengthened its position, with volumes up 245% and value up 153% over the decade, reaching 10.653 tonnes worth EUR 150 million in 2023.

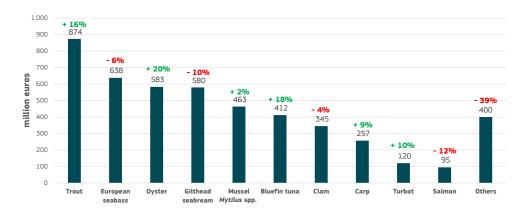
¹³⁹The increase seen in Maltese bluefin tuna production could also be related to illegal and unreported farming of the species in Malta. In 2020, both the EU and the Maltese Fisheries Department has filed a criminal case against tuna farmers previously accused of having bought bluefin tuna quotas in excess of what was granted to them. See: How the illegal Bluefin tuna market made over EUR 12 million a year selling fish in Spain | Europol (europa.eu)

NOMINAL VALUES OF MAIN SPECIES FARMED IN THE EU IN 2023 AND % VARIATION

CHART 85

2023/2022

Source: EUMOFA, based on EUROSTAT (online data code: <u>fish_aq2a</u>) and FAO data. More details on the sources used can be found in the Methodological background.



BY MEMBER STATE

Aquaculture in the EU is characterised by the production specialisations of a few Member States: Greece for gilthead seabream and European seabass, Spain for mussel, France for oyster, mussel and trout, Italy for clam and trout, Netherlands for mussels, Poland for carp, Denmark for trout, Ireland for salmon and Malta for bluefin tuna.

The five largest producers in 2023 by volume were Spain, France, Greece, Italy, the Netherlands and Poland, while France, Greece, Spain, Italy and Portugal recorded the highest production in value terms. Together, these seven countries accounted for about 70% of the EU's total aquaculture production, both in volume and value, with Spain, France and Greece alone contributing to more than half.

As shown in Tables 19 and 20, production volumes generally declined in 2023, with Spain showing the steepest fall, and only the Netherlands recording a clear rebound. By contrast, production values rose in most Member States, led by Portugal with a 26% increase, France with 14% and Italy with 12%. Spain maintained stable values despite lower output, while Greece was the main exception with a sharp fall of 20%, driven by the decrease in prices of gilthead seabream and European seabass.

VOLUME OF
AQUACULTURE
PRODUCTION IN THE
EU TOP-5
PRODUCING
COUNTRIES
(1.000 TONNES)

Source: EUMOFA, based on EUROSTAT (online data code: fish aq2a), and FAO data.

More details on the sources used can be found in the Methodological background.

Discrepancies in % changes are due to rounding.

Member State	2019	2020	2021	2022	2023	2023/2022
Spain	307	277	277	273	243	-11%
France	194	191	193	184	187	+1%
Greece	129	131	144	141	141	-0,3%
Italy	132	123	146	130	130	-0,4%
Netherlands	46	40	41	38	41	+9%

AQUACULTURE

TABLE 20
NOMINAL VALUE OF
AQUACULTURE
PRODUCTION IN THE
EU TOP-5
PRODUCING
COUNTRIES
(MILLION EUROS)

Source: EUMOFA, based on EUROSTAT (online data code: <u>fish_aq2a</u>), and FAO data. More details on the sources used can be found

in the Methodological background.

Member State	2019	2020	2021	2022	2023	2023/2022
France	759	723	781	792	906	+14%
Spain	633	582	649	809	802	-1%
Greece	508	552	641	852	684	-20%
Italy	446	392	547	553	618	+12%
Portugal	108	121	158	169	212	+26%

Spain, the EU's leading aquaculture producer, has experienced a steady decline in volumes since 2019. Between 2019 and 2023, volumes fell by 21%, while during the same period, production values rose by 27%, despite a slight 1% dip in 2023. The reduction in volume is largely explained by the sharp contraction in mussel farming, which has declined by around one third since 2019. In contrast, values increased across Spain's main high-value species, particularly European seabass and bluefin tuna, but also for mussels.

France ranked first in production value, reaching EUR 906 million in 2023, an increase of 14% compared with EUR 792 million in 2022. This growth was mainly driven by higher oyster prices, as volumes rose only a slight 1%, from about 184.000 tonnes in 2022 to around 186.500 tonnes in 2023. Oysters account for just under half of France's total aquaculture volume and close to 60% of its value. Since 2019, which marked the peak production year of the 2014–2023 decade, volumes have declined by only 4% – mainly in mussels and trout – while production value has continued to rise steadily, reflecting the broader EU trend.

Greece, which had overtaken both France and Spain in value terms in 2022, fell back in 2023 with a 20% decrease, despite stable volumes.

Greek aquaculture peaked in 2021 and has since held steady, with production between 2019 and 2023 showing an overall increase of nearly 10%. The main driver of this growth has been the farming of gilthead seabream and European seabass, for which Greece is the leading EU producer. These two species also underpinned value growth, which – despite the sharp fall in 2023 – was still 34% higher than in 2019. The decline in 2023 was largely due to falling unit prices, with gilthead seabream down by 15% and European seabass down by 12% from 2022, while their production volumes decreased by only 6% and 7%, respectively. It should be noted that inflation peaked in 2023, and prices for Greek European seabass and gilthead seabream, typically 0,70–1,00 EUR/kg higher than imported Turkish products, faced stronger consumer resistance. Rising production costs for processors and higher household expenses encouraged down-trading to cheaper Turkish imports¹⁴⁰.

Other major producers also recorded notable developments. Italy and Portugal mirrored the pattern seen in France, maintaining broadly stable volumes while achieving strong value growth of 12% and 26% respectively. In Italy, the increase was driven by higher trout prices, while Portugal reached a decade high in aquaculture value, boosted mainly by rising clam prices. In the Netherlands, production volume recovered in 2023 after a slight decline in 2022, returning to its 2021 level. Production value also rose by 5%, reaching the highest level recorded in the past five years. These increases were mainly led by a recovery in mussel farming, together with an increase in production for other marine fish categories, such as *Diadromous fishes nei*.

¹⁴⁰ However, Turkish production also contracted in 2023, suggesting that the decline reflected an overall drop in demand rather than competition alone.

CHART 86

VOLUME OF AQUACULTURE PRODUCTION IN THE MAIN EU PRODUCING COUNTRIES IN 2023 AND % VARIATION 2023/2022

Source: EUMOFA, based on EUROSTAT (online data code: <u>fish_aq2a</u>) and FAO data.

More details on the sources used can be found in the Methodological background.

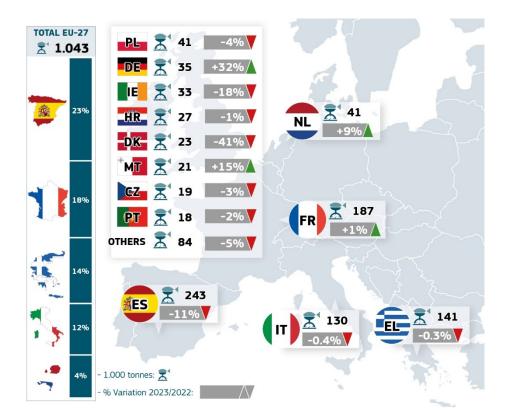


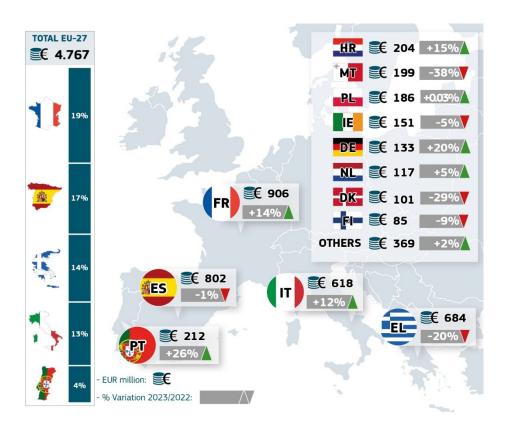
CHART 87

VALUE OF AQUACULTURE PRODUCTION IN THE MAIN EU PRODUCING COUNTRIES IN 2023 AND % VARIATION

2023/2022 Source: EUMOFA, based on

EUROSTAT (online data code: <u>fish_aq2a</u>) and FAO data.

More details on the sources used can be found in the Methodological background.



6.2 ANALYSIS BY MAIN SPECIES

BIVALVES AND OTHER **MOLLUSCS AND** AQUATIC **INVERTEBRATES**

In 2023, EU Member States farmed 491.375 tonnes of bivalves and other molluscs and aquatic invertebrates, down 6% from 2022 and marking a second consecutive year of decline. This was the lowest level of the decade and the first time production fell below the 500.000-tonne threshold. By contrast, the category's value rose by 7% to EUR 1,39 billion, a five-year peak. Oysters, mussels¹⁴¹ and clams accounted for more than 99% of both volume and value.

MUSSEL Mussel covers more than one third of the total volume of aquaculture production.

In 2022, the EU produced 356.568 tonnes of mussel worth EUR 463 million. This marked a 10% or 39.822 tonne decline in volume, but a 2% or EUR 8 million increase in value from 2022. Except for a slight 5% increase in 2021, EU mussel production has been on a downward trend since 2018, driven by a decrease in Spanish production, while global production has continued to grow. Despite fluctuating production values, the unit price of mussel has steadily increased over the last five years, growing 39% from 0,93 EUR/kg in 2019 to 1,30 EUR/kg in 2023.

Spain, the EU's largest mussel producer, continued its decline, which began in 2019. After a small recovery, when production dropped by just 0,6% in 2021, it then dropped by 19% in 2023, marking the lowest point in Spanish production of the ten years under analysis. This decline could be attributed to factors such as disease, lack of mussel seed (spat), low profitability and extreme weather conditions experienced both in 2022 and in 2023. In terms of 2023 value, it dropped by 19% to EUR 126 million, marking the first decrease in value since 2020.

Spain mainly uses the off-bottom raft technique, which is also used in Italy and the French Mediterranean. Bottom culture is mostly used in the northern EU countries of the Netherlands, Germany and Ireland.

France followed a pattern similar to Spain. Its production of mussel decreased for the second year in a row, as did household consumption. In 2023, production amounted to 53.531 tonnes and EUR 136 million, down 8% and 3%, respectively. Italy recorded a 5% decrease in volume, but also had a staggering 39% increase in value, reaching 57.279 tonnes and EUR 84 million for a ten-year high in both nominal and real terms. To be noted, Spain and Italy mainly produce Mediterranean mussel (Mytilus galloprovincialis), which in 2023, was sold at average prices of 0,81 EUR/kg in Spain and 1,46 EUR/kg in Italy. Spain uses a large share of these volumes as raw material for processing, with around one fourth destined for canning. In Italy, mussels are mainly consumed fresh while France mostly produces the more valuable blue mussel (Mytilus edulis), of which a high share goes to fresh markets, where it is sold at an average price of 2,49 EUR/kg in 2023.

¹⁴¹ A case study on mussels and oysters - latest market trends in the EU has been published on the EUMOFA'S Monthly Highlights No. 8/2025, available here: https://eumofa.eu/documents/20124/197737/MH+8+2025+Final.pdf/8e623e53-8c77-9756-8056-b07e97efa735?t=1758527276660

CHART 88PRODUCTION OF FARMED MUSSEL IN MAIN EU PRODUCING COUNTRIES

Source: EUMOFA, based on EUROSTAT data (online data code: fish aq2a). Values are deflated by using the GDP deflator (base=2020).



In 2023, EU clam production amounted to 30.153 tonnes, up 6% from 2022, while the nominal value declined by 4% to EUR 345 million. Despite this modest recovery in volume, production remained well below the decade's earlier levels. However, 2023 still ranked among the strongest years in value terms, following the record highs of 2021 and 2022. Italy dominated EU 2023 clam production in line with historical trends. Accounting for around 72% of the total, Italy produced 21.577 tonnes worth EUR 199 million, largely consisting of Japanese carpet shell clams. As shown in Chart 89, this represented a decrease of 3% in volume and 21% in value compared with 2022. The average ex-farm price in Italy fell sharply, dropping more than 23% from 12,00 EUR/kg in 2022 to 9,21 EUR/kg in 2023 – returning to levels close to those of 2021, when the average price had stood at 9,20 EUR/kg.

Portugal and France also contributed to EU clam production, but at very different price points. In Portugal, which accounted for just over 20% of the total, the average price reached 20,13 EUR/kg, an increase of 7% from 2022. In France, which represented around 4% of EU production, clams were sold at an average price of 6,28 EUR/kg, up 8% from the previous year. This price variation was likely due to differences in the species farmed: mainly grooved carpet shell in Portugal; and common edible cockle and Japanese carpet shell in France.

Regarding the methods used, clams of all species are generally bottom farmed in the EU. The Mediterranean coastal environment is particularly suitable for clam farming, thanks to its brackish waters, low tidal movements, the presence of a rather shallow mixed-texture (sand-mud) seabed and, above all, an abundance of nutrients in the form of phytoplankton.

PRODUCTION OF FARMED CLAM IN ITALY Source: EUMOFA, based on

EUROSTAT (online data code: fish aq2a) and FAO data.

More details on the sources used can be found in the Methodological background. Values are deflated by using the GDP

deflator (base=2020).



OYSTER

In 2023, the EU farmed 104.626 tonnes of oysters, with a total value of EUR 583 million. This represented a 9% increase in volume and a 20% increase in value from 2022, reaching the highest levels of the past decade, in both nominal and real terms. As shown in Chart

90, the sharp growth recorded in 2023 extended the recovery that had begun in 2021, following several years of fluctuating production since it reached a peak in 2018.

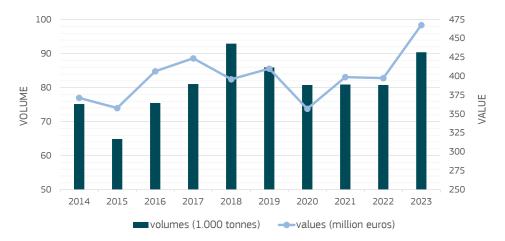
The drops in total EU production of oyster recorded in 2019 and 2020 could be explained by the norovirus (gastroenteritis virus) outbreaks in some production areas of France since December 2019. The outbreaks led to temporary closures and several sales bans in the Nouvelle-Aquitaine region during 2020. While the slight increases in production during 2021 and 2022 were driven by higher output in the Netherlands, Portugal and Ireland, French production of oysters recovered in 2023, recording the second-highest volume of the 2014-2023 decade, and driving the EU overall growth. France farmed 90.410 tonnes of oyster worth EUR 515 million, a 12% increase in volume and a 24% increase in value from 2022. Consequently, France remained the EU's leading oyster producer, accounting for more than 85% of total production, concentrated on its Atlantic coast. As a major consumer market, most of France's oyster production is consumed domestically. In 2023, French oysters sold for an average ex-farm price of 5,69 EUR/kg, up 11% from 2022.

Smaller export-oriented oyster industries have emerged in Ireland, Portugal and the Netherlands. In 2023, Ireland's oyster production held steady at 8.257 tonnes, valued at EUR 43 million, with the average price rising a slight 2% from 5,14 EUR/kg in 2022 to 5,23 EUR/kg. Portugal produced 2.434 tonnes of oysters, just below the 2022 peak, worth EUR 10 million with an average price that declined by 3%, from 4,27 EUR/kg to 4,16 EUR/kg. By contrast, production in the Netherlands dropped to 1.640 tonnes and generated less than EUR 5 million, it lowest levels of the decade in both volume and value. The average price of Dutch oysters increased by 5%, from 2,66 EUR/kg in 2022 to 2,78 EUR/kg.

The Pacific cupped oyster (Crassostrea gigas) remains the dominant species farmed in France, Ireland, Portugal and across the EU. Although oyster production traditionally takes place in intertidal zones with bottom culture, cases of rack-and-bag production are not uncommon.

CHART 90 PRODUCTION OF FARMED OYSTER IN **FRANCE**

Source: EUMOFA, based on EUROSTAT data (online data code: fish aq2a). Values are deflated by using the GDP deflator (base=2020).



SALMONIDS

Salmonids accounted for 24% of the value and 18% of the volume of EU farmed production in 2023. Trout, the main species for this category, accounted for 16% of the total volume and 21% of the total value of EU aquaculture production in 2023.

TROUT In 2023, the EU produced 171.146 tonnes of trout – mostly rainbow trout (Oncorhynchus mykiss) – with a total value of EUR 874 million. Although this represented the highest value of the past decade in both nominal and real terms, production volumes continued to decline and in 2023, they reached their lowest level since 2015. Compared with 2022, production decreased by 1%, while value grew by 16%.

> The contrasting trend of shrinking volumes but rising values has been driven by the steep increase in production costs, which led producers to adjust prices upward, but also by market conditions. In particular, the 2023 decline in European Atlantic salmon supply and the

resulting record prices exerted upward pressure on large rainbow trout, which is used as a salmon substitute in the processing and smoking industry.

Italy and France, the EU's two largest trout producers, illustrate these dynamics well. In 2023, Italy harvested 35.211 tonnes, up 18% or 5.361 tonnes from 2022, yet still below its 2021 peak. Its total value surged to EUR 207 million, nearly doubling the previous year's level and the highest of the past decade, both in nominal and real terms. This surge was driven by a sharp increase in the average price, which rose by 77%, from 3,32 EUR/kg in 2022 to 5,88 EUR/kg. France, by contrast, continued to face declining volumes, producing 27.686 tonnes, down 13% or 4.277 tonnes from 2022 and reaching the lowest level of the past decade. The French system, heavily reliant on river water, remains vulnerable to reduced flows during hot summers, which limits production capacity. Farmers are considering recirculating aquaculture systems as a solution, but such investments remain

Despite this contraction in volume, the total value reached EUR 141 million, increasing a slight 1% over the previous year. This was supported by a 17% increase in average price, which grew from 4,34 EUR/kg in 2022 to 5,08 EUR/kg in 2023.

The decline in production volumes also affected other main producers, such as Denmark and Poland, which in 2023 accounted for around 14% and 11% of total EU trout production, respectively. Denmark produced 23.194 tonnes, down 12% compared with 2022 and the lowest level of the past decade¹⁴². Its total value fell by 8%, to EUR 101 million, while the average price increased by 5% to 4,36 EUR/kg in 2023. Poland, meanwhile, produced 18.584 tonnes, down 11% from 2022, marking the first decline after two consecutive years of growth¹⁴³. Its total value decreased by 11%, to EUR 79 million, though the average price edged up by 1% and reached 4,25 EUR/kg in 2023.

Rainbow trout farming systems across the EU share similarities, with more than two thirds of production occurring in flow-through tanks and raceways. Around 10% is farmed in recirculating systems, particularly in Denmark, while pond production remains important in Poland. Although some production occurs in sea or brackish waters with cage systems, most raceways use fresh water from rivers, making them sensitive to rising water temperatures and reduced flows, both of which increasingly constrain production. Combined with surging energy and feed costs in recent years, these environmental pressures have intensified the structural decline in EU trout production.

TABLE 21 PRODUCTION OF FARMED TROUT IN MAIN EU PRODUCING COUNTRIES

Source: EUMOFA, based on EUROSTAT data (online data code: fish_aq2a). More details on the sources used can be found in the Methodological background

		2023		% variations 2023/2022			
Member State	Volume (tonnes)	Price (EUR/kg)	Value (million euros)	Volume	Price	Value	
Italy	35.211	5,88	207	+18%	+77%	+109%	
France	27.686	5,08	141	+5%	+22%	+28%	
Denmark	23.194	4,36	101	-27%	+0,4%	-27%	

SALMON EU production of salmon fell sharply in 2023, dropping to 9.301 tonnes, 30% or 3.998 tonnes less than 2022, and the lowest level of the past decade. The total value decreased by 12% or EUR 13 million, to EUR 95 million, marking the third consecutive year of decline.

¹⁴² In Denmark, production has faced headwinds from infectious haematopoietic necrosis (IHN) outbreaks in 2022, which led to movement bans, fallowing and restrictions affecting subsequent cycles (https://en.foedevarestyrelsen.dk/animals/animal-health-/animal-diseases/infectious-haematopoietic-necrosis). The country has also capped marine aquaculture capacity since 2019, limiting scope for expansion (https://www.hatchmag.com/articles/denmark-declares-no-new-fish-

farms/7714889).

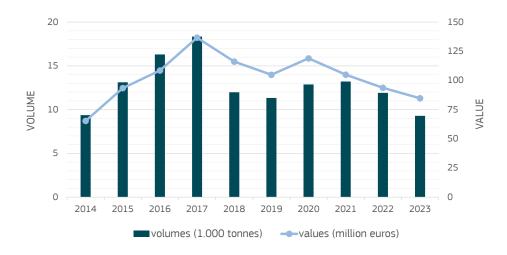
143 In Poland, production remains vulnerable to harmful golden algae (*Prymnesium parvum*) blooms in the Oder river basin, which caused mass fish mortalities in 2022 and continued to pose risks in 2023 (https://www.reuters.com/world/europe/poland-seeks-contain-toxic-algae-tons-fish-die-oder-basin-2024-08-18/).

This prolonged downturn follows the adverse environmental events first recorded in 2021, such as a toxic algal bloom that caused huge losses at the salmon-farming facilities in Mowi, Ireland. Meanwhile in Denmark, a large recirculating salmon farm burned, resulting in significant losses. The average ex-farm price of salmon rose by 27%, from 8,15 EUR/kg in 2022 to 10,21 EUR/kg in 2023, marking a five-year high. The rise in ex-farm prices from 2022 to 2023 was also impacted by the fall in Atlantic salmon production in most other European producing countries. Production in Norway, the largest producer in Europe, fell by 2%; in Scotland, the second largest producer, production fell by 5%; and production in the Faroe Islands and Iceland dropped by 10%.

Salmon farming in the EU is almost entirely concentrated in Ireland, where production is exclusively organic – even if not all producers are certified, this results in generally higher prices. In 2023, Ireland produced 9.289 tonnes, with a nominal value of EUR 95 million. This marked a sharp year-on-year decline of 22% in volume and 6% in value, bringing production to its lowest level of the past decade. The average price, however, increased by 21%, from 8,49 EUR/kg in 2022 to EUR 10,20 EUR/kg in 2023.

CHART 91 PRODUCTION OF FARMED SALMON IN IRELAND

Source: EUMOFA, based on EUROSTAT data (online data code: <u>fish aq2a</u>). Values are deflated by using the GDP deflator (base=2020).



FRESWATER FISH

Freshwater species farmed in the EU largely comprise carps and eels.

CARP

Carp accounted for around 7% of the EU's aquaculture production volume and 5% of its total value in 2023. Production reached 72.333 tonnes, remaining broadly stable compared with 2022. Although it increased a slight 0,2%, production was still close to the lowest level of the past decade. In nominal terms, carp reached EUR 257 million in 2023, an increase of 9% compared with 2022. Looking further back, real values in both 2022 and 2023 were among the highest of the past decade, reflecting a strong upward trend despite stagnant production, which had been decreasing from 2020 to 2022. This growth in value was driven by higher prices, with the average unit price increasing from 3,25 EUR/kg in 2022 to 3,55 EUR/kg in 2023.

Most of the EU's carp production is concentrated in Poland, Czechia and Hungary, which have shares of 26%, 23% and 17%, respectively, and together make up two-thirds of the total production. Poland was the only major producer to increase output, reaching 19.092 tonnes and EUR 87 million, up 6% in volume and 8% in value from 2022. In contrast, Czechia produced 16.749 tonnes, down 3% in volume, though its value rose by 3% to EUR 43 million in 2023. Hungary recorded 12.572 tonnes, slightly lower than the previous year with a decline of 0,3% in volume, but its value increased by 14% to EUR 44 million.

Other producing countries – including Romania, Germany, Bulgaria, Croatia, Lithuania and France – together made up about 31% of EU carp production in 2023. Most recorded a

trend of declining volumes and increasing values from 2022 to 2023. More specifically: Romania volume dropped 5% to 7.128 tonnes while value rose by 7% to EUR 23 million; Germany was down 2% to 4:209 tonnes, with value up 4% to EUR 14 million; Croatia down 14% to 3.073 tonnes, while value grew by 29% to EUR 11 million; and Lithuania down 22% to 2.339 tonnes, with value falling by 17% to EUR 10 million. Bulgaria, in contrast, saw a 4% volume increase to 3.538 tonnes, with value rising by 20% to EUR 11 million. France stood out, producing 2.032 tonnes worth EUR 9 million, a 50% increase in volume and a 60% increase in value from 2022. Overall, these widespread declines offset Poland's growth, leaving EU carp production broadly stable compared with 2022.

Average prices rose across almost all major producing countries in 2023. Poland's price increased a slight 2%, reaching 4,55 EUR/kg, while Czechia rose by 3% to 2,56 EUR/kg and Hungary rose 15% to 3,49 EUR/kg. Among the smaller producers, Romania grew by 12% to 3,19 EUR/kg, Germany by 6% to 3,35 EUR/kg, Bulgaria by 16% to 3,54 EUR/kg and Croatia by 51% to 3,47 EUR/kg. Lithuania and France both recorded a 7% increase, averaging 4,10 EUR/kg and 4,34 EUR/kg, respectively.

The 2023 data on EU eel production are partial, as figures for the Netherlands – by far the largest EU producer – were flagged as confidential and are therefore not included. As a result, the apparent sharp decline gives a distorted picture of the sector's real performance. Reported EU production amounted to 1.532 tonnes, 69% lower than in 2022, and valued at EUR 22 million, down 64% over the same period.

Looking further back, however, real values in 2016–2018 were substantially higher, peaking at EUR 64 million in 2017, before declining in the following years. Unlike most aquaculture species, eel farming is entirely dependent on the capture of wild glass eels, which are then grown to market size. This makes the sector highly vulnerable to regulatory closures and fluctuations in natural recruitment. Indeed, to protect this species, the EU Council adopted flanking measures¹⁴⁴ such as temporal and spatial closures, initially targeting adult eels and later extended to migrating eels of all life stages. In recent years, the EU has enforced several seasonal closures of commercial fisheries in its waters, with the exact periods determined by Member States according to local migration pattern.

Among the main producers, excluding the Netherlands, Germany maintained broadly stable output at 1.163 tonnes, up 0,4% from 2022, but saw its value decrease by 6% to EUR 16 million. Italy, in contrast, halved its production to 272 tonnes, while its value fell by 39% to EUR 4 million¹⁴⁵. The temporary extension of Italy's eel fishing ban until June 2023 also limited the supply of juveniles for aquaculture – as eels cannot be bred in captivity¹⁴⁶. Poland experienced an even sharper contraction¹⁴⁷, with production plunging by 74% to just 8 tonnes and value falling by 70% to EUR 0,1 million.

Average prices rose significantly in 2023 because of the steep fall in supply. At EU level, the average ex-farm price increased by 15%, from 12,28 EUR/kg in 2022 to 14,19 EUR/kg in 2023. Germany's average price increased 6% to 14,03 EUR/kg, while Italy increased 24%, reaching 15,85 EUR/kg.

OTHER MARINE

FISH

Two species of this commodity group, namely gilthead seabream and European seabass, account for significant portions of EU aquaculture production. In 2023, gilthead seabream covered more than 12% of the total EU value and 10% of its total volume, while European seabass contributed to 13% of the value and 8% of the volume. They are usually farmed in the same sites in the Mediterranean, prevalently in Greece, Italy and Spain.

¹⁴⁴ Council Regulation (EC) No 1100/2007 of 18 September 2007 establishing measures for the recovery of the stock of European eel, <u>EUR-Lex - 52020SC0035 - EN - FUR-Lex</u>

¹⁴⁵ According to the Italian fish farmers' association, national output in 2023 was closer to 400 tonnes worth EUR 6,4 million, compared with 550 tonnes and EUR 7,4 million in 2022, falling 27% in volume and 14% in value.

https://www.aboutpharma.com/animal-health/stop-alla-pesca-dellanguilla-fino-al-30-giugno-2023/

¹⁴⁷ A Polish government page on 2023 fishing quotas noted that ICES advised banning eel catches in all habitats in 2023, including glass eels for aquaculture and restocking, both recreational and commercial. This likely constrained the availability of inputs for aquaculture.

Gilthead seabream and European seabass are cultured predominantly in cages or open-net pens in the coastal waters of southern EU. The market for seabass production in the EU is dominated by *Dicentrarchus labrax*. Only a negligible percentage is accounted for by other marine fish belonging to the Moronidae family.

GILTHEAD SEABREAM

In 2023, EU gilthead seabream production reached 105.345 tonnes, down 2% from the 2022 peak, while its value fell by 10% to EUR 580 million. Despite this decline, production – as well as its real value – remained among the highest levels of the past decade, though value showed a sharper correction from the record achieved in 2022.

Greece, which dominates EU gilthead seabream farming, produced 65.097 tonnes in 2023, representing slightly less than two thirds of the total EU production of this species. This marked a 7% decline in volume from 2022, while value dropped by 21% to EUR 318 million¹⁴⁸. Longer-term data show that this was the first major contraction since 2018, breaking a period of sustained growth that had driven production to a decade high in 2022. The downturn was largely driven by falling unit prices, with gilthead seabream down 15% from 2022. Inflation in 2023 amplified the effect, as Greek gilthead seabream – usually priced higher than Turkish imports – faced stronger consumer resistance. Rising production costs for processors and household budget constraints encouraged down-trading to cheaper imported products¹⁴⁹, while Greek producers also lowered prices strategically to stay competitive. Moreover, summer heatwaves further strained stocks, and several production sites were decommissioned during the year.

This drop in value reflected not only weaker demand and the pressure from Turkish competition, but also a deliberate downward adjustment by Greek producers to remain competitive internationally, against the backdrop of high production costs, inflationary pressures, and the decommissioning of several sites. Climate-related challenges, such as summer heatwaves that stress seabream and seabass stocks, further contributed to the 2023 contraction.

Spain re-emerged as the second key producer in 2023, with production climbing 46% to 13.206 tonnes, and value rising 41% to EUR 69 million. This marked a strong recovery from the historic lows of 2020 and 2021, when output had collapsed due to environmental shocks such as Storm Gloria in 2020 and a red algae bloom in 2021. The bloom, caused by the proliferation of harmful algae severely depleted oxygen levels in the water and released toxins that affected marine life. This environmental event led to massive fish mortalities, particularly for species such as gilthead seabream that are sensitive to changes in water quality. With production returning to its pre-crisis range of 12.000–17.000 tonnes, Spain regained its position ahead of Italy in the EU seabream sector.

As a result, Italy ranked third in 2023, with 7.482 tonnes of gilthead seabream worth EUR 59 million. After four consecutive years of declining production, Italy rebounded strongly in 2021, increasing by 30%, and then stabilised in 2022. However, this recovery stalled in 2023, when production fell by 6% and value decreased by 2% compared with the previous year.

In 2023, Spain's average price increased by 14% to 5,19 EUR/kg. Italy remained the highest among the three at 7,85 EUR/kg, though this was 4% lower than in 2022. At EU level, the average price was 5,50 EUR/kg, down 7% compared with 5,95 EUR/kg in 2022.

¹⁴⁸ National data from the Hellenic Aquaculture Producers Organization (HAPO), however, report a smaller 8% decline in value: https://fishfromgreece.com/wp-content/uploads/2024/10/HAPO AR24 WEB v5.pdf.

Imports from Türkiye, consistently priced below EU production, gained competitiveness as inflation peaked in 2023.

CHART 92

PRODUCTION OF FARMED GILTHEAD SEABREAM IN MAIN EU PRODUCING COUNTRIES

Source: EUMOFA, based on EUROSTAT (online data code: <u>fish_aq2a</u>) and FAO data. More details on the sources used can be found in the Methodological background. Values are deflated by using the GDP deflator (base=2020).



EUROPEAN SEABASS

EU aquaculture production of European seabass has grown stronger over the past decade, rising from around 62.520 tonnes in 2014 to 87.469 tonnes in 2023. In value terms, it grew from EUR 380 million in 2014 to EUR 638 million in 2023, despite a 5% decline in volume and a 6% decrease in value compared with 2022. However, the 2023 value was significantly below the peaks of 2016–2018, highlighting a longer-term pattern of fluctuation despite overall growth.

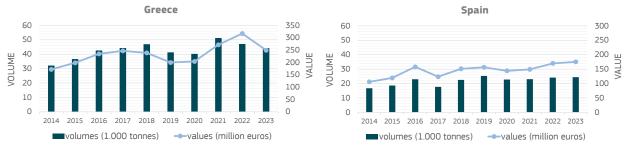
Greece remained by far the largest producer, accounting for just over half of the EU total with 44.201 tonnes. Its production declined by 6% compared with 2022, while value dropped by 17% to EUR 285 million¹⁵⁰, reflecting both lower volumes and a decrease in average prices. This decline was largely price-driven, as average Greek European seabass prices fell by 12% from 2022. The dynamics mirror those observed for gilthead seabream, where inflationary pressure, reduced consumer purchasing power and competition from Turkish imports weighed on demand, though with more variation across size categories, export destinations and biological sensitivities.

Spain consolidated its position as the second-largest producer, accounting for 28% of the overall production, and reaching 24.413 tonnes in 2023, up 1% from 2022. Its production value grew by 9% to EUR 200 million, marking a return to levels last seen before the COVID-19 downturn. Croatia's production, on the other hand, contracted by 15% to 8.515 tonnes. Despite this, its value only decreased by 7% to EUR 63 million. Among smaller producers, Italy recorded a 3% decline and dropped to 4.821 tonnes, but value remained broadly stable at EUR 40 million.

In Spain, prices strengthened, climbing from 7,56 EUR/kg to 8,19 EUR/kg, up 8%. Croatia also saw an increase, from 6,74 EUR/kg to 7,42 EUR/kg, a rise of 10%. Italy remained the highest-priced producer at 8,39 EUR/kg, up 4% over 2022.

CHART 93
PRODUCTION OF FARMED EUROPEAN SEABASS IN MAIN EU PRODUCING COUNTRIES

Source: EUMOFA, based on EUROSTAT (online data code: <u>fish_aq2a</u>) and FAO data. More details on the sources used can be found in the Methodological background. Values are deflated by using the GDP deflator (base=2020).



¹⁵⁰ Just as for gilthead seabream, HAPO reported different figures for 2023. In the HAPO Annual Report 2024 notes a marginal 0,2% decline in seabass value between 2022 and 2023.

MISCELLANEOUS AQUATIC PRODUCTS

Miscellaneous aquatic products encompass several different products which are not ascribable to specific species, but only to macro groups of products characterized by different preservation states and gradings. EUMOFA monitoring of the species covered under this group included seaweed, sponges, sea urchins, terrapins, turtles and frogs.

SEAWEED AND OTHER ALGAE

Aquaculture production of seaweed and other algae is presently reported in eight EU countries – Ireland, France, Greece, the Netherlands, Spain, Denmark, Bulgaria and Portugal. It is now at an early stage of development in Europe in terms of production volume and number of production units.

In 2023, production reached 1.164 tonnes worth EUR 15,3 million, a slight increase of 4% in volume and 10% in value compared with 2022. This consolidated the sharp expansion seen in 2022, when volumes had more than doubled from the previous year.

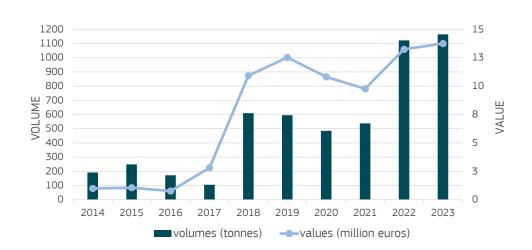
Indeed, between 2014 and 2023, algae aquaculture in the EU experienced remarkable growth. Its production volume increased by 507%, and its value surged by 1298% in real terms, indicating the sector's potential for future expansion.

Despite its limited scale – accounting for just 0,11% of EU aquaculture volume and 1,6% of value – the sector has become a policy priority. DG MARE has emphasised its potential contribution to sustainability, bioeconomy development and food innovation, and Europe hosts a particularly high number of start-ups and innovation hubs compared with other regions, signalling strong momentum for future expansion.

Macroalgae account for nearly all production with wild harvesting still dominating – covering 96% of production. Harvesting is concentrated in Brittany (France), Ireland, Iceland and Galicia, and remains largely artisanal, with around 85% conducted manually. Farmed macroalgae represent only 4% of production, but diverse techniques are emerging. These include sea-based longline farming – notably for *Saccharina*, *Alaria*, *Ulva* and *Palmaria* – and land-based systems such as ponds, raceways and photobioreactors, which are particularly used for microalgae like *Spirulina* and *Chlorella*. Leading producers of macroalgae are France, Ireland and Spain, while microalgae production is concentrated in Spain, Germany, France and Italy¹⁵¹.

CHART 94 PRODUCTION OF SEAWEED AND OTHER ALGAE IN EU

Source: EUMOFA, based on EUROSTAT data (online data code: <u>fish_aq2a</u>). Values are deflated by using the GDP deflator (base=2020).



¹⁵¹ Report of the current algae industry in Europe: https://zenodo.org/records/13375431

PRODUCTION OF FISH EGGS FOR HUMAN CONSUMPTION

During the past decade, both production volume and value of fish eggs for human consumption have shown strong growth, although volumes peaked in 2021 when it reached 1.470 tonnes.

In 2023, EU production reached 1.306 tonnes, valued at EUR 112 million¹⁵². This marked a 10% decline in volume compared with 2022, mainly driven by the decrease of production of rainbow trout (*Oncorhynchus mykiss*) eggs in Denmark and in Finland. However, in 2023, EU production of fish eggs recorded a 10% increase in value over 2022, a result in higher prices in Italy and Poland for caviar (*Acipenseridae*) roes.

The main producers are Denmark, Finland, Italy, France, Spain and Poland. Denmark leads in production volume, while Italy dominates in value, as the species farmed heavily influence the price.

Denmark harvested 571 tonnes worth EUR 12,9 million. Production consisted almost entirely of rainbow trout eggs which sold at 22,68 EUR/kg. This represented a decline of 13% in volume and 21% in value from 2022.

Italy, the leading producer in terms of value, harvested 118 tonnes in 2023, valued at EUR 40 million. The country's output included high-priced caviar roes, which sold for 579,00 EUR/kg, alongside rainbow trout at 35,00 EUR/kg and mullets (*Mugilidae*) eggs at 150,00 EUR/kg. Overall, Italian production increased by 9% in value and 11% in volume compared with 2022, driven by caviar for value and by rainbow trout for volume.

In France, production amounted to 110 tonnes in 2023, worth EUR 32 million. French production of eggs is dominated by Siberian sturgeon (*Acipenser baerii*), sold at 669,61 EUR/kg, and trout (*Salmo spp*), sold at 27,10 EUR/kg. Compared with 2022, this represented a slight 3% decrease in volume but a 2% increase in value.

Finland, Spain and Poland also contribute to EU production of fish eggs, though with different species profiles. In 2023, Finland produced 399 tonnes of rainbow trout (*Oncorhynchus mykiss*) eggs, valued at EUR 7,4 million. This marked a 10% decline in both volume and value compared with 2022, while the average price slipped slightly to 18,48 EUR/kg. Spain also farms rainbow trout, though at smaller scale: production in 2023 reached 51 tonnes, worth EUR 1 million, representing steep decreases of 33% in volume and 56% in value over 2022. Average prices dropped to 19,65 EUR/kg, well below the level of 2022. By contrast, Poland specialises in sturgeon (*Acipenseridae*) and produced 39 tonnes in 2023 valued at EUR 15 million. The 20% decline in volume from 2022 reflected sectoral challenges, including high production costs and environmental pressures ¹⁵³. The value of Polish production, however, more than doubled thanks to soaring prices, which rose from 170,74 EUR/kg in 2022 to 384,00 EUR/kg in 2023.

¹⁵² Source: Eurostat

¹⁵³ Energy prices, though somewhat lower than in 2022, remained high (≈ 534 PLN/MWh on average, (https://www.ure.gov.pl/pl/energia-elektryczna/charakterystyka-rynku/12095%2C2023.html), putting pressure on cost-intensive recirculating aquaculture systems. Toxic blooms of *Prymnesium parvum* in the Odra River have raised water-quality and biosecurity risks (https://pubmed.ncbi.nlm.nih.gov/34452361/), while disease threats such as mimiviruses – detected in about 26% of farmed sturgeon samples between 2016 and 2020 – have added further vulnerability (https://wodnesprawy.pl/en/threats-to-sturgeon-farming-and-caviar-production/).

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ISBN: 978-92-68-34342-5 doi: 10.2771/1531521