



THE EU FISH MARKET

2020 EDITION



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

E U M O F A

European Market Observatory for
Fisheries and Aquaculture Products

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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=2015); 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 June 2020. 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
http://www.eumofa.eu/documents/20178/24415/Metadata+2+--+DM+-+Annex%2B1_%2BList%2Bof%2BMCS%2BAnd%2BCG.pdf/0d849918-162a-4d1a-818c-9edcbb4edfd2
- The correlation table used for harmonizing data on fish species at ERS¹ code level (data on catches, landings, aquaculture production) to the EUMOFA standards
http://www.eumofa.eu/documents/20178/24415/Metadata+2+--+DM+-+Annex+3+Corr+of+MCS_CG_ERS.PDF/1615c124-b21b-4bff-880d-a1057f88563d
- The correlation table used for harmonizing data at CN-8 code level² (data on EU trade) to the EUMOFA standards
<http://www.eumofa.eu/documents/20178/24415/Metadata+2+--+DM+-+Annex+4+Corr+CN8-CG-MCS+%282002+--+2014%29.pdf/ae431f8e-9246-4c3a-a143-2b740a860291>

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

CATCHES 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/sailing. Catches data are provided in this report in live weight equivalent.

The sources of data on catches are FAO (for non-EU countries) and Eurostat (for EU-28 Member States, online data code: [fish_ca_main](#)).

For the purpose of properly conducting an analysis on EU-28 catches, since 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. The list below reports such instances (for all other instances not reported in this list, only Eurostat data were used):

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

2 The 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.

- Denmark: 2018 data on Northern prawn.
- Greece: 2016, 2017, and 2018 data on several species.
- Ireland: 2018 data on several species.
- Latvia: 2017 and 2018 data on several species.

Moreover, data include FAO forecasts for almost all non-EU countries, while for some EU Member States, Eurostat data include estimates and provisional figures, as below listed:

- Bulgaria: 2017 data are national estimates.
- Denmark: 2017 data on Northern prawn are national estimates.
- Germany: 2017 data for almost all species are provisional.
- Ireland: 2017 data on saithe, haddock and “anglerfishes nei” are national estimates.
- France: 2018 data are provisional.
- Italy: 2018 data are provisional.
- Romania: 2017 data are national estimates.
- Finland: 2016 and 2017 data are national estimates.

AQUACULTURE The main source used by EUMOFA for aquaculture data is Eurostat. For the purpose of properly conducting an analysis on aquaculture production in the EU, in some instances EUMOFA has integrated Eurostat data (online data code: [fish_aq2a](#)) with data deriving from [FAO database](#), national sources and sector associations. The list below report 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
 2010-2016 Eurostat confidential data were integrated with FAO estimates.
 2017-2018 data were collected from FAO.
- Bulgaria
 2010 and 2011 data on catfish and the grouping “other freshwater fish” were collected from FAO.
 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.
- Czech Republic
 2010 and 2011 data on catfish and the grouping “other freshwater fish” were collected from FAO.
- Denmark
 Data on salmon were collected from FAO.
 2010 and 2013 Eurostat confidential values were estimated by multiplying the volumes of each main commercial species to its average price (average calculated using the price corresponding to year-1 and year+1) if available within Danish AgriFish Agency.
 2013 data for mussel *Mytilus* spp. 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.

➤ Germany

Data on carp for the years 2008-2012 and 2014, 2015, 2016 and 2018 were collected from FAO.

2011-2018 Eurostat confidential data were collected from FAO, those of oyster being forecasts.

2010 and 2011 Eurostat confidential data on the grouping “other freshwater fish” were collected from FAO.

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

➤ Estonia

2012, 2014 and 2015 Eurostat confidential data were integrated with figures from FAO.

2016-2018 Eurostat confidential data on the grouping “other freshwater fish” were collected from FAO.

➤ 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.

➤ Greece

2013 Eurostat confidential data were integrated with figures from FAO.

2015 and 2016 Eurostat confidential data on the grouping “other freshwater fish” were integrated with figures from FAO.

2017 data are National provisional figures available in Eurostat.

➤ Spain

2018 Eurostat confidential data on several species were collected from FAO (those on clam and white seabream being forecasts).

➤ 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.

2012-2013 and 2016-2017 data on carp, catfish and other freshwater fish are National estimates available in Eurostat.

2018 data on carp, pike, pike-perch and on the grouping “other freshwater fish” are National estimates available in Eurostat.

➤ Italy

2015 data are National estimates and forecasts available in Eurostat.

2017 data on grooved carpet shell are FAO forecasts.

- Latvia
2014-2015 and 2017-2018 Eurostat confidential data were integrated with figures from FAO.
- Hungary
2016 data for the grouping “other freshwater fish” were collected from FAO.
- Netherlands
For eel, catfish and the grouping “other marine fish”, 2012, 2015 and 2018 data are National estimates available in Eurostat.
For mussel, data of 2012 and 2014-2016 are National estimates available in Eurostat.
For turbot, 2012 data are National estimates available in Eurostat, and data of 2008-2010 and 2013-2017 are FAO forecasts.
Data on pike-perch are FAO forecasts.
- Austria
2010-2018 Eurostat confidential data were integrated with figures from FAO.
All data on the grouping “other salmonids” were collected from FAO.
- Poland
2010 data were collected from FAO. Data on pike, freshwater catfish and other freshwater fish are FAO forecasts.
2011 data for freshwater crayfish, pike, trout, salmon and other freshwater fish are National provisional figures available in Eurostat.
2016 data on tilapia are FAO forecasts.
- 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.
- Romania
2015 data are National estimates available in Eurostat.
For turbot, 2015-2016 data are FAO forecasts.
- Slovenia
2010 and 2012 data on mussel *Mytilus* spp. were collected from FAO (the latter being forecasts).
2013- 2016 Eurostat confidential data were integrated with figures from FAO.
2016 and 2018 data on European seabass, and 2015, 2017 and 2018 data on clam are FAO forecasts.
2017 Eurostat confidential data on the grouping “other salmonids” were integrated with figures from FAO and those on European seabass with FAO forecasts.
- Sweden
Data were collected from FAO for eel (2010) and salmon (2013, 2014 and 2016).
- United Kingdom
2008 values of Atlantic halibut, European seabass, clam, warmwater shrimp, turbot, great Atlantic scallop and the grouping “Other molluscs and aquatic invertebrates” were integrated using FAO; value of Queen scallop was estimated by multiplying the volume to its 2009 unit price, as available in Eurostat. 2014-2018 values are National estimates available in Eurostat.

SUPPLY BALANCE SHEET The supply balance is a proxy that allows to follow the evolutions of internal supply and apparent consumption of fishery and aquaculture products in the EU. 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:

$$(\text{catches for food use} + \text{aquaculture production} + \text{imports}) - \text{exports} = \text{apparent consumption}$$

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 and destined to human consumption. Amounts of catches not destined to 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: [fish_ca_main](#)), 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. Sources: EUROSTAT (reference dataset: [fish_aq2a](#)), 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-016890](#)).
- Apparent consumption (total and per capita): amount of fishery and aquaculture products consumed in the EU. Per capita consumption indicates the amount consumed 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 <http://www.eumofa.eu/documents/20178/24415/Metadata+2+-+DM+-+Annex+7+CF+per+CN8+%252707-%252714.pdf/7e98ac0c-a8cc-4223-9114-af64ab670532>.

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

The objective of the assessment of origin in terms of production methods is to quantify the role of aquaculture in the EU supply balance analysis. For each EU Member State, on the basis of the total volumes of extra-EU imports and extra-EU exports, the production methods of the countries of origin of imports and destination of exports is assessed, averaging the latest three years of production volumes in terms of catches and aquaculture.

Further assessment provides an estimate of a weighted average share of aquaculture in the total production (aquaculture + capture) and it is expressed as a coefficient.

Through this proxy, the origin of imports and destinations of exports in terms of production methods is determined, i.e. if imports/exports of a given EU Member State derive from farming or fishery activities.

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 12 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, reporting 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
United Kingdom (excluding Northern Ireland)	30.000

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. Below the complete lists of “main commercial species” monitored for each country is reported:

Denmark	Germany	Ireland	Spain
Cod	Carp	Cod	Cod
Dab	Cod	Haddock	European seabass
Flounder	Herring	Hake	Gilthead seabream
Halibut	Shrimps	Mackerel	Hake
Mackerel	Mussel <i>Mytilus</i> spp.	Shrimps	Mackerel
Mussel <i>Mytilus</i> spp.	Plaice	Saithe (=Coalfish)	Miscellaneous tuna
Salmon	Pollack	Salmon	Monk
Trout	Salmon	Other unspecified products	Salmon
Other unspecified products	Trout		Sardine
	Other freshwater fish		Sole
	Other unspecified products		Other unspecified products

France	Italy	Hungary	Netherlands
Cod	Anchovy	Unspecified products	Cod
Gilthead seabream	Clam		Herring
Hake	Cuttlefish		Mackerel
Mackerel	European seabass		Mussel <i>Mytilus</i> spp.
Monk	Gilthead seabream		Pangasius
Saithe (=Coalfish)	Hake		Plaice
Salmon	Mussel <i>Mytilus</i> spp.		Salmon
Sardine	Octopus		Trout
Trout	Salmon		Shrimp <i>Crangon</i> spp.
Whiting	Squid		Miscellaneous shrimps
Other unspecified products	Other unspecified products		Other unspecified products

Poland	Portugal	Sweden	United Kingdom
Carp	Clam	Cod	Cod
Mackerel	European seabass	Flounder	Haddock
Salmon	Gilthead seabream	Haddock	Mackerel
Trout	Hake	Halibut	Miscellaneous tuna
Other unspecified products	Mackerel	Herring	Plaice
	Shrimps	Pike-perch	Pollack
	Octopus	Salmon	Salmon
	Salmon	Other salmonids	Seabass
	Sardine	Other unspecified products	Sole
	Scabbardfish		Trout
	Other unspecified products		Other unspecified products

RETAIL SALES AND OUT-OF-HOME CONSUMPTION Data for retail sales and out-of-home consumption are provided by Euromonitor International (<https://www.euromonitor.com/>) whose 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.

Unprocessed products

Data are provided for the category “fish and seafood”, as well as for the subcategories 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/filletted/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 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 fisheries and aquaculture products are analysed for the items referring to the list of CN-8 codes available at the link <http://www.eumofa.eu/documents/20178/24415/Metadata+2+--+DM+-+Annex+4+Corr+CN8-CG-MCS+%282002+--+2014%29.pdf/ae431f8e-9246-4c3a-a143-2b740a860291>.

The source used for collecting import-export data is EUROSTAT - COMEXT. 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/documents/7870049/9568307/KS-FT-19-002-EN-N.pdf/856f28e5-e9f6-4669-8be0-2a7aa5b1ee67>.

It must be specified that data comprehend instances in which volumes or values are not reported due to confidentiality. The principal of statistical confidentiality of Eurostat is explained at the link: <https://ec.europa.eu/eurostat/web/research-methodology/statistical-confidentiality>.

EXTRA-EU TRADE FLOWS They encompass all transactions between European Union (EU) Member States and countries outside the EU (non-member countries).

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.

Actually, intra-EU trade flows as reported by EUROSTAT cover both arrivals (i.e. imports) and dispatches (i.e. exports). Because of different valuation principle (CIF > FOB)³, arrivals should be slightly higher valued than dispatches. This is one of the main reasons explaining asymmetries between import and export figures. In general, bilateral comparisons between MS of intra-EU flows have revealed major and persistent discrepancies. Therefore, comparisons dealing with intra-EU trade statistics and related results must be taken into account cautiously and should consider the existence of these discrepancies.

LANDINGS Eurostat data regarding landings ([fish_ld_main](#)) comprise the initial unloading of any fisheries products from on board a fishing vessel to land in a given EU Member State. Landings are made by vessels from EU Member States and from Iceland and Norway. 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 3 vessels. Therefore, in some instances, Member States provide data at more aggregated level, in others data are just not available. Details for these instances, broken down by country, year and species involved, are listed below:
 - Denmark
 For 2017, some confidential figures are excluded, related to destination use and/or presentations/preservations of some specific species belonging to the following main commercial species: eel, pike, cod, sole, sardine, bluefin tuna, crab, coldwater 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.
 - 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.
 - 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.

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.

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

- For 2016-2017: some species belonging to the following main commercial species: octopus, red mullet, seabream (other than gilt-head 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
Data for the period 2012-2018 regarding landings made by vessels with Cyprus flag are excluded as they are confidential.

➤ Provisional data

- France
2018 volumes and values are provisional data available in Eurostat.
- Italy
2018 volumes and values are provisional data available in Eurostat.

➤ Estimates

- Bulgaria
2017 volumes and values are national estimates available in Eurostat.
- Ireland
Most of 2017 volumes and values are national estimates available in EUROSTAT. In addition, the following data were collected from SFPA (Sea-Fisheries Protection Authority):
 - 2013 and 2014 data regarding hake
 - 2014 data regarding mackerel
 - 2016 data regarding herring
 - 2018 data regarding blue whiting
- Lithuania
2017 volumes and values are national estimates available in EUROSTAT.
- Netherlands
Most of 2017-2018 volumes and values are national estimates available in Eurostat.
- Portugal
Most of 2018 volumes and values are national estimates available in Eurostat.
- Romania
2017 volumes and values are national estimates available in Eurostat.

- Moreover, data include estimates for landings expressed in value, produced by Eurostat in cases where zero prices were reported by Member States. Countries and years concerned are listed below:
 - Belgium – 2009, 2010, 2011, 2012, 2013, 2014 and 2015
 - Bulgaria – 2012
 - Denmark – 2009, 2010, 2011, 2012, 2013, 2014 and 2018
 - Germany – 2009 and 2014
 - Ireland – 2009, 2010 and 2018
 - Netherlands – 2011
 - Poland – 2011, 2012 and 2016
 - Portugal – 2009, 2010, 2011, 2012 and 2015 and 2016
 - Sweden – 2009, 2010 and 2011
 - United Kingdom – 2009, 2010, 2011 and 2012

HIGHLIGHTS

INCREASED EXPENDITURE OF EU HOUSEHOLDS FOR PURCHASING FISH AND HIGHER PRICES

The consumer prices of fishery and aquaculture products have been growing significantly since 2014 and by 2019, they were 14% higher than eight years before. As the EU demand is primarily met through imports, the increases were in line with the increased prices of imported products. From 2018 to 2019, the household expenditure for fishery and aquaculture products increased in all Member States.

THE EU TRADE DEFICIT FOR FISHERIES AND AQUACULTURE PRODUCTS CONTINUES TO RISE

In 2019, imports and exports of fisheries and aquaculture products between the EU and the rest of the world totalled 8,55 million tonnes with a value of EUR 33 billion, making the EU the second largest trader of these products after China. As a net importer, the EU had a deficit of EUR 21 billion in 2019, which was slightly higher than the previous year. In the long run, the deficit grew by 33% in real terms from 2010 to 2019.

Extra-EU imports reached a ten-year high of 6,34 million tonnes, almost 460.000 tonnes or 8% more than in 2010. There was also a peak in value, with imports reaching EUR 27,21 billion, which was a significant 38% increase in real terms compared with ten years before. From 2018 to 2019, the volume increased a barely perceptible 0,3% (+18.625 tonnes) while value grew by 2% (+EUR 659 million). The value increase was driven by prices of the most highly imported products – salmon, cod, tuna, fishmeal and Alaska pollock.

At the same time, extra-EU exports reached 2,21 million tonnes, growing by 115.275 tonnes or 6%, compared with ten years before. They achieved a ten-year high in value at EUR 6,17 billion, which in real terms was 58% higher than in 2010. From 2018, the growth reached EUR 435 million, for an 8% increase, largely driven by exports of salmon.

Intra-EU exports totalled 6,43 million tonnes and EUR 27,41 billion, marking a 170.380 tonnes or 3% decrease from 2018, accompanied by EUR 85 million or 0,3% increase in value. Intra-EU trade almost exclusively concerns exports of salmon from northern Member States (main entry points of Norwegian products) to other EU countries.

DECREASED SUPPLY AND CONSUMPTION OF FISHERIES AND AQUACULTURE PRODUCTS FROM 2017 TO 2018

Consolidated data regarding EU production of fishery and aquaculture products, and therefore estimates on EU total supply for EU consumers (production + imports) and EU apparent consumption (supply - exports) are available up to 2018.

In 2018, the EU supply of fisheries and aquaculture products for human consumption reached 14,72 million tonnes of live weight. Although this was one of the highest amounts in ten years, it represented a slight 99.884 tonnes or 0,7% decrease from 2017, due to declining production from both fishing and aquaculture.

Due to decreased production of salmon in the UK, EU aquaculture production saw a reversal of the upward trend experienced in the previous four years, with volume decreasing 4% to 1,32 million tonnes from 2017 to 2018, and value decreasing 5% to EUR 4,8 billion. EU catches totalled 5,34 million tonnes, of which 3,99 million were

destined for food use. Food-use catches registered a 5% or 208.288-tonne decrease from 2017 to 2018, mainly due to reduced catches of mackerel by the UK, Spanish and Irish fleets.

Yet, in 2018, the EU self-sufficiency ratio⁴, which measures the capacity of EU Member States to meet demand from their own production, remained in line with the ten-year average. However, a comparison of 2018 data with 2017 data shows a slight decline caused by the combined effect of the increased imports and decreased production.

Per capita apparent consumption, estimated at 24,36 kg of live weight of mostly wild-caught products, signalled that in 2018 EU citizens consumed, on average, 430 grams less fishery and aquaculture products than in 2017. Consumption declined for the three most consumed species, namely tuna, salmon and cod. According to EUMOFA and national estimates, in contrast with the general trend at EU level⁵, Malta observed a significant per capita consumption growth from 2017 to 2018, largely driven by increased imports.

Landings of fisheries products, including species not destined for human consumption and seaweed, decreased 11% to 4,53 million tonnes while their value decreased 3% to EUR 7,13 billion. The most significant drop was with sandeels destined for industrial use in Denmark – the same species that contributed to the boost recorded one year before, from 2016 to 2017. Denmark, however, remained the country with more total landings in the EU (one quarter of the total), which are mainly for non-food use. On the other hand, landings of skipjack tuna in Spain and scallop in France increased significantly.

RECENT DYNAMICS FOR SOME MAIN SPECIES

Salmon. With a growth rate of 5%, the quantity of salmon imported in the EU reached an all-time high in 2019. Despite a 2% decrease in import prices, total import value amounted to EUR 6,28 billion, another all-time high. Major drivers behind the increase in import quantity were a combined 8% growth in salmon production in the Faroe Islands, Iceland and Norway, and strong demand on the EU market. On top of the growth in imports, the EU showed an estimated 24% growth in salmon production in 2019.

Alaska pollock. In 2019, 305.007 tonnes were supplied to the EU market, the same quantity reported in 2018, which had been a record year. However, significantly higher prices on the EU market resulted in import value increasing 25% from 2018 and reaching EUR 838 million in 2019. In the first semester of 2020, the volume of Alaska pollock imported in the EU decreased by 6% while import prices increased by 7%.

Tuna. After a 7% drop from 2017 to 2018, EU imports of whole tuna continued to decrease, dropping 3% in 2019, while imports of fillets continued an upward trend that saw annual increases of 10% on average from 2016 to 2019.

Atlantic mackerel. Despite its TAC⁶ being significantly higher in 2020 than in 2019, prices of Atlantic mackerel exports from EU Member States to non-EU countries were relatively high in the first seven months of 2020. Export prices of whole mackerel (fresh and frozen) of EU origin sold to non-EU countries averaged 1,62 EUR/kg, up by 4% from the record high price level observed in the corresponding period of 2019.

⁴ Ratio between EU production and apparent consumption of the EU market.

⁵ 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.

⁶ Total Allowable Catch

Seabass and seabream. While EU production of farmed seabass and seabream is relatively stable, its production in Turkey is still on the rise. On the rise are also EU imports of both species from Turkey which increased by 15% from 2018 to 2019. At the same time the import prices of both decreased on average by 4%: farmed seabass prices decreased 9% to 3,78 EUR/kg, while farmed seabream remained stable at around 3,90 EUR/kg. However, in the first semester of 2020, EU apparent consumption of seabass and seabream was down by approximately 6%, with seabass reporting the strongest decline⁷.

IMPACT OF COVID-19 ON THE FISHERY AND AQUACULTURE SECTORS

The COVID-19 pandemic has strongly impacted the market dynamics of fishery and aquaculture products, albeit to different extents. In the fishing sector, the pandemic has had negligible impact on products from small pelagics, as they are mainly processed into frozen products, and their market prices are still relatively low. On the other hand, fisheries targeting species sold fresh have been impacted noticeably. As for the aquaculture industry, market players targeting the retail sector did not report major losses in the first semester of 2020, while players traditionally targeting the hotel, restaurant and catering (HoReCa) segment suffered the most. The processing sector also faced the challenge of establishing safe working conditions to avoid the spread of COVID-19 among its workers. The processing sectors that produce durable products and target the retail segment have performed the best under the pandemic.

Loss of export opportunities has been challenging for both the aquaculture and the fishery sectors. With no strong demand in export markets, products have been sold in the EU market at lower prices.

Huge efforts have been made by many market players to adapt to the new market dynamics and many have succeeded. However, it seems as if the fishery and aquaculture industry must live with the uncertainties from the COVID-19 pandemic for the foreseeable future.

MACROECONOMIC TRENDS

In 2018, the Euro (EUR) strengthened against four currencies important to operators in the fish and seafood industry – US dollar (USD), Icelandic króna (ISK), British pound (GBP) and Norwegian krone (NOK). However in 2019, the picture was mixed. EUR depreciated 5% against USD and 1% against GBP. On the other hand, it strengthened by 3% and 5% against NOK and ISK, respectively. In the first three quarters of 2020, EUR strengthened a significant 10% against NOK and 11% against ISK, while its exchange rate with GBP and USD remained unchanged.

The consumer price index for fish and seafood in the EU⁸ showed a slight upward trend through 2019. In the first half of 2020, it rose by 1,5% compared with the same period in 2019. This also meant a higher growth rate, with fish and seafood consumer prices rising by 0,9% in the first semester of 2019.

In 2019, spot prices of crude oil, which is the main price driver for marine fuel prices, remained stable, as did marine fuel prices in the EU. In 2020, a drop in crude oil prices, highly impacted by the COVID-19 pandemic, resulted in lower fuel cost for the fishing fleet. In the first three quarters of 2020, the spot price for marine fuel averaged 30% lower than in the corresponding period in 2019⁹.

⁷ Source: Kontali Analyse, monthly seabass and seabream report, September 2020

⁸ Source: EUMOFA macroeconomic dashboard

⁹ *Ibidem*

1/ THE EU IN THE WORLD

1.1 PRODUCTION

In 2018, total world catches¹⁰ and aquaculture production achieved a 10-year high. With a 3% increase from 2017, their combined totals moved from 206 million tonnes to 212 million tonnes. In that time, catches continued to increase, rising from 94 million tonnes to 97 million tonnes, and farmed production grew from 112 million tonnes to 115 million tonnes.

Peru was the main contributor to the growth, thanks to the boost registered by its catches of “anchoveta” (*Engraulis ringens*) designated for fishmeal production.

TABLE 1

TOP-15 PRODUCING COUNTRIES IN 2018 (1.000 TONNES)

Source: Eurostat (online data codes: [fish_ca_main](#) and [fish_aq2a](#)) and FAO. More details can be found in the Methodological background.

Country	Catches	Aquaculture	Total production	% of total	% evolution of total production 2018/2017
China	14.831	66.135	80.966	38%	+1%
Indonesia	7.261	14.772	22.033	10%	-4%
India	5.343	7.071	12.414	6%	+6%
Vietnam	3.347	4.153	7.500	4%	+5%
Peru	7.208	104	7.312	3%	+71%
EU-28	5.337	1.319	6.656	3%	-2%
Russia	5.117	204	5.321	3%	+5%
United States	4.757	468	5.225	2%	-5%
Philippines	2.053	2.304	4.357	2%	+6%
Bangladesh	1.871	2.405	4.276	2%	+3%
Japan	3.207	1.033	4.240	2%	-1%
Norway	2.658	1.355	4.013	2%	+4%
Chile	2.369	1.287	3.656	2%	+3%
Republic of Korea	1.345	2.279	3.624	2%	-2%
Myanmar	2.033	1.132	3.165	1%	-1%
Others	28.494	8.440	36.934	18%	+3%
Total	97.231	114.461	211.692	100%	+3%

¹⁰ 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.

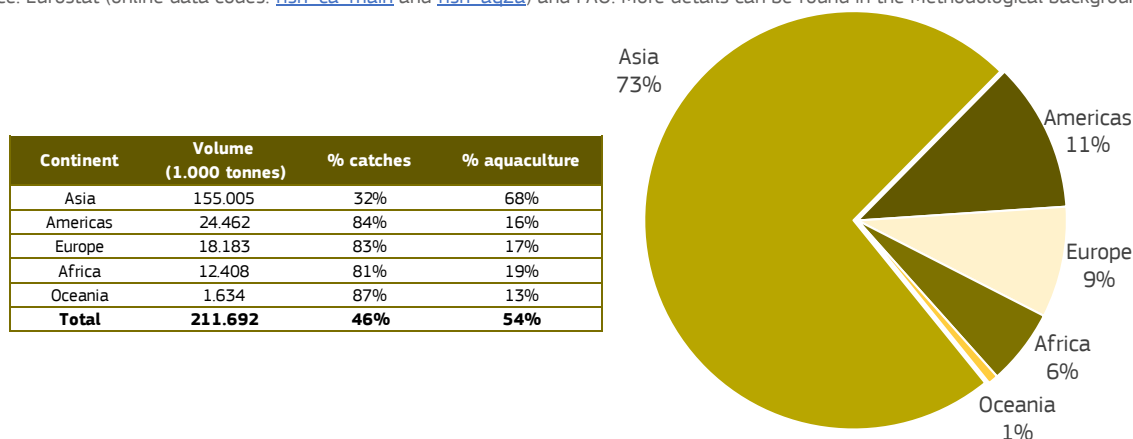
From 2017 to 2018, aquaculture production grew for almost all major producers. The exceptions were the EU, mainly due to reduced production of salmon in the UK, Indonesia and the Republic of Korea, which both had reduced production of algae. Catches showed different trends across the world – the most remarkable being that of Peru.

Since 2000, aquaculture's share of total world production has increased continuously and, since 2013, aquaculture production has been higher than that of catches. This trend was driven by Asia, where aquaculture production represented more than 90% of the world's total farmed production in 2018. Asia is also the only continent where farmed production exceeds wild production. In fact, in each of the world's top four producing countries – China, Indonesia, India and Vietnam – the majority of production originates from aquaculture: more than 80% in China, 67% in Indonesia, and more than half in India and Vietnam. By contrast, only 20% of EU production originates from aquaculture.

CHART 1

WORLD PRODUCTION BY CONTINENT IN 2018

Source: Eurostat (online data codes: [fish_ca_main](#) and [fish_aq2a](#)) and FAO. More details can be found in the Methodological background.



ASIA

Asia leads the world in both farmed and wild production. In 2018, Asia's farmed production amounted to 105 million tonnes, up 2% from 2017, and its wild production reached 50 million tonnes, which was a 3% increase from 2017. China alone accounted for close to 60% of global farmed production and 15% of global wild-caught production. The country mainly produces seaweed and carp – both from aquaculture – with production reaching 19 million tonnes and 18 million tonnes, respectively, in 2018. If compared with world production of these two species, Chinese production covered almost 60% of the total for seaweed and 85% for carp. By comparison, the EU produced only 85.940 tonnes of carp and 44.596 tonnes of seaweed in 2018. However, EU seaweed production originates mostly from wild harvesting for non-food purposes, which limits the relevance of the comparison with Chinese production.

AMERICA

In the Americas – including North, Central and South America – catches grew to 21 million tonnes in 2018, up 16% from 2017. The increase was driven by the boost registered by Peruvian catches of anchoveta which rose from 3,30 million tonnes to 6,19 million tonnes. This was affirmed when the combined quota for the two seasons of 2018 achieved the highest amount since 2011, confirming the normalization of climate conditions and favourable biomass of anchovy on that coast¹¹. Thanks to such a boost, Peru became the top American fishery producer in 2018, a position the United

¹¹ Source: FAO – Globefish <http://www.fao.org/in-action/globefish/market-reports/resource-detail/en/c/1189963/>.

States had held since 2014 due to its catches of Alaska pollock which had amounted to around 1,5 million tonnes each year.

Aquaculture production in the Americas grew as well, reaching 3,8 million tonnes with a 6% increase from 2017. Chile leads the sector and drove the growth, with its production of 1,3 million tonnes representing a 6% increase from 2017. This mainly included salmon, which increased 4% to 809.659 tonnes and marked a continuing steady recovery from the algal bloom mortalities of 2016, and mussels, which had an 8% increase and reached 368.916 tonnes. By comparison, EU farmed production of salmon totalled only 171.351 tonnes, but its production of mussels surpassed the Chilean one, as it amounted to 515.863 tonnes. On the other hand, as specifically concerns salmon, Chilean production was 37% lower than Norway's 1,28 million tonnes.

EUROPE

Three non-EU countries accounted for almost 60% of total European production in 2018: Russia with 5,32 million tonnes, Norway with 4,01 million tonnes, and Iceland with 1,30 million tonnes.

Russian production mainly comprises catches of Alaska pollock which totalled 1,68 million tonnes in 2018, 3% less than in 2017. In Norway, two thirds of production comes from aquaculture and consist more specifically of salmon, whose production grew 4% from 2017. Norwegian catches mainly include herring with 498.041 tonnes in 2018, blue whiting with 438.426 tonnes, and cod with 373.924 tonnes. While its catches of cod and blue whiting were higher than those of the EU, the Norwegian fleet caught much less herring than the EU's total of 869.566 tonnes. As for Iceland, production increased by 6% from 2017 to 2018 thanks to increased catches of the two most fished species: blue whiting, which totalled 292.952 tonnes for a 28% increase, and cod, which totalled 274.958 tonnes for a 10% increase.

Looking more specifically at the EU level, the combined production of EU countries totalled 6,65 million tonnes. Production in the EU is more focused on pelagic and demersal fish than in the rest of the world. Pelagic fish cover more than half and demersal fish cover one-third of the total EU fisheries production, whereas they represent lower shares in non-EU countries. On the other hand, crustaceans, cephalopods and freshwater fish have a limited impact on the EU production, with a combined share of around 5%, while in non-EU countries, they have a combined share of around 25%.

AFRICA

In Africa, the main producers are Egypt, which mainly farms Nile tilapia, Morocco, which mainly catches sardine, and Nigeria, which mainly catches wild tilapia.

In 2018, Moroccan production of sardine amounted to 967.131 tonnes, which was almost five times higher than that of EU Member States.

OCEANIA

In Oceania, almost 90% of total production is wild caught. The main species caught are skipjack tuna, mainly fished by Papua New Guinea and Kiribati, and grenadier, mainly fished by New Zealand. In 2018, catches of skipjack tuna reached 577.848 tonnes, and grenadier reached 141.808 tonnes. By comparison, Oceania production of skipjack tuna was double that of the EU, while its catches of grenadier were more than 20 times higher than catches by the EU.

1.2 IMPORT – EXPORT¹²

EU-28 The EU trade of fisheries and aquaculture products, which comprises both imports and exports with third countries, totalled EUR 33,37 billion and 8,55 million tonnes in 2019, making the EU the second largest trader of these products in the world after China. Imports, which accounted for around 80% of the total, amounted to EUR 27,21 billion and 6,34 million tonnes.

Detailed analyses on imports and exports of EU Member States can be found in Chapter 4. This section focuses on the trade flows of the top-5 non-EU world traders of fisheries and aquaculture products – China, United States, Japan, Norway and Thailand ranked in value terms – and compares them with the EU.

CHINA With a total flow of 10,38 million tonnes valued at EUR 34,37 billion, China ranked first in the world for total trade of fisheries and aquaculture products in 2019. China is a net exporter in terms of value, while a net importer in terms of volume. A significant share of its surplus comes from its large processing sector, which processes both internally produced and imported products for export.

The main destinations for Chinese exports are Japan, the US and the EU (ranked in decreasing order in volume terms), with Japan mainly receiving frozen fillets of marine fish¹³, the US mostly receiving prepared/preserved fish¹⁴, and the EU mainly importing frozen fillets of Alaska pollock.

From 2018 to 2019, Chinese exports decreased by a slight 1% in volume and 3% in value) to reach 4,18 million tonnes and EUR 18,02 billion. Despite decreasing, Chinese exports were still twice as large in volume and three times as large in value as EU exports.

On the other hand, China's imports increased by a considerable 20% in volume and 31% in value, reaching peaks of 6,20 million tonnes (nearly as much as EU imports) and EUR 16,36 billion (around two thirds of EU imports). Consequently, the Chinese trade surplus plummeted to EUR 1,66 billion, 72% lower than in 2018. As trade exchanges are expressed in USD, this was also due to a 4,4% appreciation of the USD against the CNY during 2019.

China saw increased imports from all its main suppliers – Russia, Peru, Vietnam, Ecuador and India – with the most significant growth regarding shrimps coming from Ecuador and India. The increase in imports, especially from Ecuador and India, is a result of these trade flows “shifting”. In the past, they were going through third countries (such as Vietnam) and were registered into limited degree, while they now directly involve the actual importer and exporter.

¹² Sources used in this chapter are Eurostat for EU-28 (online data code [DS-016890](#)), StatBank Norway and Global Trade Atlas – IHS Markit for non-EU countries.

¹³ No detail is available in terms of species.

¹⁴ *Ibidem*

UNITED STATES

The total amount of imports and exports of fisheries and aquaculture products to/from the US in 2019 was 4,36 million tonnes worth EUR 24,99 billion. The US is a net importer of these products and, in 2019, the trade balance reached its lowest level of the five years analysed.

The value of US imports increased 3% from 2018, reaching a five-year peak of EUR 19,84 billion for 2,81 million tonnes, which was 3% less than 2018. The value increase was mainly driven by increased imports of shrimps from India, salmon from Chile, and crab from Canada and Russia. On the other hand, imports from China, the top supplier, largely including tilapia, declined.

The US exports showed a 1% decrease in volume and value from 2018, bringing their 2019 total to 1,55 million tonnes and EUR 5,15 billion. Its top destinations were China, which received mainly frozen whole salmon, flatfish and other marine fish¹⁵; the EU, receiving frozen fillets of Alaska pollock; Canada, receiving salmon, both fresh or frozen, and whole or filleted; and Japan and the Republic of Korea which received frozen fillets of marine fish¹⁶.

JAPAN

In 2019, Japan's imports and exports of fisheries and aquaculture products totalled 3,04 million tonnes and EUR 15,59 billion. Japan, the EU and the US are the major net importers of these products in the world, but Japan's trade deficit is half as much as the EU's and around 20% lower than the US's.

With a 4% increase in volume and value from 2018, imports in Japan reached a five-year value peak at EUR 13,60 billion for 2,44 million tonnes. The volume increase was mainly due to supplies of non-food use products – mostly used as fishmeal in the aquaculture sector – from China and Peru with the latter mainly exporting fishmeal. Value increased mainly due to imports of coho salmon and trout from Chile.

Japanese exports dropped 16% from 2018, reaching 598.153 tonnes, which was still higher than the five-year average. The decline was due to decreased exports of mackerel to Ghana, Egypt and the Philippines. In value terms, with a 0,5% increase, Japanese exports reached a five-year peak at EUR 1,99 billion, mainly driven by exports of frozen fillets of marine fish¹⁷ to the US.

NORWAY

Norway's total trade flows of fisheries and aquaculture products reached 3,25 million tonnes worth EUR 11,94 billion in 2019, for a trade surplus of EUR 9,55 billion – the highest in the last five years.

Norwegian exports of these products rank second in the world after those from China, due to the significant amount of salmon it exports all over the world. The EU, its main destination, absorbs 60% of total Norwegian exports.

From 2018 to 2019, total exports from Norway decreased by 5% in volume, reaching 2,64 million tonnes, mainly driven by a decline in exports of blue whiting to the EU and fresh whole marine fish¹⁸ to Iceland. In value terms, however, they increased by 4%

¹⁵ *Ibidem*

¹⁶ *Ibidem*

¹⁷ *Ibidem*

¹⁸ *Ibidem*

and achieved a five-year high of EUR 10,74 billion, thanks to increased exports of salmon to the EU.

Supplies from abroad were at almost the same level as 2018, amounting to 612.510 tonnes in 2019. Their value, however, increased by 10% to reach EUR 1,19 billion, due to increased imports of fish oil from Peru, which is its major supplier together with the EU and Iceland.

THAILAND

The total amount of imports and exports of fisheries and aquaculture products to/from Thailand in 2019 was 3,29 million tonnes worth EUR 8,50 billion. The country is a net exporter of these products, with a 2019 surplus close to EUR 1,80 billion. The trade surplus decreased each year from 2015 to 2018, but recovered in 2019.

From 2018 to 2019, exports showed opposite, slight changes, decreasing 1% in volume and increasing 1% in value, reaching 1,30 million tonnes worth EUR 5,15 billion. Thailand's exports are mostly destined for Japan and the US, which mainly receive shrimps and tuna.

Imports in Thailand declined by 7% in volume and 1% in value in the same period due to decreased supplies of frozen marine fish¹⁹ from India. However, it registered increased imports from Myanmar and China, its main suppliers.

¹⁹ *Ibidem*

TABLE 2

EXPORTS 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 2019

Source: EUMOFA elaboration of data from EUROSTAT (for EU trade flows, online data code [DS-016890](#)), StatBank Norway and Global Trade Atlas - IHS Markit (for other non-EU countries)

Country	2015		2016		2017		2018		2019		2019/2018	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
China	3,98	17,86	4,16	18,31	4,26	18,21	4,23	18,48	4,18 (12% to the EU)	18,02 (11% to the EU)	-1%	-2%
Norway	2,57	8,21	2,45	9,77	2,61	10,06	2,76	10,29	2,64 (60% to the EU)	10,74 (60% to the EU)	-4%	+4%
EU-28	2,06	5,01	1,99	5,24	2,13	5,67	2,20	5,73	2,21	6,17	+0,5%	+8%
US	1,65	5,45	1,59	5,35	1,70	5,46	1,57	5,20	1,55 (21% to the EU)	5,15 (19% to the EU)	-1%	-1%
Thailand	1,48	5,07	1,44	5,25	1,28	5,26	1,31	5,08	1,30 (4% to the EU)	5,15 (5% to the EU)	-1%	+1%
Japan	0,53	1,73	0,51	1,85	0,57	1,82	0,71	1,98	0,60 (1% to the EU)	1,99 (2% to the EU)	-15%	+1%

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 2019

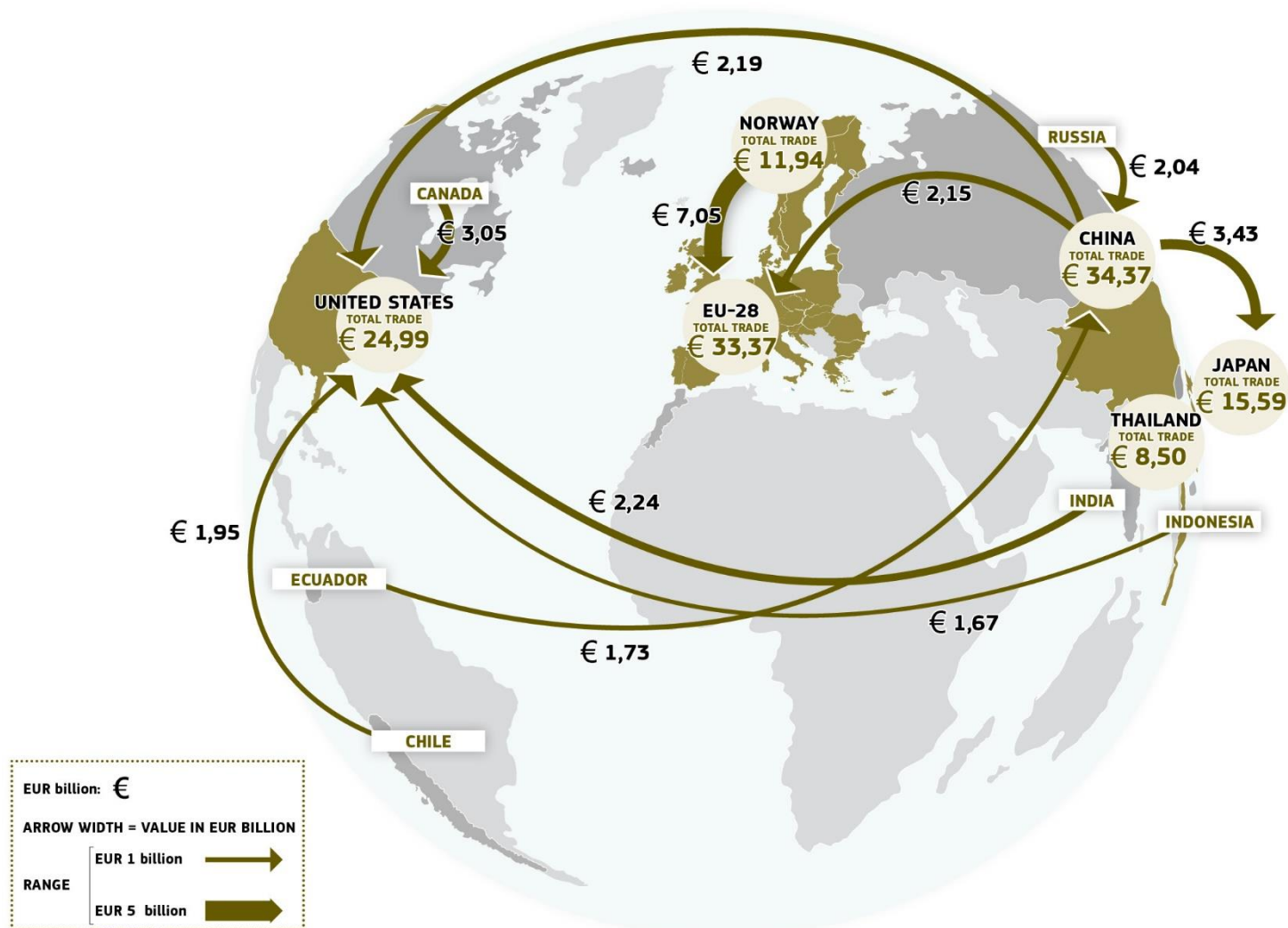
Source: EUMOFA elaboration of data from EUROSTAT (for EU trade flows, online data code [DS-016890](#)), StatBank Norway and Global Trade Atlas - IHS Markit (for other non-EU countries)

Country	2015		2016		2017		2018		2019		2019/2018	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
EU-28	5,94	22,80	6,10	24,85	6,07	25,98	6,32	26,55	6,34	27,21	+0,3%	+2%
US	2,64	17,03	2,72	17,77	2,80	19,22	2,88	19,26	2,81 (3% from the EU)	19,84 (3% from the EU)	-2%	+3%
China	4,04	7,84	3,98	8,15	4,84	9,70	5,16	12,45	6,20 (2% from the EU)	16,36 (2% from the EU)	+20%	+31%
Japan	2,47	12,28	2,36	12,73	2,46	13,52	2,36	13,12	2,44 2% from the EU)	13,60 (4% from the EU)	+3%	+4%
Thailand	1,60	2,33	1,85	2,85	1,92	3,24	2,13	3,39	1,98 (1% from the EU)	3,35 (1% from the EU)	-7%	-1%
Norway	0,63	1,12	0,63	1,15	0,66	1,08	0,61	1,08	0,61 (43% from the EU)	1,19 (39% from the EU)	=	+10%

CHART 2

MAIN TRADE FLOWS OF FISHERY AND AQUACULTURE PRODUCTS IN THE WORLD (2019, NOMINAL VALUES)

Source: EUMOFA, based on elaboration of data from EUROSTAT (for EU trade flows, online data code [DS-016890](#)), StatBank Norway, and Global Trade Atlas - IHS Markit (for trade flows of other non-EU countries)



1.3 EXPENDITURE AND CONSUMPTION²⁰

In 2017, the EU as a whole reported the highest expenditure on fish in the world. However, when looking at per capita expenditure, it ranked 8th after Iceland, Japan, Korea, Norway, Australia, Israel and Switzerland.

On the other hand, according to the OECD-FAO Agricultural Outlook forecasts for 2019, the EU ranked 13th in terms of per capita consumption, amounting to less than half of the forecast for the top-3 ranked countries – Malaysia, Korea and Norway.

TABLE 4
EXPENDITURE ON FISH,
TOP 10 OECD COUNTRIES,
2017
Source: OECD

Country	Per capita nominal expenditure (EUR per capita)	Total nominal expenditure (EUR million)
Iceland	398	137
Japan	368	46.634
Korea	201	10.349
Norway	170	899
Australia	144	3.548
Israel	124	1.080
Switzerland	119	1.002
EU-28	106	54.262
New Zealand	97	469
Canada	81	2.955

TABLE 5
CONSUMPTION OF FISH,
TOP OECD COUNTRIES,
2019 (FORECASTS)
Source: OECD

Country	Per capita consumption (Kg)	Total consumption (Tonnes)
Malaysia	58,52	1.985.624
Korea	57,41	3.192.406
Norway	54,56	1.024.442
Japan	46,74	6.394.872
Viet Nam	40,73	4.844.249
China	40,42	60.386.185
Indonesia	38,98	11.981.150
Thailand	28,07	2.447.870
New Zealand	27,58	186.702
Philippines	26,47	2.861.286
Australia	25,07	666.555
Egypt	24,07	2.435.000
EU-28	23,82	11.307.720

²⁰ Data in this section are collected from the OECD website (Organization for Economic Co-operation and Development). More details available at the links <https://stats.oecd.org/Index.aspx?DataSetCode=PPP2017> (for expenditure) and https://stats.oecd.org/viewhtml.aspx?datasetcode=HIGH_AGLINK_2019&lang=en (for consumption).

2/ MARKET SUPPLY

2.1 SUPPLY BALANCE AND SELF-SUFFICIENCY OVERVIEW

In 2018, the EU supply for human consumption of fishery and aquaculture products, including both domestic production and imports, amounted to 14,72 million tonnes in live weight equivalent. This was 99.884 tonnes less than in 2017, but still one of the highest supplies of the 2009–2018 decade.

From 2017 to 2018, both catches and aquaculture production decreased, although the drop in aquaculture production was to a much lesser extent. The decrease of total production was only partially offset by an import increase. As a result, the total available supply declined. More in detail, catches dropped 5% or 208.288 tonnes and aquaculture production decreased 4% or 50.330 tonnes, while imports grew 2% or 158.734 tonnes.

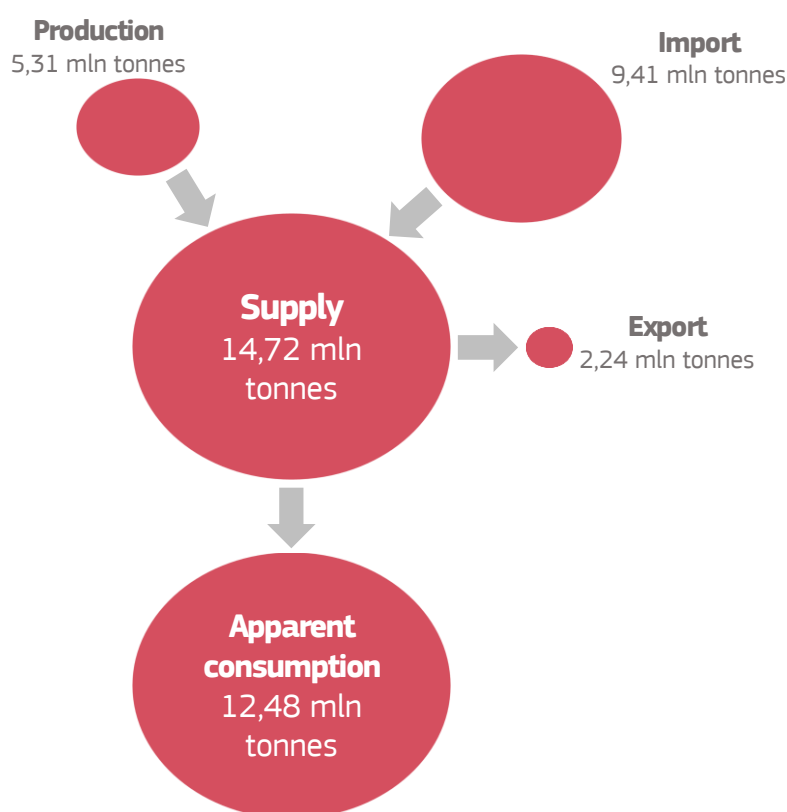
Consequently, and also due to a 5% or 96.337-tonne export increase, apparent consumption²¹ decreased 2%, dropping from 12,68 million tonnes to 12,48 million tonnes in live weight equivalent, which amounted to a drop of 196.221 tonnes.

CHART 3

EU SUPPLY BALANCE (2018, LIVE WEIGHT EQUIVALENT, FOOD USE ONLY)

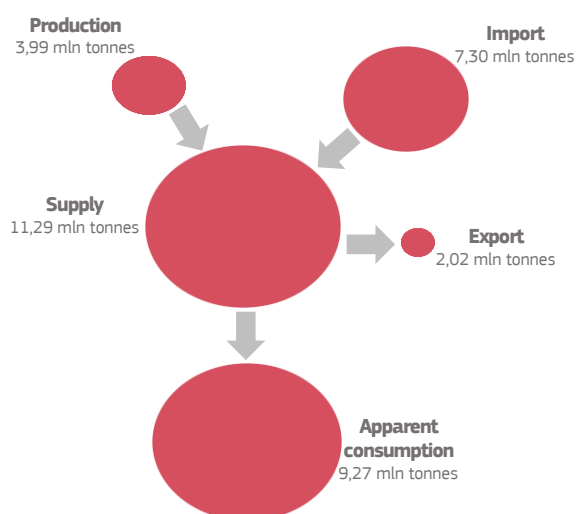
Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-016890](#)) and FAO data. Details on the sources and on the methodological approach used for assessing the production method of imports and exports can be found in the Methodological background.

TOTAL FISHERIES AND AQUACULTURE PRODUCTS

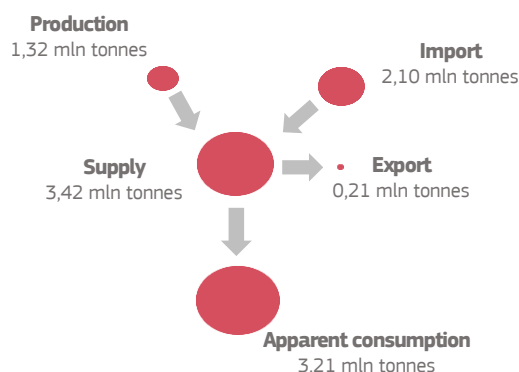


²¹ The definition of "apparent consumption" is available in the "Supply balance sheet" section of the Methodological background.

FISHERIES PRODUCTS



AQUACULTURE PRODUCTS



Catches of the EU fleet can be destined for human consumption or non-food use. While catches for food use decreased from 2017 to 2018, non-food catches²² recovered, registering a 10% increase from 2017, mainly thanks to sprat fisheries in Denmark.

Wild-caught products account for 74% of total apparent consumption. The average EU citizen consumed 24,36 kg of fish and seafood in 2018, of which 18,09 kg originated from catches and 6,27 kg from aquaculture. Consumption of both wild and farmed products decreased 2% and 1%, respectively, from 2017, when total per capita consumption of fisheries and aquaculture products was 24,79 kg. Lower catches, increased exports of wild products and reduced production of farmed fish led to the decline of supply for EU consumers.

More detailed analyses on apparent consumption are included in Chapter 3.

TABLE 6

EU PRODUCTION DETAILS (TONNES, LIVE WEIGHT)

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), and [fish_ca_main](#)), FAO and FEAP data.
 Details on the sources used can be found in the Methodological background.

		2014	2015	2016	2017	2018
Food use	Catches	4.534.510	4.204.237	4.269.062	4.197.520	3.989.231
	Aquaculture	1.236.808	1.267.645	1.296.485	1.369.822	1.319.492
Total production destined for food use		5.771.318	5.471.882	5.565.547	5.567.342	5.308.723
Non-food use	Catches	959.569	1.056.128	857.683	1.227.268	1.347.531

²² Source: Eurostat. For the species considered not to be destined to human consumption, please refer to the Methodological background.

TABLE 7

EU SUPPLY BALANCE FOR FISHERIES AND AQUACULTURE PRODUCTS BY COMMODITY GROUP AND PRODUCTION METHOD (2018, LIVE WEIGHT EQUIVALENT, FOOD USE ONLY)

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-016890](#)) and FAO data. Details on the sources used can be found in the Methodological background.

Commodity group	Production (tonnes)		Import (tonnes)		Export (tonnes)		Apparent consumption (tonnes)			Apparent consumption per capita (kg)		
	Wild	Farmed	Wild	Farmed	Wild	Farmed	Wild	Farmed	Total	Wild	Farmed	Total
Bivalves and other molluscs and aquatic invertebrates	229.741	623.916	113.782	168.359	40.727	15.791	302.796	776.485	1.079.280	0,59	1,52	2,11
Cephalopods	92.594	0	686.893	0	48.628	1	730.859	0	730.858	1,43	0	1,43
Crustaceans	194.469	461	472.209	399.907	123.731	995	542.947	399.373	942.320	1,06	0,78	1,84
Flatfish	164.289	11.544	147.921	843	71.458	342	240.752	12.045	252.797	0,47	0,02	0,49
Freshwater fish	95.447	101.500	84.578	261.495	8.596	4.669	171.429	358.326	529.755	0,33	0,70	1,03
Groundfish	680.461	0	2.943.089	340	448.651	0	3.174.898	340	3.175.238	6,20	0	6,20
Miscellaneous aquatic products	40.759	582	322.402	0	40.519	0	322.642	582	323.224	0,63	0	0,63
Other marine fish	288.770	190.196	409.410	109.666	127.252	19.049	570.928	280.813	851.740	1,11	0,55	1,66
Salmonids	16.170	363.103	931	1.165.118	1.891	167.159	15.211	1.361.063	1.376.274	0,03	2,66	2,69
Small pelagics	1.687.736	0	650.316	0	726.546	0	1.611.506	0	1.611.506	3,15	0	3,15
Tuna and tuna-like species	498.795	28.189	1.470.639	30	384.096	6.828	1.585.339	21.391	1.606.730	3,09	0,04	3,14
Total	3.989.231	1.319.492	7.302.170	2.105.757	2.022.096	214.833	9.269.306	3.210.417	12.479.722	18,09	6,27	24,36

Data as of June 2020. Data may differ from those currently available on the EUMOFA website as these are constantly updated. Possible discrepancies in totals are due to rounding. For more details, see the Methodological background.

The EU is able to maintain a high level of fish and seafood apparent consumption mainly by sourcing it from other regions of the world through imports. Self-sufficiency, which is the capacity of EU Member States to meet demand from their own production, can be calculated as the ratio of domestic production over domestic consumption. Imports prevail for tuna, salmon, cod, Alaska pollock and shrimps – the top 5 species consumed in the EU and for which EU self-sufficiency averaged only 14% in 2018.

TABLE 8
SELF-SUFFICIENCY RATES OF MOST CONSUMED PRODUCTS IN THE EU (2018)

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-016890](#)) and FAO data. Details on the sources used can be found in the Methodological background.

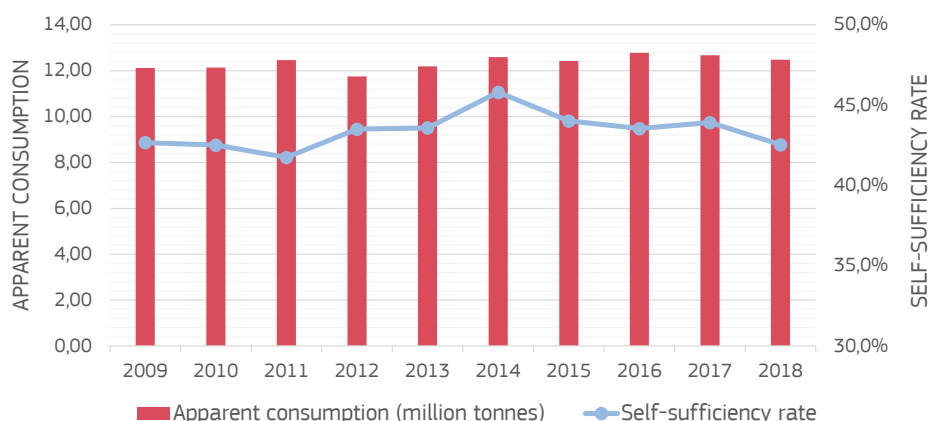
Products ²³ and share of total apparent consumption	Per capita consumption (kg, live weight equivalent)	Self-sufficiency rate
Tuna (13%)	3,05	33%
Salmon (9%)	2,24	15%
Cod (9%)	2,14	8%
Alaska pollock (7%)	1,68	0%
Shrimps (6%)	1,58	13%
Mussel (5%)	1,21	81%
Herring (5%)	1,18	98%
Hake (4%)	1,00	37%
Squid (3%)	0,66	12%
Mackerel (2%)	0,60	106%
Surimi ²⁴ (2%)	0,59	n/a
Sardine (2%)	0,57	74%
Trout (2%)	0,42	90%
Sprat (=Brisling) (2%)	0,40	111%
Saithe (=Coalfish) (1%)	0,34	20%

²³ 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).

²⁴ 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.

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

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-016890](#)), FAO, national administrations and FEAP data. Details on the sources used can be found in the Methodological background.

**TABLE 9****SELF-SUFFICIENCY RATES BY COMMODITY GROUP**

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-016890](#)), FAO, national administrations and FEAP data. Details on the sources used can be found in the Methodological background.

Commodity groups and share of total apparent consumption in 2018	Self-sufficiency rates									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Groundfish (25%)	23%	23%	19%	20%	22%	24%	25%	23%	24%	21%
Small pelagics (13%)	109%	118%	113%	119%	116%	132%	119%	107%	107%	105%
Tuna and tuna-like species (13%)	20%	21%	23%	26%	29%	34%	27%	28%	28%	33%
Salmonids (11%)	34%	35%	33%	31%	31%	29%	28%	29%	31%	28%
Bivalves and other molluscs and aquatic invertebrates (9%)	63%	60%	59%	64%	61%	61%	65%	68%	76%	79%
Crustaceans (8%)	23%	22%	21%	21%	22%	22%	22%	22%	21%	21%
Other marine fish ²⁵ (7%)	55%	55%	56%	68%	67%	65%	63%	61%	59%	56%
Cephalopods (6%)	17%	17%	18%	21%	21%	22%	20%	16%	14%	13%
Freshwater fish (4%)	25%	22%	24%	27%	28%	31%	34%	36%	39%	37%
Miscellaneous aquatic products (3%)	8%	7%	13%	13%	20%	17%	6%	16%	13%	13%
Flatfish (2%)	94%	97%	98%	77%	79%	75%	76%	70%	73%	70%
Total	42,7 %	42,5 %	41,7 %	43,5 %	43,6 %	45,8 %	44,0 %	43,5 %	43,9 %	42,5 %

In the long term, self-sufficiency remained at almost the same level from 2009 to 2018. However, a comparison of 2018 data with 2017 data illuminated a decline in self-sufficiency. The decline was caused by the combined effect of the increased imports and decreased production of both aquaculture and fisheries, which amounted to a drop of almost 260.000 tonnes.

²⁵ 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>.

2.2 ANALYSIS BY MAIN SPECIES

GROUNDFISH

COD, ALASKA POLLOCK, HAKE, SAITHE

Four groundfish species, namely cod, Alaska pollock, hake and saithe, had a combined per capita consumption total of 5,16 kg in 2018, accounting for one-fifth of the total EU apparent consumption of fisheries and aquaculture products. For them, the EU held a low degree of self-sufficiency, averaging 16%.

As all Alaska pollock available in the EU is imported, Member States are completely dependent on non-EU countries to meet their demand.

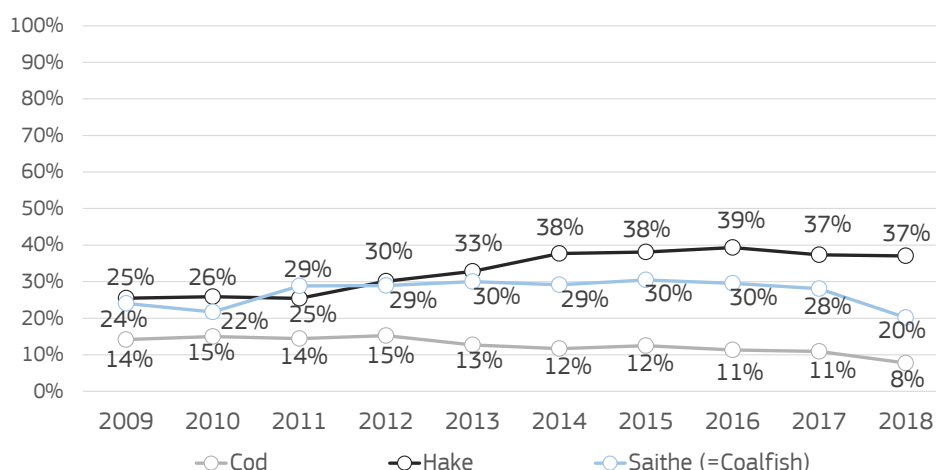
For cod, which is one of the most highly consumed species in the EU, the EU self-sufficiency in 2018 was 8%, the lowest level of the 10-year period analysed. The decrease from the 11% registered in 2017 was due to a drop in UK catches. EU self-sufficiency for saithe also dropped from the 28% registered in 2017 to 20% in 2018, its lowest of the 2009–2018 period. In this case, the decline was caused by both decreased catches and, more importantly, increased imports.

On the other hand, thanks to increased Spanish production, the EU self-sufficiency for hake remained high, averaging 38% for the last five years.

CHART 5

SELF-SUFFICIENCY RATE FOR MOST CONSUMED GROUNDFISH

Source: EUMOFA, based on EUROSTAT data (online data codes [fish_ca_main](#) and [DS-016890](#)). Details on the sources used can be found in the Methodological background.



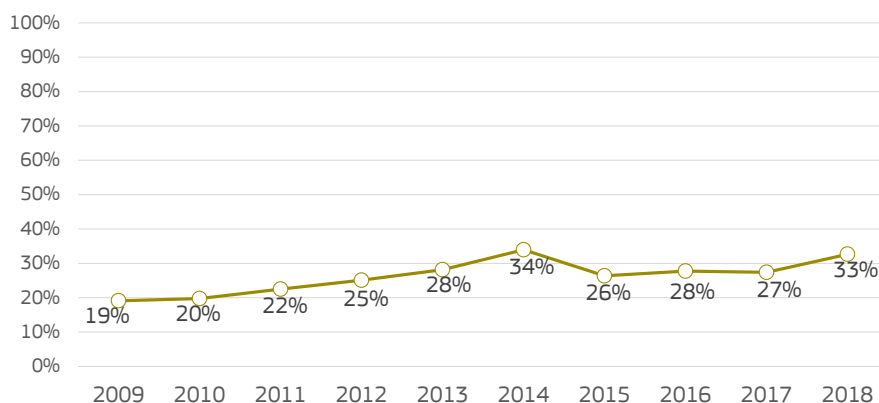
TUNA

Apparent consumption of the commodity group “tuna and tuna-like species” includes 97% tuna and 3% swordfish. Overall, the self-sufficiency rate of this category was at 33% in 2018.

Specifically for tuna, Autonomous Tariff Quotas (ATQ) increased in 2014. This followed the establishment of Free Trade Agreements with major producing countries which contributed to the higher imports. Consequently, due to increased imports of yellowfin and skipjack tuna, the level of self-sufficiency dropped in 2015 and remained stable at an average of 27% until 2017. In 2018, it rose again to reach 33%, driven by increased catches of skipjack tuna by the Spanish and French fleets, and also thanks to reduced imports.

CHART 6 SELF-SUFFICIENCY RATE FOR TUNA

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-016890](#)) and FAO data. Details on the sources used can be found in the Methodological background.



SMALL PELAGICS

HERRING, MACKEREL SARDINE, SPRAT

Of all fisheries and aquaculture products produced in the EU, small pelagics account for one third. If considering total EU catches only, they account for more than 40%²⁶. This, combined with low imports, makes the EU fully capable of meeting the overall EU demand for these products.

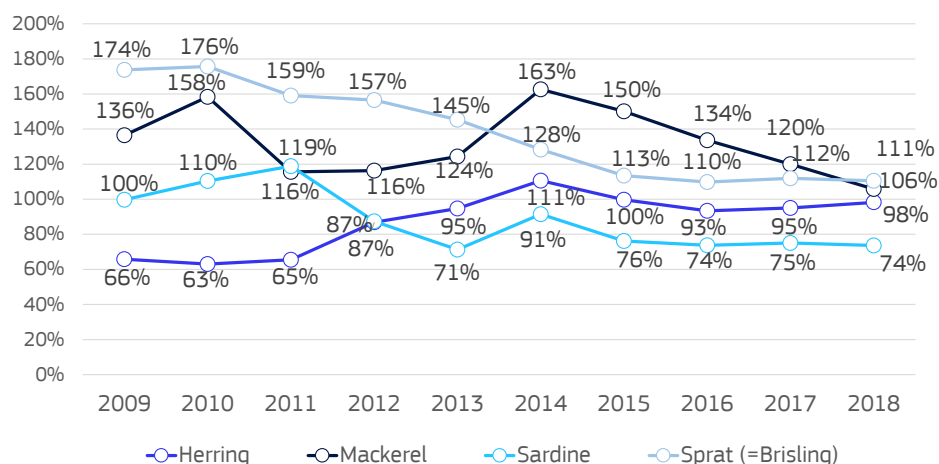
As for herring, during the decade under analysis, the EU was completely independent in terms of supplies from abroad in 2014 and 2015, as the self-sufficiency was 100% or higher. The lower self-sufficiency rates were registered from 2009 to 2011, because of lower production and higher imports. In 2018, the EU self-sufficiency for this species was at 98%, slightly higher than the previous year.

As for mackerel and sprat, each year the EU proves to be fully capable of meeting the overall EU demand – with its self-sufficiency always being much higher than 100%. For sprat in particular, imports are negligible compared with production, thus the self-sufficiency is only based on the balance between production and exports. Considering that sprat production was stable at around 200.000 tonnes from 2010 to 2018, the downward trend of self-sufficiency in this period was merely due to reduced exports causing increased availability of sprat for EU consumers and a minor weight of production in the self-sufficiency ratio. On the other hand, the downward trend of self-sufficiency for mackerel from 2014 to 2018 was due to increased imports and reduced catches.

For sardine, the EU self-sufficiency has been declining from the peak achieved in 2011, due to halving production – with main reductions in the Netherlands, Lithuania, Portugal, Poland and Spain.

CHART 7 SELF-SUFFICIENCY RATE FOR MOST CONSUMED SMALL PELAGICS

Source: EUMOFA, based on EUROSTAT data (online data codes: [fish_ca_main](#) and [DS-016890](#)). Details on the sources used can be found in the Methodological background.



²⁶ Percentage calculated on total catches destined for food use.

SALMONIDS

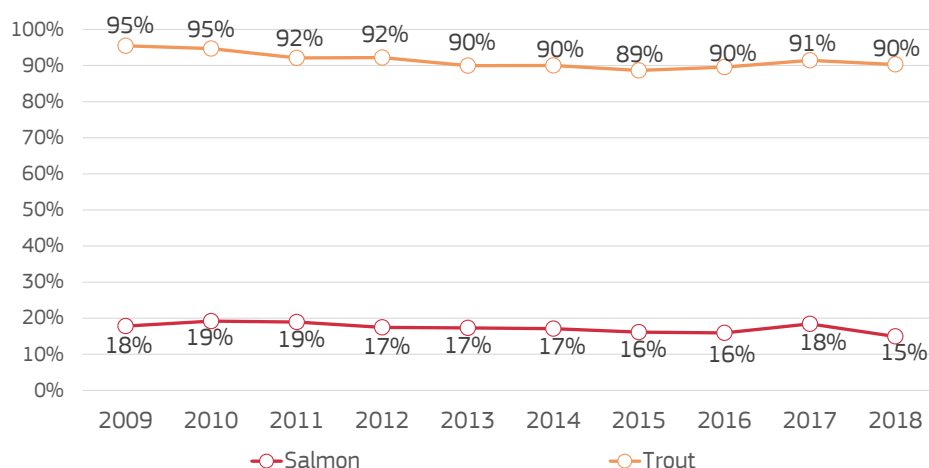
SALMON, TROUT

In 2018, 15% of the salmon consumed in the EU was produced internally. This was the lowest level of self-sufficiency shown for this species in the 10-year period analysed. Salmon's decrease from 2017 was due to the combined effect of a drop in production and increase in imports.

For trout, the EU has maintained 91% of self-sufficiency on average during the same decade. The highest levels were in 2009 and 2010, when production was at its maximum.

CHART 8
SELF-SUFFICIENCY RATE
FOR MOST CONSUMED
SALMONIDS

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-016890](#)), FAO, national administrations and FEAP data. Details on the sources used can be found in the Methodological background.



OTHER PRODUCTS

SHRIMPS, MUSSELS, SQUID, SURIMI

Other highly consumed products in the EU, which each belong to a different commodity group, include shrimps (crustaceans), mussels (bivalves), squid (cephalopods) and surimi (miscellaneous aquatic products).

As concerns surimi, there are no statistics specifically referring to its production because it is made of different species, thus the self-sufficiency rate cannot be calculated.

Mussel is one of the few most consumed species for which the EU holds a high level of self-sufficiency. It averaged 80% from 2009 to 2018, with its lowest level of 75% registered in 2011, the year when imports of mussels were at their maximum.

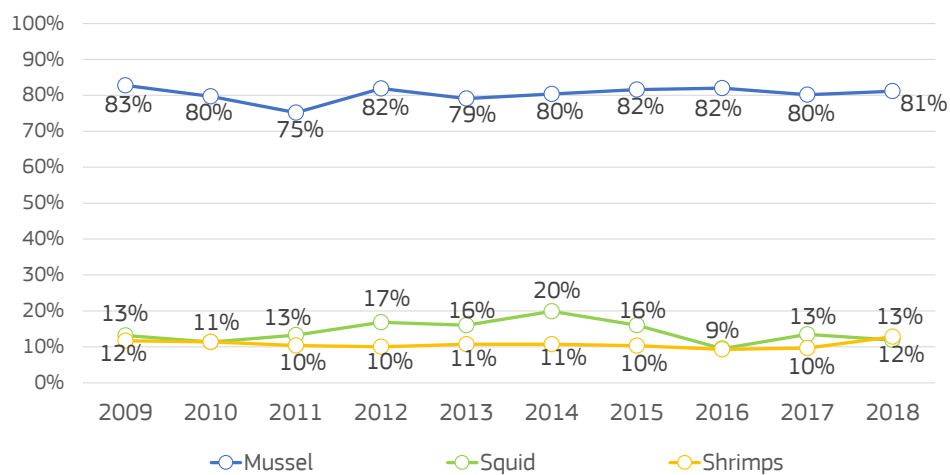
On the other hand, the EU is highly dependent on imports of shrimps and squid.

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

As for squid, the self-sufficiency was at 12% in 2018, slightly lower than the 13% registered one year before. During the 10-year period analysed, its highest level was in 20% in 2014 and the lowest was 9% in 2016. This drop was due to the combined effect of decreased production and increased imports. However, a recovery occurred in 2017, raising self-sufficiency to 13%, as production and imports followed opposite trends with respect to the previous year. The evolution of this rate was driven by catches of the main squid species, namely Patagonian squid (*Loligo gahi*), by the Spanish fleet. In 2015 and 2016, the catches were significantly lower than in 2014, but they rose again in 2017.

CHART 9 SELF-SUFFICIENCY RATE FOR OTHER MOST CONSUMED PRODUCTS

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-016890](#)) and FAO data. Details on the sources used can be found in the Methodological background.



3/ CONSUMPTION

3.1 OVERVIEW FOR TOTAL FISHERY AND AQUACULTURE PRODUCTS

APPARENT CONSUMPTION

In 2018, apparent consumption²⁷ of fishery and aquaculture products in the EU amounted to 12,48 million tonnes in live weight equivalent, which was 2% below the 10-year peak of 12,78 million tonnes recorded in 2016.

From 2017 to 2018, on average, EU citizens consumed 430 grams less of fishery and aquaculture products.

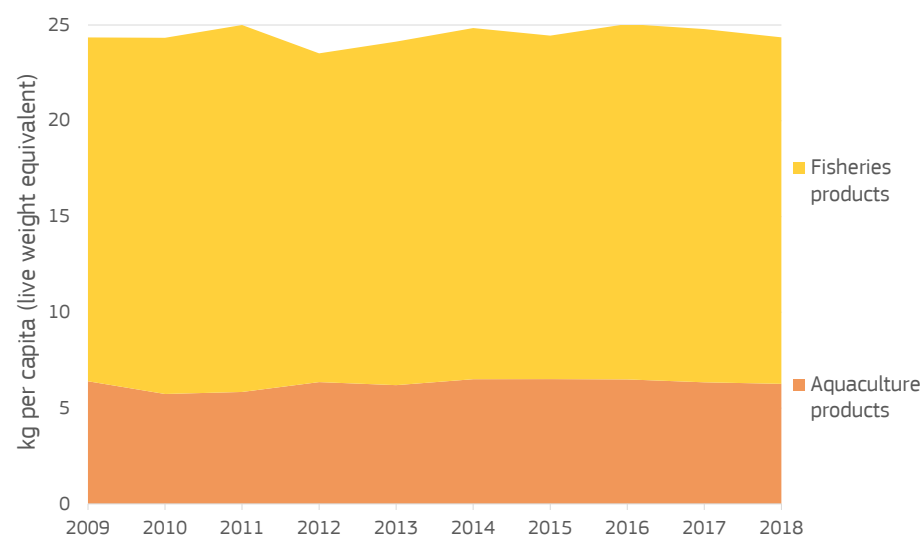
From 2017 to 2018, per capita consumption decreased from 24,79 kg to 24,36 kg, which means that on average, EU citizens consumed 430 grams less of fishery and aquaculture products.

Wild-caught products accounted for three-quarters of total apparent consumption. In 2018, per capita consumption of wild-caught products amounted to 18,09 kg, 351 grams lower than in 2017 and slightly below its 10-year average.

Although it showed a slight 1% or 80-gram decrease from 2017, the 2018 consumption of farmed products in the EU was 6,27 kg per capita, which corresponded to its decade average.

CHART 10 PER CAPITA APPARENT CONSUMPTION OF FISHERY AND AQUACULTURE PRODUCTS

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-016890](#)), FAO, national administrations and FEAP data. Details on the sources and on the methodological approach used for assessing the production method of imports and exports can be found in the Methodological background.



APPARENT CONSUMPTION BY MEMBER STATE

According to EUMOFA and national estimates, in contrast with the general trend at EU level²⁸, Malta observed a significant per capita consumption growth from 2017 to 2018, largely driven by increased imports.

²⁷ The definition of "apparent consumption" is available in the "Supply balance sheet" section of the Methodological background.

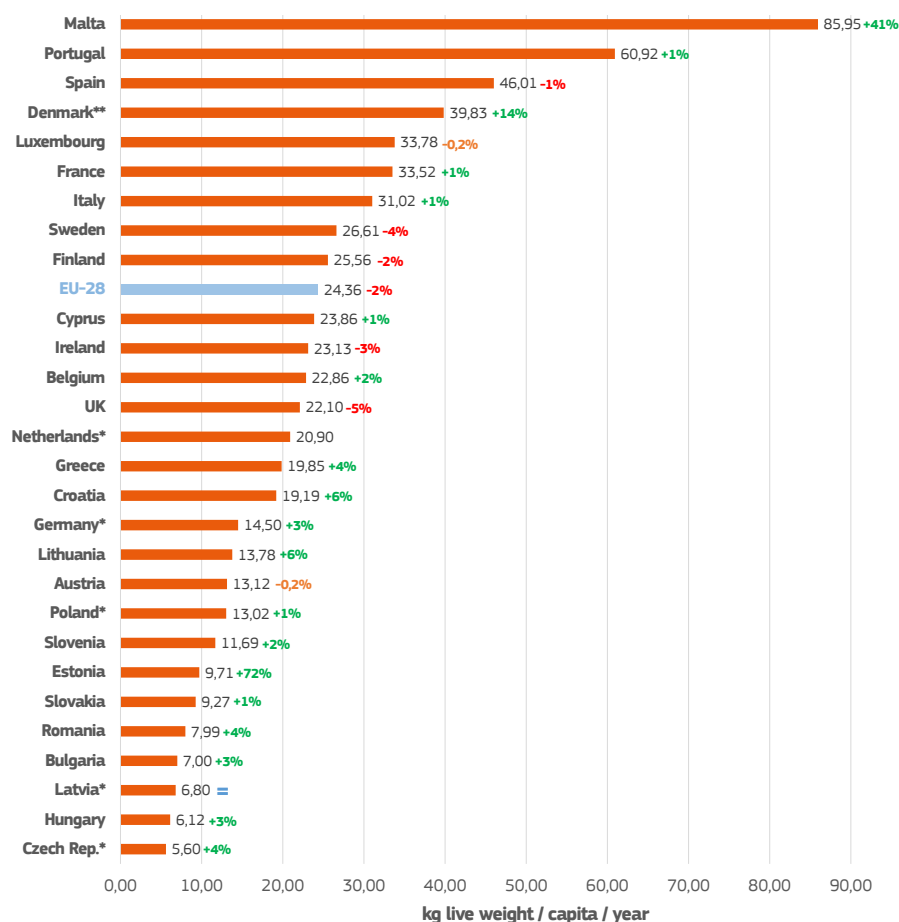
²⁸ It is worth underlining that the methodologies for estimating apparent consumption at EU and Member State levels are different, the first based on data and estimates as described in the Methodological background, the latter also requiring the adjustment of abnormal trends due to the higher impact of stock changes.

CHART 11
PER CAPITA APPARENT
CONSUMPTION
OF FISHERY AND
AQUACULTURE
PRODUCTS BY MEMBER
STATE IN 2018 AND %
VARIATION 2018/2017

Source: EUMOFA estimates.

*Data are provided by the following National sources: BMEL-Statistik (Germany), CZSO Czech Statistical Office (Czech Republic), Centrālā statistikas pārvalde (Latvia), Dutch Fish Marketing Board (Netherlands) and Statistics Poland (Poland). For the Netherlands, the National source has not developed estimates for 2017; however, based on dead weight figures, there was a decrease by 1-3%.

**Estimates for Denmark were not confirmed by the National contact point.



ANALYSIS BY MAIN SPECIES

The 15 products listed in Table 10 accounted for 72% of apparent consumption in 2018. From 2017 to 2018, Alaska pollock's 9% increase in apparent consumption was the highest. The most significant decrease was the 17% registered for cod, even if the 2018 level corresponded to its decade average.

TABLE 10
APPARENT CONSUMPTION
OF MOST CONSUMED
PRODUCTS (2018)

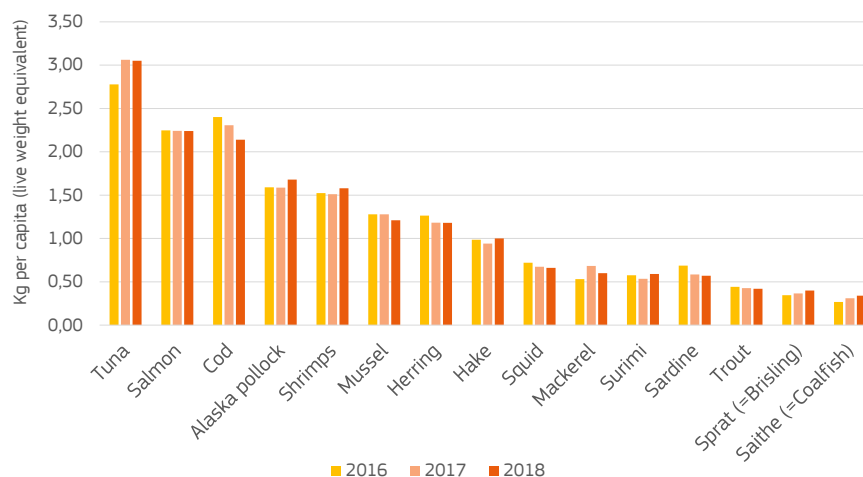
Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-016890](#)) and FAO data. Details on the sources and on the methodological approach used for assessing the production method of imports and exports can be found in the Methodological background.

Products	Per capita consumption (kg, live weight equivalent)	Consumption evolution 2018/2017	% wild	% farmed
Tuna	3,05	-1%	98,63%	1,37%
Salmon	2,24	-0,2%	0,16%	99,84%
Cod	2,14	-17%	99,97%	0,03%
Alaska pollock	1,68	+9%	100%	0%
Shrimps	1,58	+7%	52,34%	47,66%
Mussel	1,21	-7%	6,29%	93,71%
Herring	1,18	-0,2%	100%	0%
Hake	1,00	+6%	100%	0%
Squid	0,66	-1%	100%	0%
Mackerel	0,60	-8%	100%	0%
Surimi ²⁹	0,59	+6%	100%	0%
Sardine	0,57	-2%	100%	0%
Trout	0,42	-1%	2,05%	97,95%
Sprat (=Brisling)	0,40	+3%	100%	0%
Saithe (=Coalfish)	0,34	+3%	100%	0%
Total	24,36	-2%	74,27%	25,73%

²⁹ Surimi is made from wild-caught species (mainly Alaska pollock, blue whiting, blue grenadier, and Pacific hake). It is worth underlining that surimi apparent consumption is calculated as import *minus* export, as there are no statistics specifically referring to surimi production, neither estimating shares of catches of these species used for its production. In fact, the supply balance sheet is broken down by species, and calculating it for surimi would generate double counting.

CHART 12 APPARENT CONSUMPTION OF MOST CONSUMED PRODUCTS, THREE-YEAR TREND

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-016890](#)) and FAO data. Details on the sources used can be found in the Methodological background.



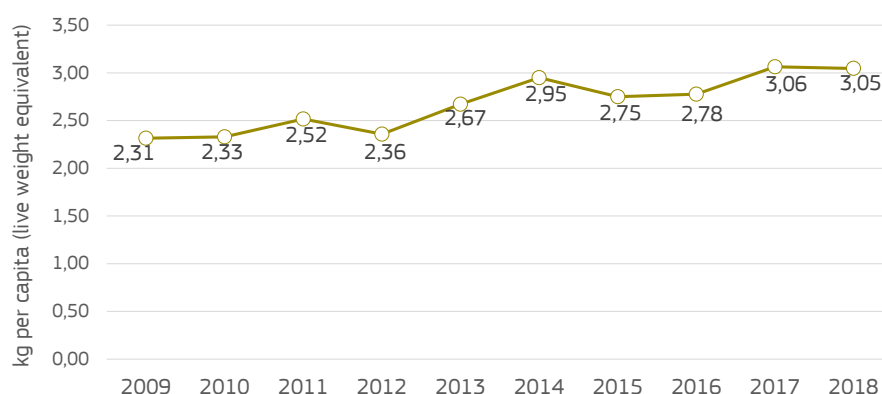
TUNA

During the 2009–2018 decade analysed, none of the fishery and aquaculture products consumed in the EU reached a level of annual apparent consumption higher than 3 kg per capita until 2017–2018, when tuna achieved peaks of 3,06 (2017) and 3,05 (2018) kg per capita. This largely included canned products of skipjack and yellowfin tuna.

EU consumption of tuna is largely supported by imports, but there is also internal production, mainly consisting of Spanish and French catches. However, a significant share of these catches is landed abroad close to fishing areas, further processed there and then re-exported. The 2017 increase from 2016 was indeed driven by both increased imports and catches.

CHART 13 APPARENT CONSUMPTION OF TUNA

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-016890](#)) and FAO data. Details on the sources used can be found in the Methodological background.



GROUNDFISH

COD, ALASKA POLLOCK, HAKE, SAITHE (=COALFISH)

Four groundfish species account for more than one fifth of EU consumption of fishery and aquaculture products: cod, Alaska pollock, hake and saithe (= coalfish).

Cod consumption followed an upward trend during 2009–2018. However, it has been decreasing in the last two years, due to both a decline in imports, which are the largest suppliers of cod in the EU, and in catches.

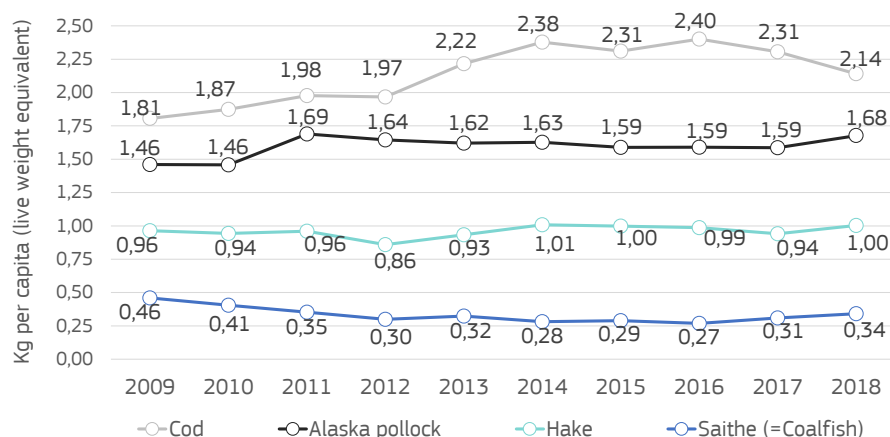
As for Alaska pollock, there was reduced availability in the EU market in 2009 and 2010, due to US fishing quotas being reduced to around 950.000 tonnes on average. However, the US fishing quota recovered in 2011, increasing to 1.367.000 tonnes, and apparent consumption in the EU returned to its 2008 level, averaging 1,63 kg per capita during 2011–2018.

Consumption of hake remained almost stable from 2009 to 2018, at an average of almost 1,00 kg per capita, in line with a flat trend of both imports and production.

Saithe, the least consumed groundfish species, showed a slight downward trend during the decade, due to a reduced supply from production and imports.

CHART 14
APPARENT CONSUMPTION
OF MOST CONSUMED
GROUNDFISH

Source: EUMOFA, based on EUROSTAT data (online data codes: [fish_ca_main](#) and [DS-016890](#)). Details on the sources used can be found in the Methodological background.



SMALL PELAGICS

HERRING, MACKEREL, SARDINE, SPRAT

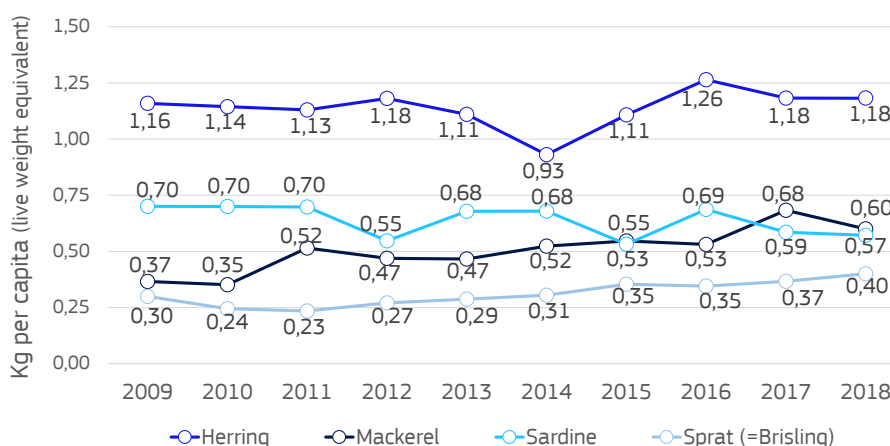
The availability of small pelagics in the EU market is mostly linked to the evolution of their catches over time.

Herring is the most consumed small pelagic species. From 2009 to 2018, EU citizens ate an average of around 1,14 kg per capita of herring annually. The low in 2014 was due to the combined effect of German catches decreasing by 18.502 tonnes from 2013 to 2014, and, most importantly, of exports increasing by 85.886 tonnes from 2013 to 2014.

As for mackerel, sardine and sprat, their annual consumption per capita during the decade remained lower than 1 kg. Sprat, in particular, has shown a constant consumption increase since 2012, linked to stability of catches and decreased exports.

CHART 15
APPARENT CONSUMPTION
OF MOST CONSUMED
SMALL PELAGICS

Source: EUMOFA, based on EUROSTAT data (online data codes: [fish_ca_main](#) and [DS-016890](#)). Details on the sources used can be found in the Methodological background.



SALMONIDS

SALMON, TROUT

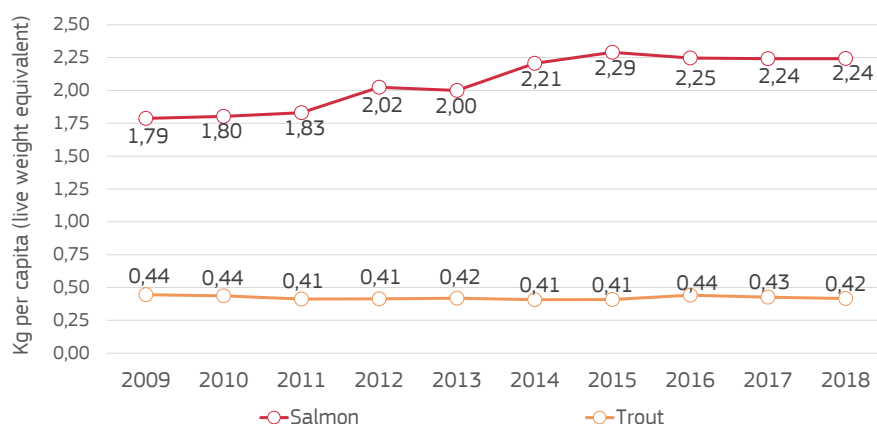
Salmon is by far the most-consumed farmed species in the EU. In 2018, it accounted for 36% of the total apparent consumption of aquaculture products.

After it reached a decade high of almost 2,30 kg per capita in 2015, its apparent consumption began slowly decreasing, as did salmon imports from Norway.

Apparent consumption of trout in the EU remained around 400 grams per capita each year of the decade analysed, in line with an almost flat trend of the volumes farmed in main producing Member States.

CHART 16
APPARENT CONSUMPTION
OF MOST CONSUMED
SALMONIDS

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-016890](#)) and FAO data. Details on the sources used can be found in the Methodological background.



OTHER PRODUCTS

SHRIMPS, MUSSEL, SQUID, SURIMI

Shrimps consumption includes equal shares of wild-caught and farmed products. It largely relies on supplies from Ecuador, India, Vietnam, Thailand, Indonesia, Argentina and Greenland.

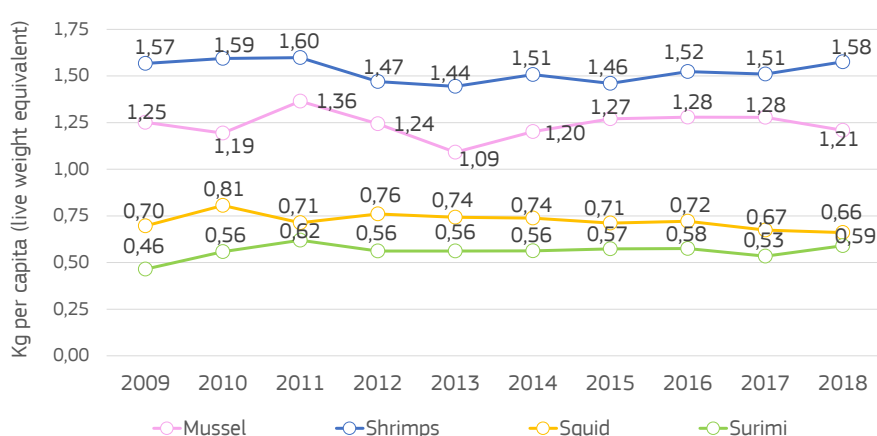
After salmon, mussels are the main farmed product consumed in the EU, mostly supplied by Spanish production. Indeed, the recovery of total mussels consumption – from fishery and aquaculture – started in 2014 with Spain's aquaculture recovering from a collapse caused by "red tide" or algae blooms in 2013. Nonetheless, although Spanish production increased from 2017 to 2018, the consumption decreased in 2018, mainly due to lower Danish catches of blue mussels and decreased imports from Chile and New Zealand.

As for squid, apparent consumption in 2018 of 660 grams per capita was the lowest of the 10-year period analysed, reflecting the decrease of Spanish catches of Argentine shortfin squid.

Finally, for surimi, no statistics specifically referring to its production are available, as it is made of different species. Thus apparent consumption is assumed to be the result of imports *minus* exports. As the US is by far the largest supplier of surimi to the EU, the increase of EU apparent consumption from 2017 to 2018 is a consequence of increased imports.

CHART 17
APPARENT CONSUMPTION
OF OTHER MOST
CONSUMED PRODUCTS

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-016890](#)) and FAO data. Details on the sources used can be found in the Methodological background.



HOUSEHOLD EXPENDITURE AND PRICES

In 2019, the EU household expenditure on fishery and aquaculture products reached EUR 56,6 billion, representing a 3% increase from 2018. When compared with ten years before, with inflation effects taken into account³⁰, the increase was still 3%.

From 2018 to 2019, households of all EU countries spent more for buying fishery and aquaculture products. In absolute terms, Spain recorded the highest increase of total expenditure, posting a growth of EUR 228 million.

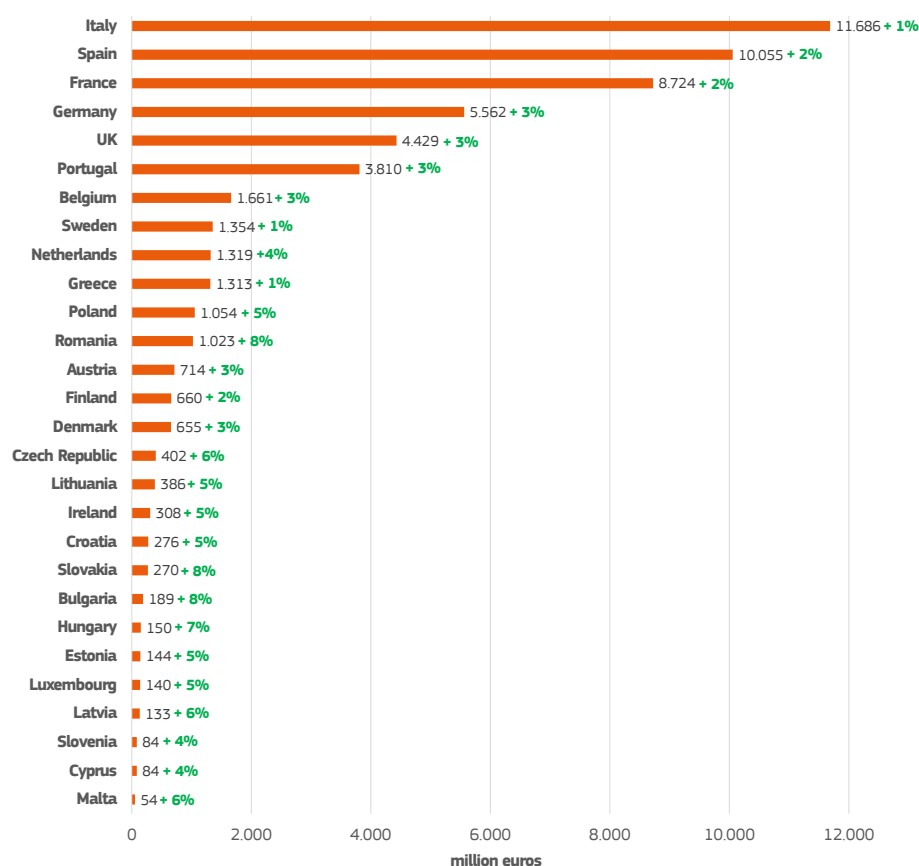
Italy has always been the Member State with the highest level of total expenditure and Portugal has had the highest per capita expenditure.

It is worth noting that in 2019, the amount spent for buying fishery and aquaculture products by individuals in Portugal (EUR 371) was more than triple the EU average of EUR 110.

CHART 18
HOUSEHOLD NOMINAL
EXPENDITURE ON
FISHERY AND
AQUACULTURE
PRODUCTS IN 2019 AND
% VARIATION 2019/2018
(out-of-home
consumption is excluded)

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

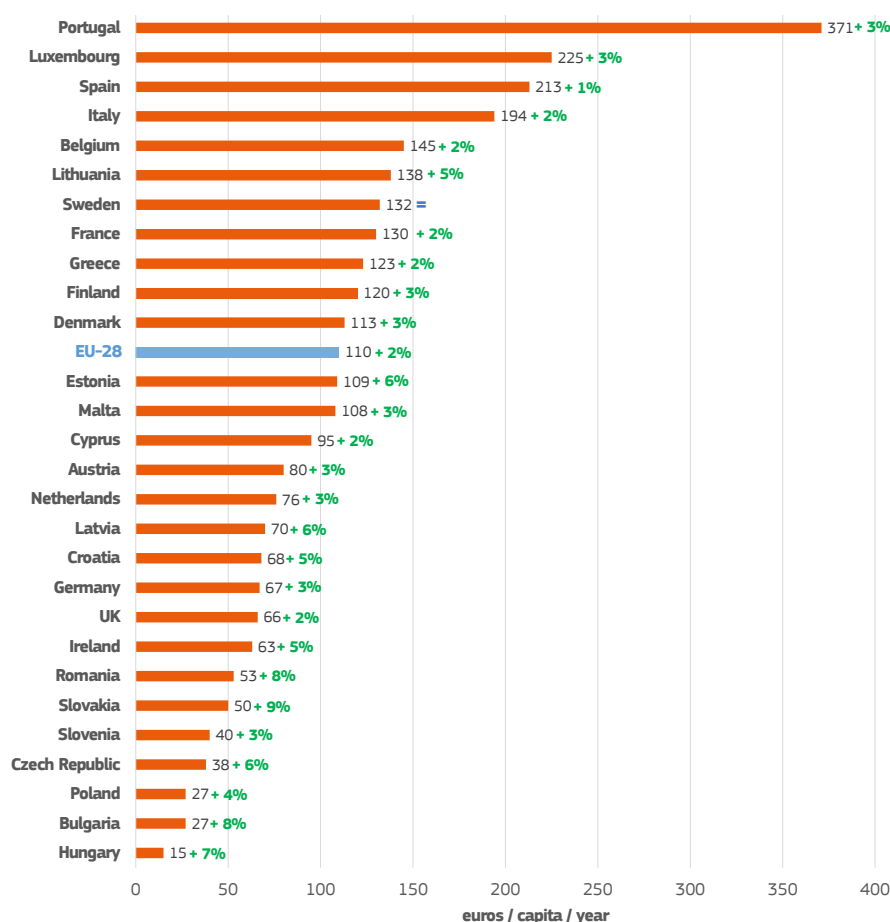
*In 2019, households
of all EU countries
spent more for buying
fishery and
aquaculture products
than in 2018.*



³⁰ In this report, value and price variations for periods longer than 5 years are analysed by deflating values using the GDP deflator (base=2015); for shorter periods, nominal value and price variations are analysed.

CHART 19
PER CAPITA HOUSEHOLD
NOMINAL EXPENDITURE
ON FISHERY AND
AQUACULTURE
PRODUCTS IN 2019 AND
% VARIATION 2019/2018
(out-of-home
consumption is excluded)

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

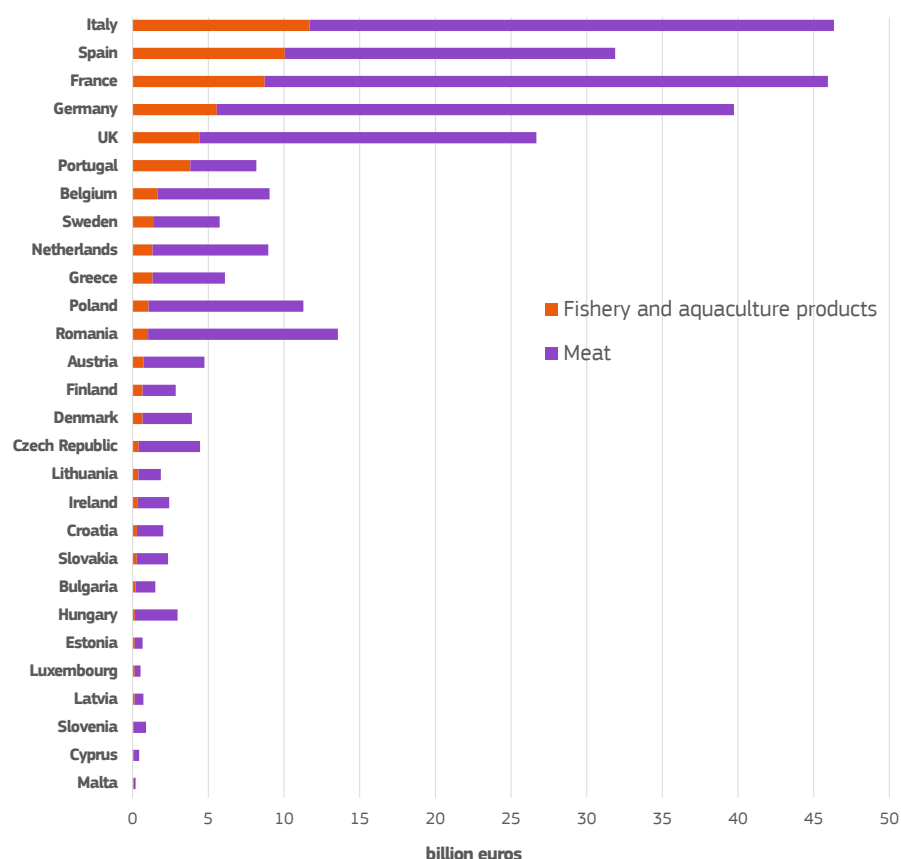
In none of the EU countries the expenditure on fishery and aquaculture products is higher than that for meat. In 2019, on average, households spend around one-quarter of the amount spent on meat – which was EUR 229 billion – for purchasing fishery and aquaculture products.

Of all the Member States, the ratio between the two categories is most balanced in Portugal. In 2019, Portugal's expenditure on fishery and aquaculture products represented 47% of the total amount spent on both fishery and aquaculture products and meat. The greatest imbalances were seen in Hungary, which spent 5% for fishery and aquaculture products, and Romania, which spent 8% for fishery and aquaculture products.

In the top-3 fish consumers – namely Italy, Spain and France – different patterns were observed. In Italy, expenditure on fishery and aquaculture products was three times lower than for meat, in Spain, it was twice lower, and in France, it was four times lower.

CHART 20
HOUSEHOLD NOMINAL
EXPENDITURE ON
FISHERY AND
AQUACULTURE
PRODUCTS VS. MEAT IN
THE EU IN 2019
(out-of-home
consumption is excluded)

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



From 2010 to 2019, consumer prices of fishery and aquaculture products increased by 3% per year on average, a higher growth rate than the 2% recorded for the prices of meat and of food in general.

From 2011 to 2013, the prices of fishery and aquaculture products, meat and food in general increased at similar rates, but starting from 2014, they drifted apart. Those of fishery and aquaculture products began to grow significantly and, in 2019, they were 14% higher than in 2013. This was in line with increased prices of imported products, as the EU demand is primarily met through imports. During the same period, the prices of meat and food grew as well, but at much lower rates.

It is also interesting to note that from 2018 to 2019, expenditure on fishery and aquaculture products grew by 2,5%, which was higher than the 1,7% inflation for fishery and aquaculture products. This was not the case in 2018, when the 1,8% growth of expenditure compared to 2017 was lower than the 2,2% inflation. This could suggest that EU households purchased more fishery and aquaculture products in 2019 than in 2018, while the expenditure increase that was seen from 2017 to 2018 could have been mainly linked to inflation effects. This is confirmed by the decrease of EU apparent consumption of fishery and aquaculture products from 2017 to 2018, as estimated by EUMOFA.

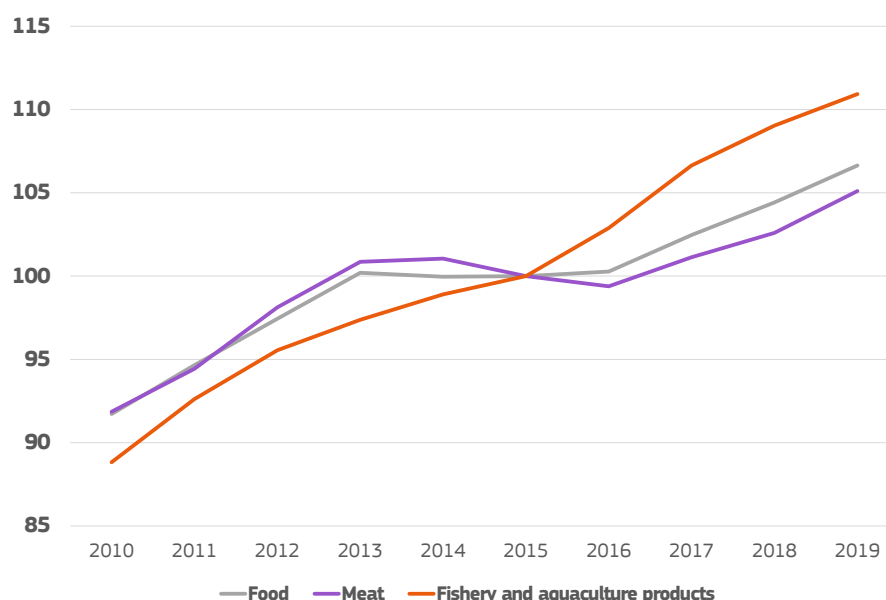
TABLE 11
EVOLUTION OF
CONSUMER PRICES

Source: EUROSTAT
(online data code: [prc_fsc_idx](#))
Harmonised index of
consumer prices
HICP

Sector	2015	2016	2017	2018	2019	2019/2015
Food	+0,04%	+0,3%	+2,2%	+1,9%	+2,1%	+6,6%
Meat	-1,0%	-0,6%	+1,8%	+1,4%	+2,4%	+5,1%
Fishery and aquaculture products	+1,1%	+2,9%	+3,6%	+2,2%	+1,7%	+11,2%

CHART 21
CONSUMER PRICES
INDICES
(2015=100)

Source: EUROSTAT
(online data code: [prc_fsc_idx](#))
Harmonised index of
consumer prices
HICP



RELEVANCE BY PRESERVATION STATE

As for statistics concerning household expenditure for fishery and aquaculture products, Eurostat provides “shares of the total household final monetary consumption expenditure”³¹ for four preservation states, which are listed in Table 12.

Of all goods and services purchased by EU households, fishery and aquaculture products covers less than 1%, which means it is four times lower than the relevance of meat.

From 2018 to 2019, the shares of expenditure on both fishery and aquaculture products and meat saw a slight decrease, contributing to the decline of the share of expenditure on food in general.

As specifically regards fishery and aquaculture products, only the frozen category recorded an increased share. This was mainly seen in Hungary and, to a lesser extent, Slovakia and Malta. The reduction of the share for fresh or chilled products, which are the most relevant, was mainly felt in Hungary, Germany, Denmark, Poland and Luxembourg.

³¹ Metadata are available at https://ec.europa.eu/eurostat/cache/metadata/en/prc_hicp_esms.htm.

TABLE 12
ITEM WEIGHTS OF EU
HOUSEHOLD
EXPENDITURE ON “TOTAL
GOODS AND SERVICES”

Source: EUROSTAT
(online data code: prc_hicp_inw)
Harmonised index of
consumer prices
HICP

Category	2018	2019
FOOD (Meat + FAPs + Other food)	14,069%	13,672%
Meat	3,364%	3,253%
Fishery and aquaculture products	0,859%	0,832%
<i>Fresh or chilled</i>	47%	47%
<i>Frozen</i>	19%	20%
<i>Dried, smoked or salted</i>	10%	9%
<i>Other preserved or processed and preparations</i>	24%	24%
Other food	9,846%	9,587%
OTHER GOODS AND SERVICES	85,931%	86,328%
TOTAL GOODS AND SERVICES	100%	100%

3.2 HOUSEHOLD CONSUMPTION OF FRESH FISHERY AND AQUACULTURE PRODUCTS

OVERVIEW

The household consumption³² of fresh fishery and aquaculture products is analysed for 12 EU Member States, namely Germany, Denmark, Spain, France, Hungary, Ireland, Italy, the Netherlands, Poland, Portugal, Sweden and the United Kingdom. Together, they accounted for 87% of total EU expenditure on fishery and aquaculture products³³ in 2019.

During 2015–2019, household consumption in these countries decreased each year until 2018, but showed a very slight but still encouraging 4.780-tonne or 0,3% increase from 2018 to 2019. The trend in value terms fluctuated, remaining almost unchanged from 2015 to 2016, then dropping by 20% one year later, to recover again, posting a 24% increase from 2017 to 2018. Between 2018 and 2019, it grew at a slower pace, increasing by 3% or EUR 362 million) thanks to increases in all surveyed countries.

From 2018 to 2019, household consumption of fresh salmon increased in all countries surveyed.

In 2018, 8 of the 12 analysed countries recorded negative trends compared with the previous year. In 2019, consumption continued to decrease in three countries only: Poland, which saw a decrease of 4% or 2.282 tonnes; Spain which decreased 2% or 10.708 tonnes; and France, with a 2% or 3.270-tonne decrease. Germany was almost stable with a 0,2% or 101-tonne decrease.

Of fresh products consumed by EU households, salmon prevails in all countries surveyed³⁴. From 2018 to 2019, consumption of fresh salmon grew in all of them, and the total average increase was 11% in volume and 10% in value. This led to peaks of 181.184 tonnes and EUR 2,65 billion during the five years analysed. The average 2019 price of 14,65 EUR/kg was slightly lower than in 2018.

³² 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.

³³ 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.

³⁴ Data for Hungary are not available at species level, so specific data for salmon are collected for 11 countries instead of 12.

Hake consumption continued the decline it started in 2017 in all five countries surveyed – Spain, Italy, Portugal, France and Ireland, The greatest decrease was 11%, registered in Spain.

TABLE 13

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

Source: EUMOFA, based on Europanel data

Member State	2015		2016		2017		2018		2019		2019 / 2018	
	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume
Denmark	162598	11068	158014	10579	169169	10737	183761	11465	199942	12177	↑ +9%	↑ +6%
Germany	748852	57850	791580	58727	818078	60353	812065	58308	862326	58208	↑ +6%	↓ - 0,2%
Ireland	182568	13595	192502	13667	177548	12319	187605	12799	192817	13948	↑ +3%	↑ +9%
Spain	4951108	686097	4913212	666055	4826921	629317	4644167	601267	4696180	590559	↑ +1%	↓ - 2%
France	2290295	222761	2394845	221808	2407543	217641	2320901	208444	2375842	205174	↑ +2%	↓ - 2%
Italy	2879212	317369	2983628	308509	325122	336799	3140154	312162	3207944	319488	↑ +2%	↑ +2%
Hungary	14857	3079	29015	5931	26154	4839	29440	5326	32640	6086	↑ +11%	↑ +14%
Netherlands	446709	32995	457029	32448	487126	33396	488919	32338	520569	33307	↑ +6%	↑ +3%
Poland	335542	66009	317639	62839	308378	57399	305938	53469	315073	51186	↑ +3%	↓ - 4%
Portugal	365568	62435	373204	60401	362287	54548	334358	50035	371026	57005	↑ +11%	↑ +14%
Sweden	139942	11187	130002	9400	132430	9135	117650	8803	124172	9310	↑ +6%	↑ +6%
United Kingdom	764080	48061	706121	48075	695409	44573	735422	47073	763800	49821	↑ +4%	↑ +6%
Total	13.281.331	1.532.506	13.446.791	1.498.439	10.736.165	1.471.056	13.300.380	1.401.489	13.662.331	1.406.269	↑ +3%	↑ +0,3%

FOCUS ON THE TOP THREE CONSUMING COUNTRIES

Spain, Italy and France are the top three consumers, accounting for close to 80% of the total volume of fresh fishery and aquaculture products consumed by households in the 12 countries under review.

SPAIN

Spain accounts for the EU's largest household consumption of fresh fishery and aquaculture products. Its consumption totalled 590.559 tonnes in 2019, for a total value of EUR 4,70 billion, corresponding to around 40% of total household consumption in the 12 countries surveyed.

Consumption had been following a decreasing trend for the last five years, but from 2018 to 2019, Spain saw a value-recovery of EUR 52 million.

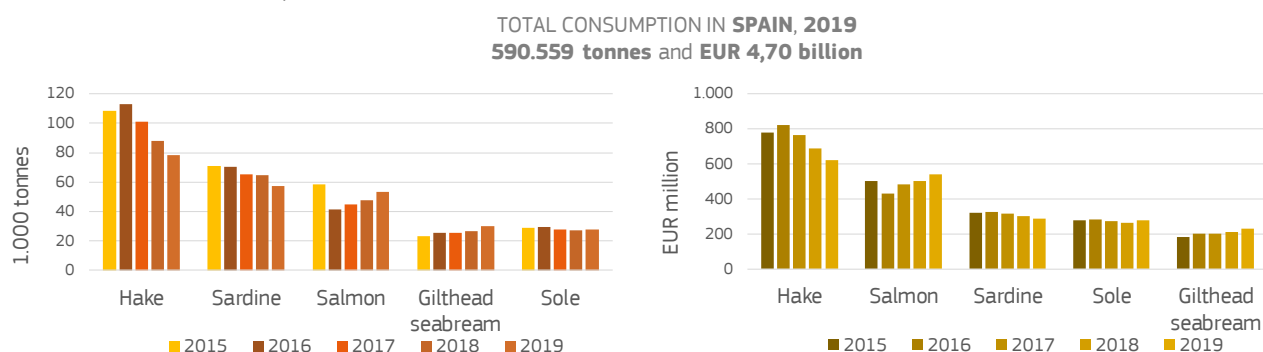
With 78.283 tonnes consumed in 2019, hake remains the most consumed species. That said, hake consumption has been diminishing since 2016, and from 2018 to 2019, it declined by 11%. While the price reached a peak of 7,90 EUR/kg, total values dropped by 10% to reach EUR 618 million, the lowest level of the five-year period analysed.

Between 2018 and 2019, of the major species, only salmon, gilthead seabream and sole recorded increased consumption, growing by 11%, 12% and 2%, respectively. Prices increased, even if slightly, for sardine (+8%, from 4,65 EUR/kg to 5,03 EUR/kg, linked with a 12% volume-decrease) Prices also increased for sole (+4%, from 9,67 EUR/kg to 10,09 EUR/kg, and for hake (+2%, from 7,77 EUR/kg to 7,90 EUR/kg). Slight price decreases were observed for salmon (-3%, from 10,49 EUR/kg to 10,18 EUR/kg) and for gilthead seabream (-1%, from 7,85 EUR/kg to 7,75 EUR/kg).

CHART 22

TOP-5 FRESH SPECIES (IN VOLUME AND NOMINAL VALUE) CONSUMED BY HOUSEHOLDS IN SPAIN

Source: EUMOFA, based on Europanel data



ITALY

Household consumption of fresh fishery and aquaculture products in Italy accounts for almost one quarter of the total of the 12 countries surveyed. Since 2015, it has been following a volatile trend. From 2018 to 2019, it increased by 2% in both volume and value, the latter reaching a five-year peak of EUR 3,21 billion for 319.488 tonnes.

Consumption of the two most popular fresh species, gilthead seabream and mussel, increased very slightly from 2018 to 2019. For gilthead seabream, this increase represented the highest amount of the five years analysed and caused the price to decline by 3%, from 9,56 EUR/kg to 9,23 EUR/kg. Salmon consumption and salmon price both reached 5-year highs, with consumption increasing by 5%, and the price increasing 2% to 14,92 EUR/kg.

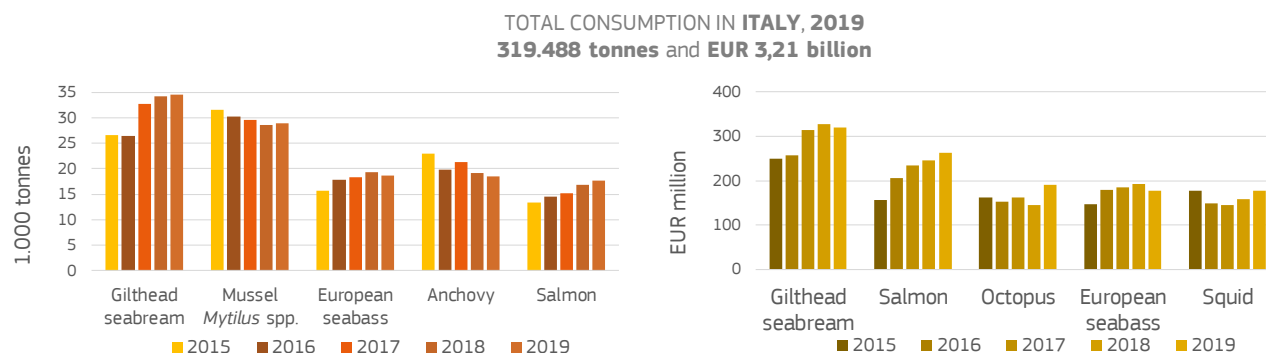
A 3% consumption decrease observed for anchovy, which reached the lowest amount of the last five years, was linked to the price increasing 3%, from 6,17 EUR/kg to 6,39 EUR/kg. For European seabass, 4% decreases were observed in both volume and price, with the price dropping from 9,95 EUR/kg to 9,55 EUR/kg.

Squid and octopus are also worth mentioning, as they are among the top-5 valued species consumed in Italy. Both saw increased consumption and growing prices from 2018 and 2019, with squid's total value growing by 12% and octopus value growing by 31%.

CHART 23

TOP-5 FRESH SPECIES (IN VOLUME AND NOMINAL VALUE) CONSUMED BY HOUSEHOLDS IN ITALY

Source: EUMOFA, based on Europanel data



FRANCE Household consumption of fresh fishery and aquaculture products has been on a downward trend in France for the past five years, while total values have fluctuated. In 2019, it reached 205.174 tonnes, which was a 2% decrease from 2018, but at the same time, the value increased 2%, reaching EUR 2,38 billion.

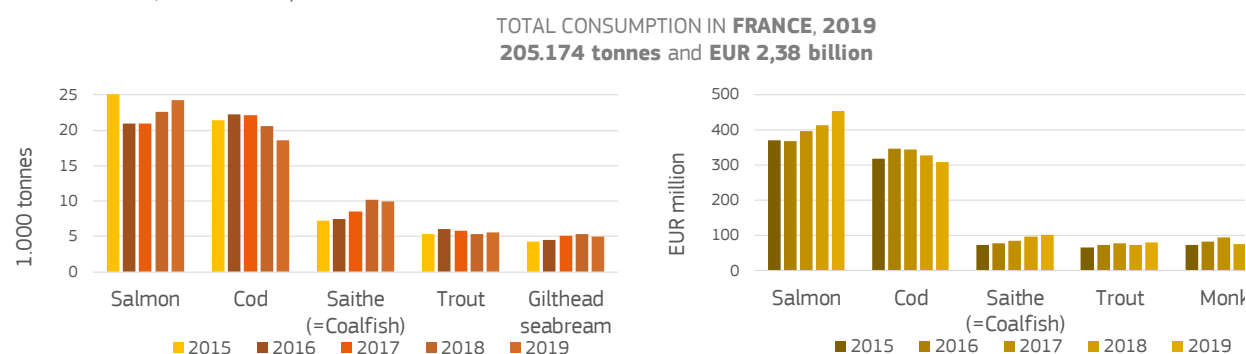
In 2019, consumption of cod and monk reached their lowest levels of the last five years, dropping by 10% and 16%, respectively, from 2018. However, the prices for both species increased 5% and both reached five-year peaks – 16,68 EUR/kg for cod and 17,92 EUR/kg for monk.

Among most consumed species, consumption increased for salmon and trout from 2018 to 2019, with salmon increasing 7% and trout increasing 5%. Both species also saw price increases. Salmon grew by 2%, from 18,28 EUR/kg to 18,73 EUR/kg, while trout grew by 4%, from 13,81 EUR/kg to 14,40 EUR/kg, which was a five-year peak. As for saithe, consumption decreased a slight 2% and the price grew by 6%, from 9,50 EUR/kg to 10,09 EUR/kg. Consumption of gilthead seabream declined by 8% and the price increased by 2%, reaching a five-year peak of almost 12,00 EUR/kg.

CHART 24

TOP-5 FRESH SPECIES (IN VOLUME AND NOMINAL VALUE) CONSUMED BY HOUSEHOLDS IN FRANCE

Source: EUMOFA, based on Europanel data



MAIN TRENDS IN OTHER COUNTRIES

GERMANY

The decreasing volume trend that started in 2017 continued in 2018 and 2019 but slowed. The decline from 2018 to 2019 was a slight 0,2% (-101 tonnes) but, in contrast, it registered a 6% or EUR 50 million growth in value in 2019, driven by the increase recorded by salmon and cod.

In 2019, the value of salmon and cod, which make up almost half of the total value of household consumption of fresh fishery and aquaculture products, continued to increase.

Salmon increased 18% and cod 15% from 2018. For cod, this growth was linked to a five-year peak of the price, which reached 18,56 EUR/kg, while for salmon it was due to increased volumes, as the price decreased slightly to 17,89 EUR/kg.

UNITED KINGDOM

Since 2018, household consumption of fresh fishery and aquaculture products has been recovering from the drop seen in 2016–2017. In 2019, consumption increased by 6% or 2.748 tonnes in volume compared with 2018, reaching a five-year peak, accompanied by a 4% value increase of EUR 28 million.

Salmon drove the overall trends, being by far the most consumed species in the UK where it accounts for two thirds of the total.

NETHERLANDS

Household consumption of fresh fishery and aquaculture products in the Netherlands remained stable during the five years analysed, varying between 32.338 tonnes and 33.396 tonnes. In 2019, it increased by 3% or 969 tonnes from 2018, after registering a decrease in 2017–2018. In value, it reached a five-year peak, thanks to a 6% or EUR 32 million growth.

Salmon, the main consumed species of the Netherlands, drove the overall trends, with its consumption continuing an upward trend over the last five years, increasing by 15% from 2018 to 2019. Despite its 3% price decrease, its value grew 12%, to reach a five-year peak.

Although shrimp is not a very popular species in the Netherlands, covering around 5% of total volume, increased shrimps consumption is worth mentioning. In particular, consumption of *Crangon* grew by 54% in volume and 31% in value, while that of other species of shrimps rose by 22% in both volume and value.

PORTUGAL

Both volume and value of household consumption of fresh fishery and aquaculture products grew from 2018 to 2019: volume by 14% or 6.970 tonnes, and value by 11% or EUR 37 million.

The volume increase concerned all main species, especially scabbardfish, which increased 50%, and octopus, which increased 48%. Further, gilthead seabream, the most popular, increased by 10%, accompanied by a 3% decrease in value. The value decrease was linked to a 12% price decrease – from 6,38 EUR/kg in 2018 to 5,65 EUR/kg in 2019 – reaching the lowest recorded since 2015.

POLAND

In 2019, household consumption of fresh fishery and aquaculture products reached the lowest level of the last five years, due to a 4% or 2.282-tonne decrease from 2018. At the same time, value increased by 3% or EUR 9 million. All most consumed species – namely mackerel, salmon, carp and trout – registered their highest prices of the 2015–2019 period.

IRELAND

During 2015–2019, household consumption of fresh fishery and aquaculture products reached the highest amounts of volumes and values in 2019. This included a 9% volume increase of 1.149 tonnes, and 3% value increase of EUR 5 million, from 2018, which was mainly driven by the most consumed species, salmon.

Alone, salmon accounted for more than half of the total value and 43% of total volumes in 2019. Despite a slight price decrease, its consumption increased by 6% in volume and 5% in value from 2018. Also of note, Ireland recorded the most significant increase of shrimp consumption from 2018 to 2019 of the EU countries

analysed³⁵. In fact in 2018, these products only represented 5% of total volumes of Irish consumption but in 2019, their share grew to 10%, as their consumption increased 145% or 860 tonnes.

SWEDEN

The highest level of household consumption of fresh fishery and aquaculture products in Sweden – in volume and value – had been in 2015. However, after three years of decreasing, volumes of household consumption of fresh fishery and aquaculture products recovered in 2019 with an increase of 6% or 507 tonnes from 2018. Consumption also grew in value terms, increasing 6% or EUR 7 million.

More than 60% of total consumption includes salmon, whose consumption increased by 16% in volume and 15% in value.

DENMARK

Household consumption of fresh fishery and aquaculture products achieved five-year peaks in both volume and value in 2019, with volume growth of 6% or 713 tonnes and value growth of 9% or EUR 16 million from 2018. All products recorded increases in value from 2018 to 2019, except for a slight decrease registered for trout.

More than two thirds of total consumption includes salmon, which had a consumption increase of 11% in volume and 14% in value.

HUNGARY

Household consumption of fresh fishery and aquaculture products achieved five-year peaks in both volume and value in 2019. From 2018, volumes increased by 14% or 760 tonnes, while values grew by 11% or EUR 3 million.

3.3 RETAIL SALES AND OUT-OF-HOME CONSUMPTION

The fishery and aquaculture industry supplies fish and seafood to consumers through different sale channels: retail, which includes fishmongers and large-scale retailers (LSR); foodservice, which includes catering and restaurants; and institutional channels, which include schools, canteens, hospitals and prisons. Foodservice and institutional channels are referred to as “out-of-home consumption³⁶”. This section of “The EU fish market” analyses retail sales and out-of-home consumption of unprocessed³⁷ fishery and aquaculture products in the top-five EU consuming countries, namely Germany, Spain, France, Italy and the UK. In addition, it analyses the out-of-home consumption of processed³⁸ products through the foodservice in all EU countries.

³⁵ Consumption of shrimps is monitored in Germany, Ireland, the Netherlands and Portugal.

³⁶ Out-of-home consumption data are collected from Euromonitor international (<https://www.euromonitor.com/>). For more details, see the Methodological background.

³⁷ Unprocessed products are defined as the aggregation of fresh, chilled and frozen finfish, crustaceans, molluscs and cephalopods, packaged and unpackaged. For more details, see the Methodological background.

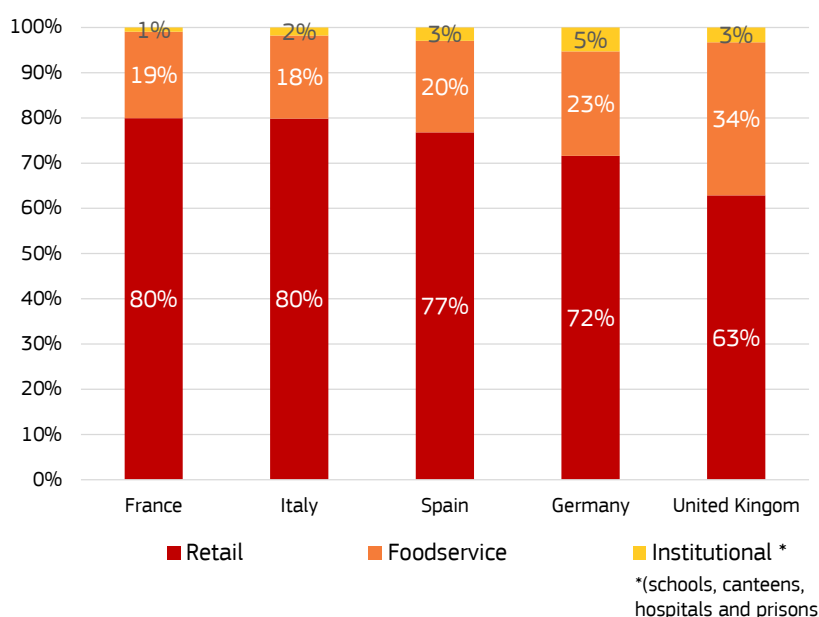
³⁸ Processed products are defined as the aggregation of shelf-stable, chilled processed and frozen finfish, crustaceans, molluscs and cephalopods. For more details, see the Methodological background.

RETAIL SALES OF UNPROCESSED PRODUCTS

Retail is the main sales channel for unprocessed fishery and aquaculture products in all five countries surveyed.

CHART 25
SALES OF UNPROCESSED FISHERY AND AQUACULTURE PRODUCTS BY CHANNEL IN 2019 (% OF TOTAL VOLUME)

Source: Euromonitor International



The highest amount of unprocessed fishery and aquaculture products sold through the retail channel in 2019 was recorded in Spain, with 790.400 tonnes. Nonetheless, this represented a 4% decrease from 2018, as well as the lowest level registered by the country in the last 15 years. The decrease was due to a 26% or 180.000-tonne drop in finfish retail sales since 2005.

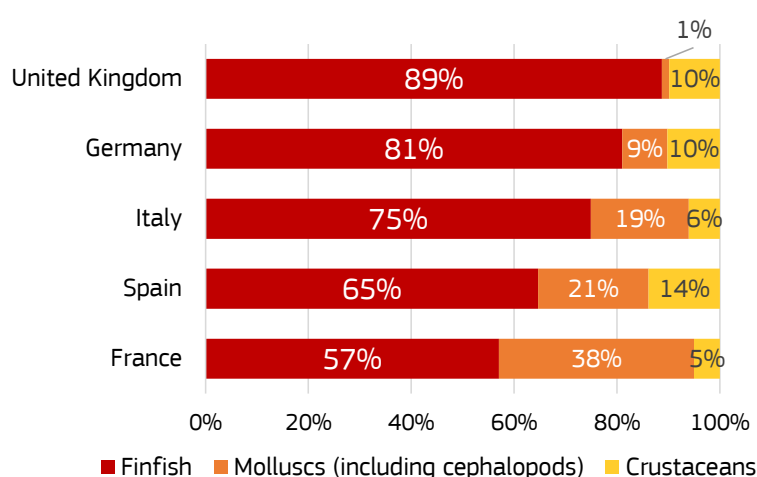
From 2018 to 2019, retail sales of unprocessed fishery and aquaculture products also decreased a slight 1% in Germany and 0,2% in France. On the other hand, UK sales remained steady, increasing a mere 0,2%. Italy, which saw retail sales grow 2%, was the only country registering an increase, continuing the upward trend started in 2014.

TABLE 14
RETAILS SALES OF UNPROCESSED FISHERY AND AQUACULTURE PRODUCTS (1.000 TONNES)

Source: Euromonitor International

Member State	2015	2016	2017	2018	2019	2019/2018
Spain	929,2	898,8	854,9	821,5	790,4	↓ - 4%
Germany	487,8	512,8	495,9	482,4	477,8	↓ - 1%
United Kingdom	445,5	449,5	452,5	453,8	454,6	↗ +0,2%
Italy	398,9	394,1	409,3	416,2	424,7	↗ +2%
France	258,1	256,2	253,6	251,8	251,2	↘ -0,2%

CHART 26
UNPROCESSED FISHERY
AND AQUACULTURE
PRODUCTS SOLD
THROUGH THE RETAIL
CHANNEL IN 2019,
SHARES OF TOTAL
VOLUME
Source: Euromonitor
International



Finfish have a pivotal role in the retail channel for fishery and aquaculture products in all five Member States surveyed, followed at distance by cephalopods and other molluscs and crustaceans. Molluscs play a significant role in the southern Member States: Spain with retail sales of cephalopods and mussels, France (oysters and mussels), and Italy (clams, mussels and cephalopods).

As specifically concerns finfish, the highest retail sales of unprocessed products in 2019 were recorded in Spain, which reached 511.000 tonnes. However, they have been declining for 11 years, and 2019 sales were 28% less than in those in 2009. In the UK, sales reached 403.500 tonnes, or 0,1% higher than 2018. Germany's sale of 387.100 tonnes marked a decrease of 1%, while Italy's 318.100 tonnes was a 2% increase. The lowest level was recorded in France, namely 143.200 tonnes, which were slightly higher than 2018 but represented a 9% decrease from the peak registered in 2012.

Retail sales of cephalopods and other molluscs have been very high in Spain. Nevertheless, they have been declining since 2013, and the 169.900 tonnes registered in 2019 was Spain's lowest since 2005.

Crustaceans covered relatively low shares of total retail sales of fishery and aquaculture products in all five countries surveyed. Retail sales always reach significant amounts in Spain, even if the 109.600 tonnes it registered in 2019 represented its lowest level since 2005.

OUT-OF-HOME CONSUMPTION OF UNPROCESSED PRODUCTS

Out-of-home consumption of unprocessed fishery and aquaculture products has a different relevance in each of the five surveyed countries. The UK prevails, as confirmed by the report "EU consumer habits regarding fisheries and aquaculture products" carried out by Eurobarometer in 2018³⁹. The report found that 45% of UK consumers eat fisheries and aquaculture products out-of-home at least once a month, while in Italy and France, for instance, this percentage reaches 35% and 37%, respectively.

³⁹ <https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/survey/getsurveydetail/instruments/special/surveyky/2206>

TABLE 15

OUT-OF-HOME
CONSUMPTION OF
UNPROCESSED FISHERY
AND AQUACULTURE
PRODUCTS
(1.000 TONNES) AND %
VARIATION 2019/2018

Source: Euromonitor International

Member State	2015	2016	2017	2018	2019	2019/2018
United Kingdom	294,2	288,3	279,6	273,3	268,4	↓ - 2%
Spain	266,7	272,9	258,3	248,5	238,4	↓ - 4%
Germany	195,2	204,1	197,4	191,7	189,4	↓ - 1%
Italy	102,6	101,2	104,2	105,7	107,3	↑ +2%
France	55,7	57,2	59,6	61,3	63,0	↑ +3%

OUT-OF-HOME CONSUMPTION OF PROCESSED PRODUCTS (THROUGH THE FOODSERVICE ONLY)

In 2019, out-of-home consumption of processed fishery and aquaculture products through foodservice in the EU totalled 734.800 tonnes, which was the highest level in more than ten years. The top 10 consuming countries accounted for 92% of the total. Among them, Italy, Sweden, Portugal, Austria (the only landlocked country) and Denmark reached their 15-year peaks in 2019, while the UK and Greece touched their lowest amounts since 2005. To be noted, consumption of processed products through the foodservice is lower than that of unprocessed products in all top-5 EU consuming countries except Germany⁴⁰.

TABLE 16

OUT-OF-HOME
CONSUMPTION OF
PROCESSED FISHERY AND
AQUACULTURE PRODUCTS
THROUGH THE
FOODSERVICE
(1.000 TONNES)

Source: Euromonitor
International

Member State	2015	2016	2017	2018	2019	2019/2018
Germany	246,0	245,4	245,0	246,0	246,6	↑ + 0,2%
United Kingdom	175,3	173,6	172,0	170,7	169,4	↓ - 1%
Spain	116,8	120,2	124,8	129,3	133,6	↑ + 3%
France	38,8	38,9	39,2	39,1	39,0	↓ - 0,3%
Italy	26,3	26,6	26,8	27,1	27,3	↑ + 1%
Sweden	16,9	17,2	17,4	17,7	17,9	↑ + 1%
Austria	9,0	9,5	10,1	10,8	11,5	↑ + 6%
Portugal	9,9	10,2	10,6	10,9	11,2	↑ + 3%
Belgium	10,5	10,5	10,6	10,6	10,7	↑ + 1%
Denmark	9,6	9,7	9,9	10,0	10,2	↑ + 2%
Greece	11,0	10,6	10,4	10,2	10,0	↓ - 2%
Poland	8,3	8,5	8,8	9,1	9,3	↑ + 2%
Czech Republic	5,3	5,4	5,5	5,6	5,6	=
Finland	4,8	5,0	5,1	5,2	5,4	↑ + 4%
Netherlands	4,6	4,7	4,8	4,9	5,0	↑ + 2%
Ireland	3,5	3,5	3,5	3,5	3,6	↑ + 3%
Croatia	2,7	2,8	2,8	2,8	2,8	=
Slovakia	2,5	2,5	2,5	2,6	2,6	=
Lithuania	2,1	2,2	2,3	2,3	2,4	↑ + 4%
Bulgaria	2,2	2,2	2,3	2,3	2,3	=
Romania	1,9	1,9	2,0	2,1	2,2	↑ + 5%
Latvia	1,4	1,4	1,5	1,5	1,5	=
Hungary	1,2	1,2	1,3	1,3	1,3	=
Estonia	0,7	0,8	0,8	0,8	0,8	=
Slovenia	0,7	0,7	0,7	0,7	0,8	↑ +14%
Cyprus	0,7	0,7	0,7	0,7	0,7	=
Malta	0,5	0,6	0,6	0,6	0,6	=
Luxembourg	0,5	0,5	0,5	0,5	0,5	=
Total	713,7	717,0	722,5	728,9	734,8	↑ + 1%

*Consumption of
processed fishery and
aquaculture products
through the
foodservice in the EU
has been increasing in
the last ten years.*

⁴⁰ Italy: 78% unprocessed, 22% processed; France: 61% unprocessed, 39% processed; Spain: 61% unprocessed, 39% processed; UK: 59% unprocessed, 41% processed; Germany: 38% unprocessed, 62% processed. Data referring to 2019.

Shelf-stable products⁴¹ have the highest consumption, followed by frozen and chilled products. Nonetheless, shelf-stable products' relative share of total processed fishery and aquaculture products varied a lot among countries in 2019, ranging from 7% in Sweden, where frozen products are preferred, to 81% in Spain.

CHART 27
 15-YEAR TREND OF EU
 OUT-OF-HOME
 CONSUMPTION OF
 PROCESSED FISHERY AND
 AQUACULTURE PRODUCTS
 THROUGH THE
 FOODSERVICE BY
 CATEGORY,
 2019 VOLUMES AND %
 VARIATION 2019/2018

Source: Euromonitor
 International

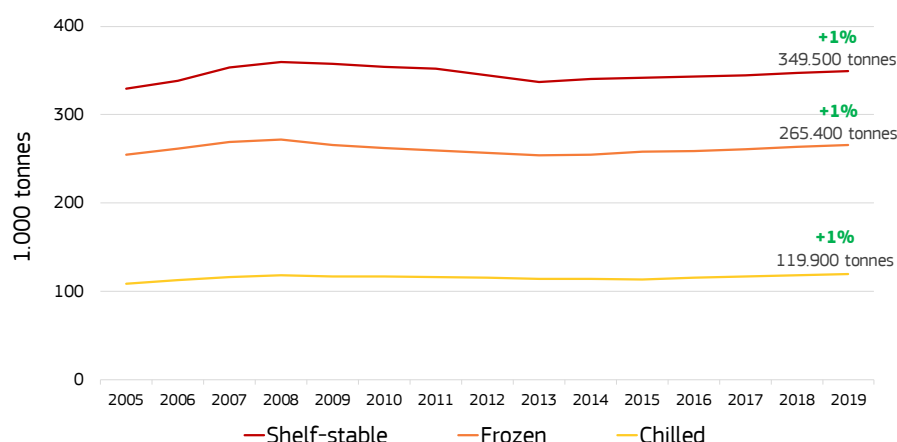
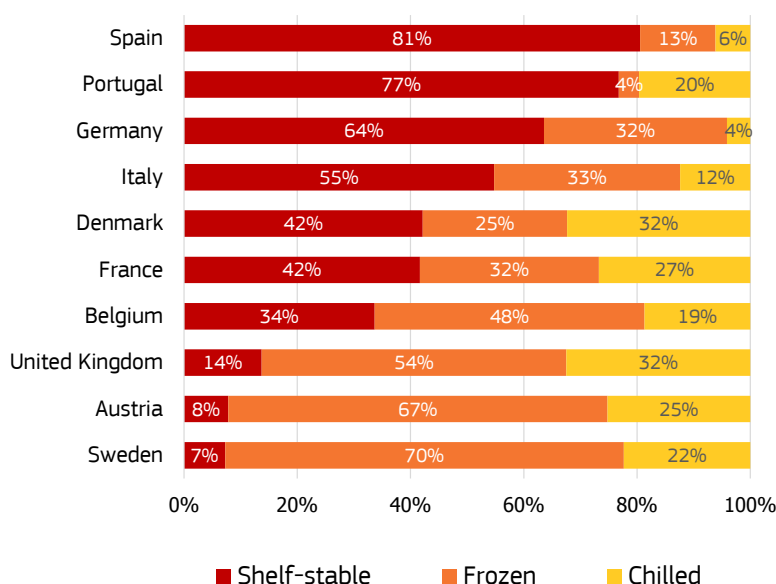


CHART 28
 EU OUT-OF-HOME
 CONSUMPTION OF
 PROCESSED FISHERY AND
 AQUACULTURE PRODUCTS
 THROUGH THE
 FOODSERVICE IN TOP-10
 COUNTRIES BY CATEGORY
 IN 2019, SHARES IN
 VOLUME (% OF TOTAL)

Source: Euromonitor
 International



The out-of-home consumption of shelf-stable products in 2019 was highest in Germany and Spain. In Germany, it totalled 156.800 tonnes, which was a 1% decrease from 2018, while Spain showed a 4% increase and reached 107.700 tonnes – marking a 15-year peak.

Frozen processed products were mainly sold in the UK and Germany – 91.100 tonnes in the UK and 79.700 tonnes in Germany. For the UK, this was the lowest amount since 2005, while Germany reached a 15-year peak, continuing an upward trend started in 2013.

The out-of-home consumption of chilled processed fishery and aquaculture products is relatively low in all EU countries. In absolute terms, the only exception in 2019 was the UK, where consumption of these products amounted to 55.000 tonnes in 2019.

⁴¹ 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.

3.4 THE ORGANIC SEGMENT

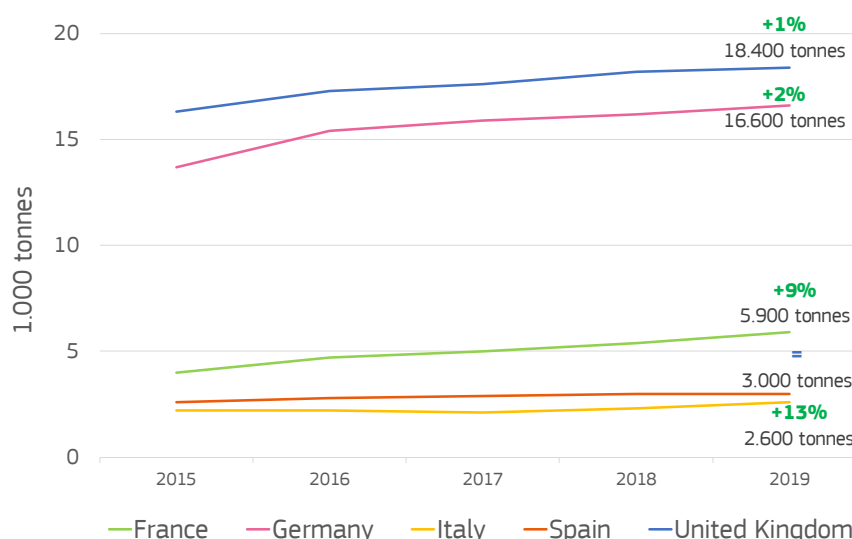
Organic fishery and aquaculture products represent a niche market in the EU. In the main EU countries surveyed – Germany, Spain, France, Italy and the UK – the 46.500 tonnes of unprocessed⁴² fishery and aquaculture products consumed in 2019 originated from organic production. This was a 3% increase from 2018, but it represented a 20% growth from 2015, thus indicating an increase of the share of organic products within overall unprocessed fishery and aquaculture products consumption.

In absolute terms, the UK and Germany lead EU consumption of organic fishery and aquaculture products.

All countries surveyed reached their five-year peaks in 2019. Compared with 2015, the most significant increase was the 48% recorded by France. It was followed by increases of 21% in Germany, 18% in Italy, 15% in Spain and 13% in the UK.

CHART 29
5-YEAR TREND OF
CONSUMPTION OF
ORGANIC FISHERY AND
AQUACULTURE PRODUCTS
IN TOP-5 COUNTRIES,
2019 VOLUMES AND %
VARIATION 2019/2018

Source: Euromonitor
International



According to Eurostat, overall EU production of organic aquatic organisms amounted to 69.000 tonnes of live weight in 2018.

Due to increasing consumption demand for salmon, the most important organic fish species produced and consumed in the EU, organic salmon production has reached remarkable levels in the EU.

The main producers of organic salmon are Ireland and, in the UK (Scotland and, to a lesser extent, Northern Ireland).

According to estimates⁴³ for 2018, Irish organic salmon production dropped to approx. 11.900 tonnes, which was 35% less than in 2017. Production value fell by 14%. All consumer-ready products, mainly whole-round or head-on-gutted, are farmed according to organic certification standards and their exports are destined

⁴² It should be underlined that 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.

⁴³ Source: BIM, National Seafood Survey, Aquaculture Report 2019, <http://www.bim.ie/media/bim/content/publications/aquaculture/BIM-National-Seafood-Survey-Aquaculture-Report-2019.pdf>.

for diverse markets: 90% to the EU, 7% to North America, and the Near and Far East (3%).

Irish exports in 2018 amounted to 8.000 tonnes in whole fish equivalent. The drop in overall value was less severe than the drop in volume from 2017, due to an increase in salmon price, which reached an average of 9,55 EUR/kg for whole-round products⁴⁴.

Scottish production of farmed Atlantic organic salmon was 4.200 tonnes in 2018, down 400 tonnes from 2017⁴⁵.

Since Irish and UK production are not sufficient to satisfy the EU market demand, internal demand of organic salmon is fed with products imported from Norway, which had a 2018 production estimated at 16.000 tonnes, compared with around 15.000 tonnes produced in the EU.

Organic salmon achieves a price premium in the market. Research from 2015 and 2016 suggests a price premium of between 20 and 30% on prices paid to farmers, while price premium on retail level is higher⁴⁶. Input from stakeholders indicates that the premium price paid to farmers has increased over the last years, but in relative terms, it varies depending on the spot price⁴⁷ level in the market.

3.5 EU QUALITY SCHEMES: GEOGRAPHICAL INDICATIONS AND TRADITIONAL SPECIALITIES

There are 53 products registered with EU quality schemes in the seafood sector. They refer to geographical indications (GIs), Protected Designations of Origin (PDOs) and Protected Geographical Indications (PGIs), and to traditional aspects, the Traditional Specialities Guaranteed (TSG). Two-thirds of the names (36) are PGIs, about one-quarter (14) are PDOs and 6% (3) are TSGs.⁴⁸

The number of GIs and TSGs increased greatly over the last decade, growing from 21 names in 2010 to 53 in 2020. The most recent addition is the PGI "*Bulot de la Baie de Granville*" (France), which was registered in February 2019.

Among the 53 names registered, 36 of them, or 68%, are registered in EU MS and 32% originate from third countries. The MSs where most of the names are registered include Germany, France, Italy and Spain, with 5 to 7 names registered in each. They are followed by Czechia, Finland and Romania with 2 names registered in each, and then the Netherlands, Latvia, Portugal, Poland, Sweden, Ireland and Greece with one name registered in each. A total of 17 registered names originate from third countries: 14 in the UK and 1 each in China, Norway and Vietnam.

Among the 53 current denominations, 41 (77%) cover finfish, 11 (21%) cover molluscs, and 1 (2%) covers crustaceans. Moreover, 26 (59%) refer to marine

⁴⁴ Source: BIM, 2018, Annual Aquaculture Survey, <http://www.bim.ie/media/bim/content/publications/aquaculture/BIM-Annual-Aquaculture-Survey-2018.pdf>.

⁴⁵ Scottish fish farm production survey 2018

⁴⁶ EUMOFA, "Fresh organic salmon packed fillets in the EU", 2020 https://www.eumofa.eu/documents/20178/367933/PTAT_Organic+salmon.pdf

⁴⁷ The spot price is the current price in the marketplace at which a product can be bought or sold for immediate delivery.

⁴⁸ PDOs and PGIs also refer to non-EU products.

species, 19 (36%) to freshwater, and the remaining 8 (15%) refer to migratory species whose life cycles alternate between the marine environment and fresh water. The main species covered by GIs and TSGs include carp, with 9 products, notably in Germany, Czechia and Poland; mussels, with 5 products in France, Italy, Spain and the UK; salmon with 5 products, of which 4 are in the UK and 1 in Ireland; and anchovy, cod, oyster, tuna and vendace which have 3 products each.

TABLE 17
QUALITY SCHEMES
REGARDING FISHERIES
AND AQUACULTURE
PRODUCTS REGISTERED
UP TO AUGUST 2020
 Source: eAmbrosia, DG AGRI

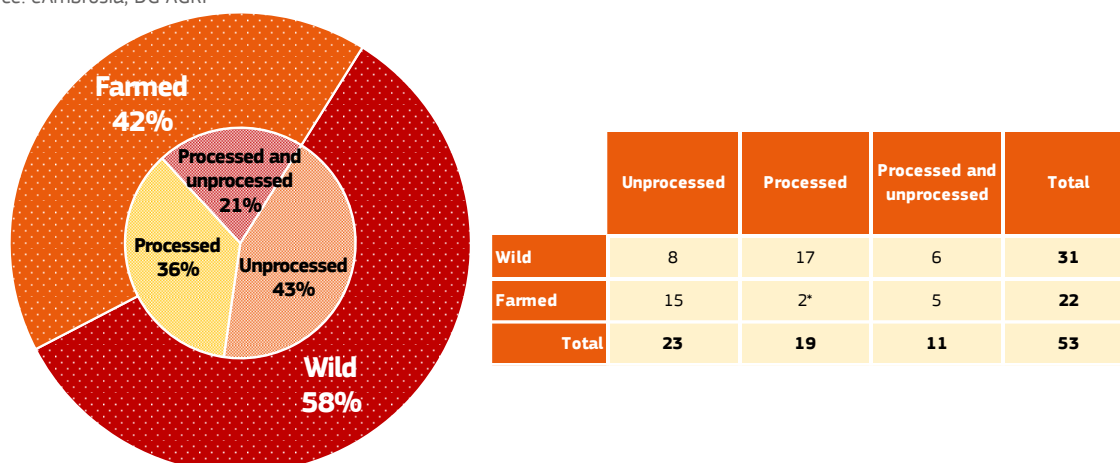
Country	Protected Designations of Origin (PDO)		Protected Geographical Indications (PGI)		Traditional Specialities Guaranteed (TSG)		TOTAL
	Number	Species concerned	Number	Species concerned	Number	Species concerned	
Czech Republic	1	Carp	1	Carp			2
Germany			7	Carp (5 PGIs), Herring, Trout			7
Ireland			1	Salmon			1
Greece	1	Grey mullet (roes)					1
Spain	1	Mussel	4	Tuna (mojama) (2 PGIs), Tuna, Mackerel			5
France	1	Mussel	4	Oyster, Anchovy, Scallop, Whelk	1	Mussel	6
Italy	2	Mussel, Tench	3	Trout, Arctic char, Anchovy			5
Latvia			1	Lamprey			1
Netherlands					1	Herring	1
Poland	1	Carp					1
Portugal					1	Cod	1
Romania			2	Carp, Pontic shad			2
Finland	1	Vendace	1	Vendace			2
Sweden	1	Vendace (roes)					1
China			1	Freshwater crayfish			1
Norway			1	Cod			1
United Kingdom	4	Pollan, Mussel, Oyster, Scallop	10	Salmon (4 PGIs), Sea trout, Eel, Sardine, Cod/Haddock, Haddock, Oyster			14
Vietnam	1	Anchovy (sauce)					1
TOTAL	14		36		3		53

More than half or 58% of the products covered by GIs/TSGs are wild caught, including mainly anchovy, cod, tuna and vendace, and 42% are farmed, including mainly shellfish, carp and salmon. Each GI/TSG may cover unprocessed or processed products. Unprocessed products, representing 43% of the denominations, cover most of the shellfish and some finfish. The processed products account for 36% of the denominations: this includes, for instance, the PGI “*Mojama de Barbate*” in Spain which covers cured dried and seasoned tuna loins or the PGI “*Glückstädter Matjes*” in Germany which covers ripened herring. Some GIs/TSGs cover both processed and unprocessed products (21% of the denominations, for instance whole or filleted fish).

CHART 30

TYPES OF PRODUCTS UNDER EU QUALITY SCHEMES IN THE SEAFOOD SECTOR (AUGUST 2020)

Source: eAmbrosia, DG AGRI



*The PGI "London Cure Smoked Salmon" (2017, the United Kingdom) is based on both wild caught and farmed products.

The sales of fish, molluscs and crustaceans under GI/TSG reached an estimated 246.709 tonnes and EUR 1,42 billion in 2017 for GIs/TSGs originating from EU-28. This represented an increase of 83% from 2013^{49, 50} and accounted for about 4% of the sales value of the EU seafood sector⁵¹. Most of the sales value (62%, EUR 0,88 billion) was on the domestic market, followed by intra-EU trade (28%, EUR 0,4 billion) and extra-EU trade (10%, EUR 0,14 billion). PGIs accounted for the largest share (71%), followed by TSGs (22%) and PDOs (7%).

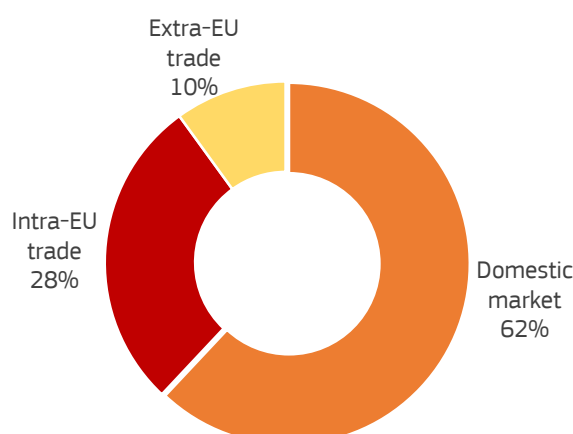
In 2017, the UK and France were the leading MS in terms of sales, with the PGI "Scottish Farmed Salmon", TSG "Moule de Bouchot", PGI "Huîtres Marennes Oléron" and PDO "Moules de Bouchot de la Baie du Mont-Saint-Michel"⁵².

The average economic size of each TSG and PGI tended to be higher than the average size of each PDO, respectively EUR 36 million, EUR 32 million and EUR 8 million in 2017.

CHART 31

SHARE OF SALES VALUE BY MARKET FOR FISH, MOLLUSCS AND CRUSTACEANS UNDER GI/TSG IN 2017

Source: Study on economic value of EU quality schemes, Geographical Indications (GIs) and Traditional Specialities Guaranteed (TSGs), AND International for DG AGRI, 2019



⁴⁹ Source: Study on economic value of EU quality schemes, Geographical Indications (GIs) and Traditional Specialities Guaranteed (TSGs), AND International for DG AGRI, 2019 - <https://op.europa.eu/en/publication-detail/-/publication/a7281794-7ebe-11ea-aea8-01aa75ed71a1>

⁵⁰ This covers the 43 GIs/TSGs registered at EU-28 level before 2017.

⁵¹ Based on Eurostat and EUMOFA data, sales value of the seafood sector at EU 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 an overestimate with double counts).

⁵² Source: Study on economic value of EU quality schemes, Geographical Indications (GIs) and Traditional Specialities Guaranteed (TSGs), AND International for DG AGRI, 2019 and INAO - <https://www.inao.gouv.fr/Nos-actualites/Publication-de-la-brochure-chiffres-cles-2017>

4/ IMPORT - EXPORT⁵³

The total value of EU trade flows of fishery and aquaculture products in 2019 was 44% higher than 10 years before.

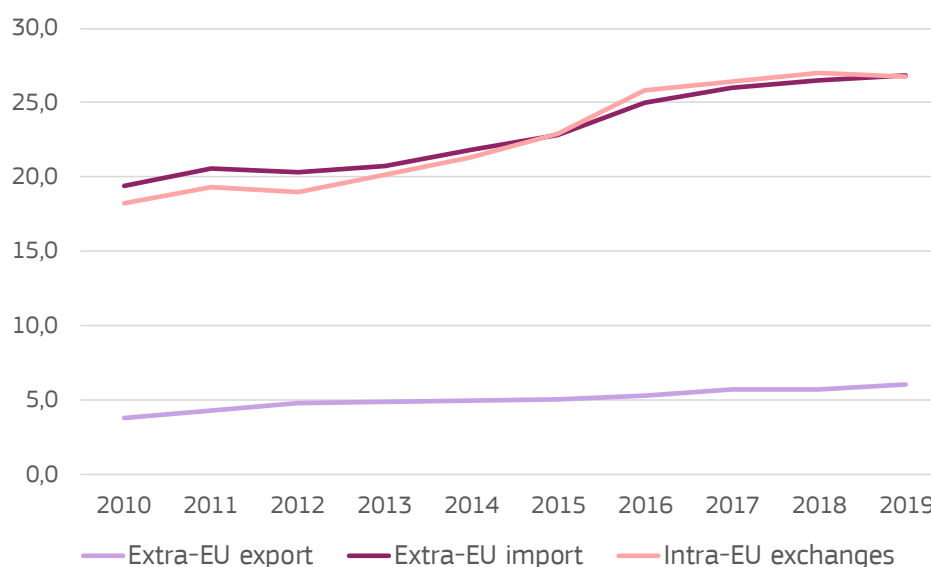
The total value of EU trade flows⁵⁴ of fishery and aquaculture products in 2019 was EUR 60,78 billion, 2% higher than in 2018. In real terms, it was 44% above the level of 10 years before⁵⁵. During the 2010–2019 decade, trade flow value had increased at a compound annual growth rate of 4%.

Extra-EU imports account for almost half of all fishery and aquaculture products traded both within the EU and with third countries. The extra-EU exports were on an upward value trend in the decade, growing 58% in real terms, but they play a far less important role, which makes the EU a net importer. The other half is made up of intra-EU exchanges, mostly exports from northern Member States to other EU countries, and mainly salmon and cod originating from Norway and Iceland.

This chapter provides detailed data and analyses of extra-EU imports, extra-EU exports and intra-EU exchanges, focusing on major species traded and countries involved.

CHART 32
EU TRADE FLOWS
OF FISHERY AND
AQUACULTURE
PRODUCTS, IN VALUE
(EUR BILLION)

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-016890](#)). Values are deflated by using the GDP deflator (base=2015).



⁵³ In line with the approach adopted by EUMOFA following BREXIT, the United Kingdom is considered part of the EU till 2019 and its data until that year are available in all tables, charts and analyses at EU level. In addition, EU data has included Croatia since 2013, which is when it became an EU Member state.

⁵⁴ 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.

⁵⁵ In this report, value and price variations for periods longer than 5 years are analysed by deflating values using the GDP deflator (base=2015); for shorter periods, nominal value and price variations are analysed.

CHART 33

MOST RELEVANT EXTRA-EU TRADE FLOWS IN 2019, IN NOMINAL VALUE (EUR BILLION)

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-016890](#)).

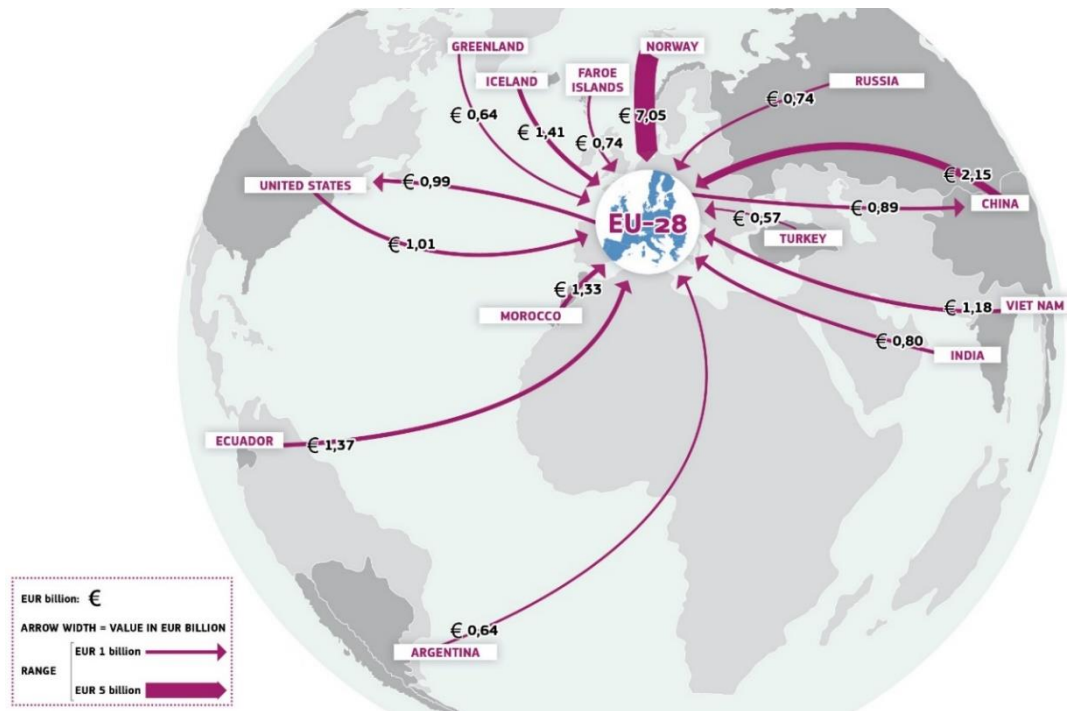
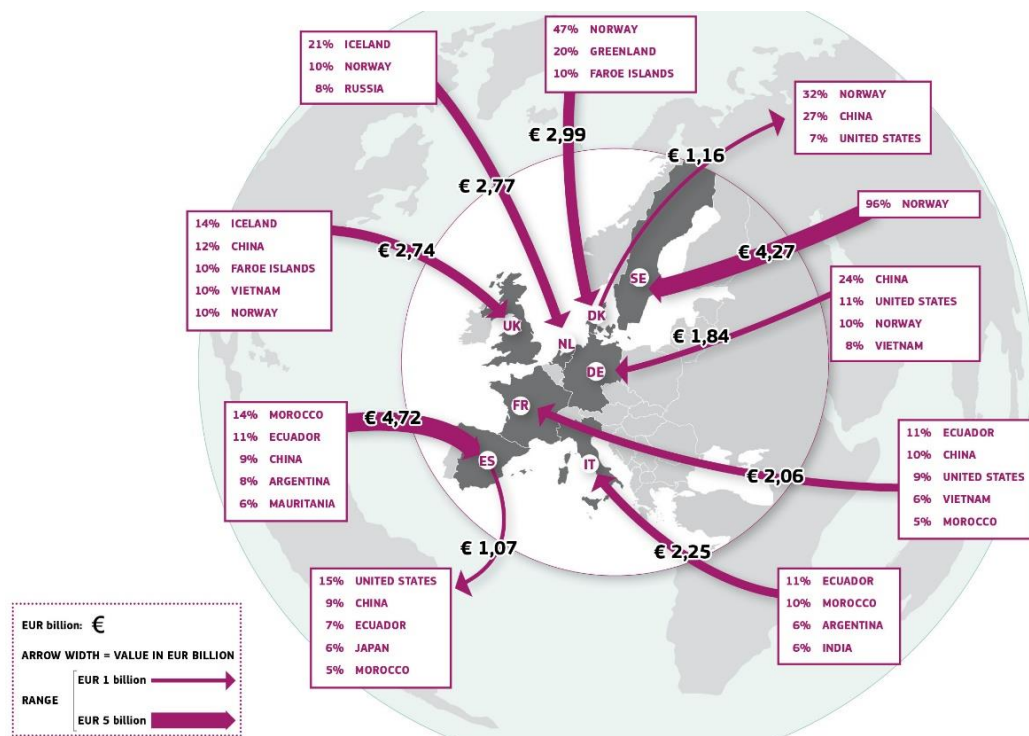


CHART 34

MOST RELEVANT EXTRA-EU TRADE FLOWS BY MEMBER STATE IN 2019, IN NOMINAL VALUE (EUR BILLION)

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-016890](#)).



4.1 EXTRA-EU TRADE BALANCE

The extra-EU trade balance⁵⁶ deficit in 2019 was worth EUR 21 billion, slightly higher than the previous year. In a longer perspective, the deficit in real terms grew by 33% from 2010 to 2019.

Among the EU countries, Sweden is the main net importer from non-EU countries, since it is the major entry point for high-value Norwegian products destined for the internal market.

A worsening of the trade balance was also seen in the US and Japan, the two main importers of fishery and aquaculture products after the EU (see a comparative analysis of EU trade and trade of other main players in the world in section 1.2).

TABLE 18
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-016890](#))
and Global Trade Atlas - IHS
Markit data.

Country	Trade balance 2018	Trade balance 2019	Variation 2019-2018
European Union	-20,81	-21,04	-0,22
United States	-12,54	-14,68	-2,15
Japan	-11,14	-11,61	-0,47

TABLE 19
TRADE BALANCE FOR
FISHERY AND
AQUACULTURE
PRODUCTS OF MAIN EU
NET IMPORTERS
(NOMINAL VALUE IN
EUR BILLION)
Source: EUMOFA elaboration of
Eurostat-COMEXT data
(online data code: [DS-016890](#))

EU Member State	Trade balance 2018	Trade balance 2019	Variation 2019-2018
Sweden	-4,22	-4,18	+0,04
Spain	-3,78	-3,65	+0,13
Italy	-2,21	-2,09	+0,12
United Kingdom	-1,88	-1,94	-0,06
Denmark	-1,73	-1,83	-0,10
Netherlands	-1,70	-1,79	-0,10
France	-1,69	-1,68	+0,01

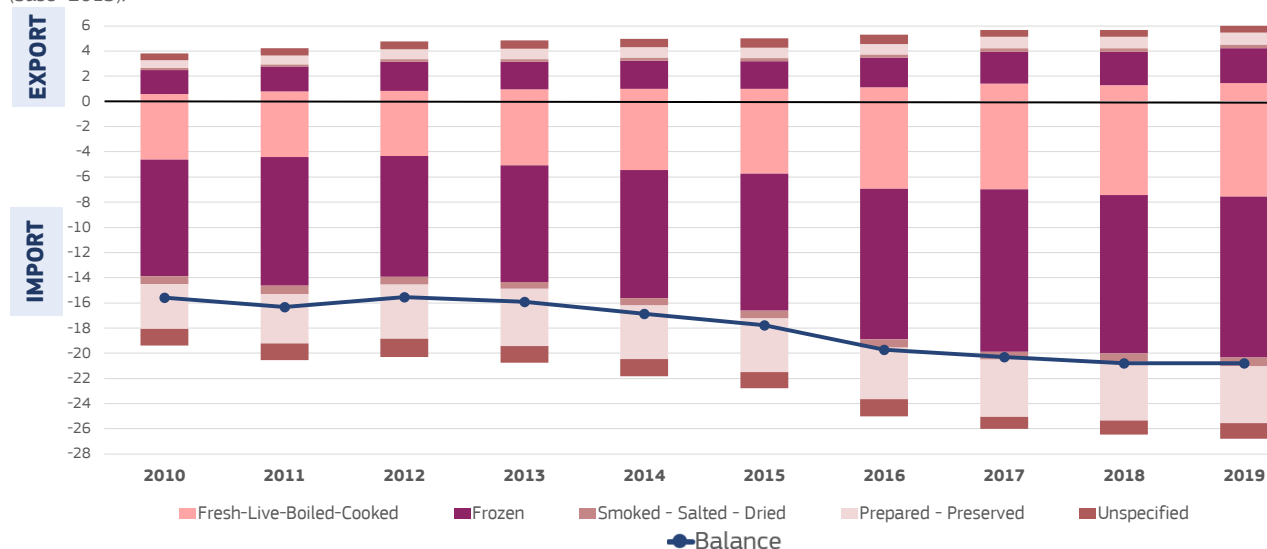
⁵⁶ Extra-EU exports *minus* extra-EU imports.

Almost half of the 2019 EU deficit – 49%, corresponding to EUR 10,2 billion – was due to frozen products. As for fresh and prepared-preserved products, “fresh” with a value of EUR 6,1 billion accounted for 29% of the 2019 deficit, while prepared-preserved with a value of EUR 3,6 billion accounted for 17%. Compared with 2018, all of the three major preservation categories showed a worsening trade balance.

CHART 35

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

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-016890](#)). Values are deflated by using the GDP deflator (base=2015).



4.2 COMPARISON BETWEEN IMPORTS OF FISHERY AND AQUACULTURE PRODUCTS AND MEAT

In 2019, the combined value of total EU imports of agri-food, and fishery and aquaculture products was EUR 146,49 billion⁵⁷. Of this, fish accounted for 15% and meat for 2%⁵⁸.

The EU is a net importer of fishery and aquaculture products, while it is a net exporter of meat. Chart 36 compares the values of imports of fish and meat from 2010 to 2019, excluding prepared and non-edible products. The chart's blue line represents the evolution of the ratio between the value of imports of fish and meat. In 2019, the ratio rose to 5,99, meaning that the imported fish was almost six times higher in value than imported meat. This was due to the increasing value of fish imports, since the value of imports of meat was quite stable during the 10-year period.

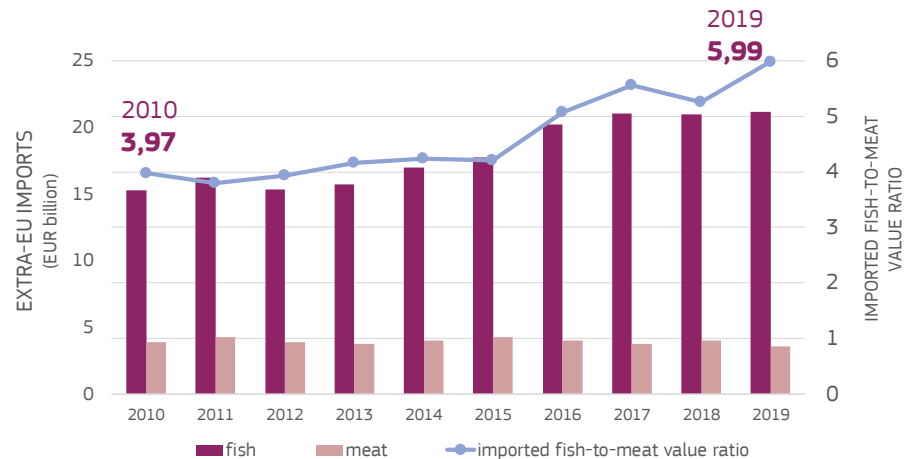
⁵⁷ This total amount includes extra-EU imports of the items referring to fishery and aquaculture products monitored by EUMOFA (list by CN-8 code available at the link <http://www.eumofa.eu/documents/20178/24415/Metadata+2+-+DM+-+Annex+4+Corr+CN8-CG-MCS+%282002+-+2014%29.pdf/ae431f8e-9246-4c3a-a143-2b740a860291>) and extra-EU imports of agri-food products (source: DG AGRI).

⁵⁸ 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).

CHART 36

**EXTRA-EU IMPORTS
TREND AND RATIO OF
IMPORTED FISH VS. MEAT,
IN VALUE (EUR BILLION)**

Source: EUMOFA elaboration of Eurostat-COMEXT (online data code: [DS-016890](#)) and DG AGRI data. Values are deflated by using the GDP deflator (base=2015).



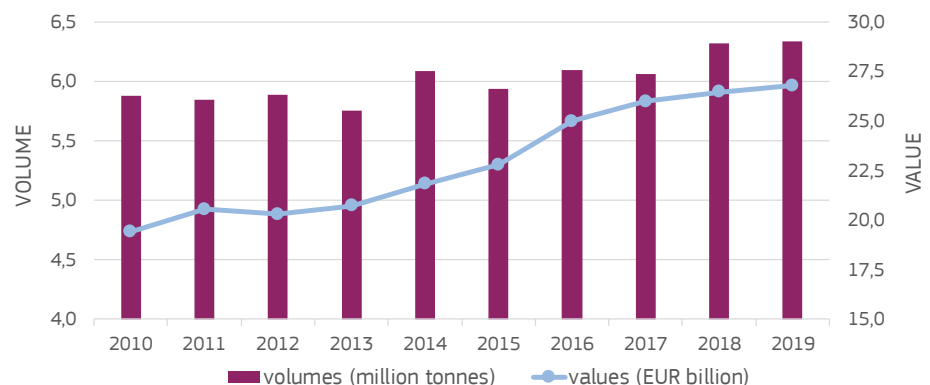
4.3 EXTRA-EU IMPORTS

In 2019, extra-EU imports of fishery and aquaculture products reached a 10-year high of 6,34 million tonnes, almost 460.000 tonnes or 8% more than in 2010. From 2018 to 2019, the increase was a barely perceptible 18.625 tonnes or 0,3%. There was also a peak in value, with imports reaching EUR 27,21 billion. This was nearly EUR 659 million or 2% higher than in 2018, but 38% higher if compared with 10 years before in real terms.

CHART 37

**EXTRA-EU IMPORTS OF
FISHERY AND
AQUACULTURE
PRODUCTS**

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-016890](#)). Values are deflated by using the GDP deflator (base=2015).



The EU's main suppliers of fishery and aquaculture products cover the same shares of the total, both in value and volume. More than one-quarter of extra-EU imports originates from Norway, the main supplier. China is second, but far behind, accounting for less than 10% of the total, while Iceland, Ecuador, Morocco, Vietnam and the United States follow, each covering 5%. The most imported products are salmon, mainly from Norway, shrimps from Ecuador and Vietnam, cod from Norway and Iceland, skipjack tuna from Ecuador, Alaska pollock from China and the US, and fishmeal not destined for human consumption from Norway. As for shrimps, they mostly include warmwater shrimps (more specifically frozen shrimps of the genus *Penaeus*), as well as miscellaneous shrimps and prawns other than Pandalidae, *Crangon*, deep-water rose shrimps (*Parapenaeus longirostris*) and *Penaeus*.

Chart 38 illustrates the trend in average import prices for these products in the last five years. The most significant changes from 2018 to 2019 are price increases for cod and Alaska pollock, due to slight decreases in volumes imported.

CHART 38
 NOMINAL PRICES OF TOP
 VALUED IMPORTED MAIN
 COMMERCIAL SPECIES
 AND % VARIATIONS
 2019/2018

Source: EUMOFA elaboration of
 Eurostat-COMEXT data
 (online data code: [DS-016890](#))

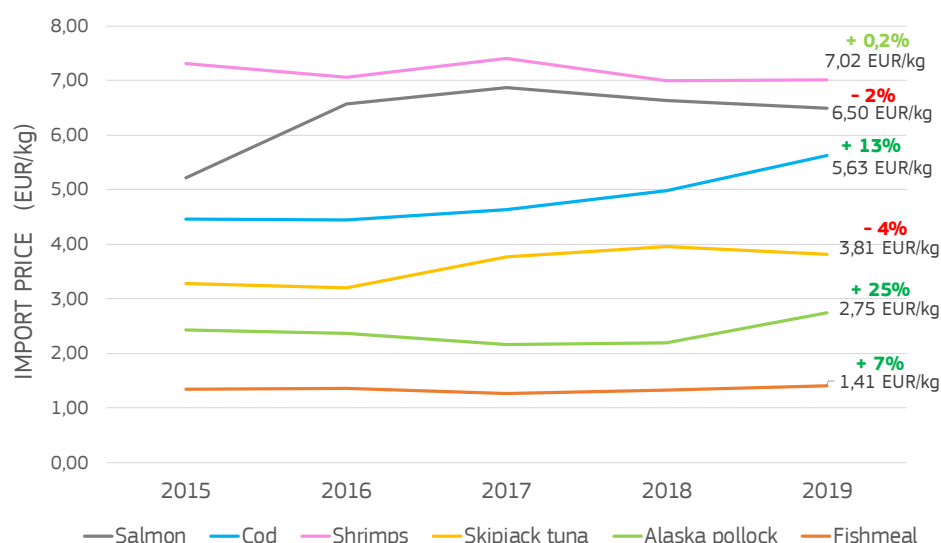
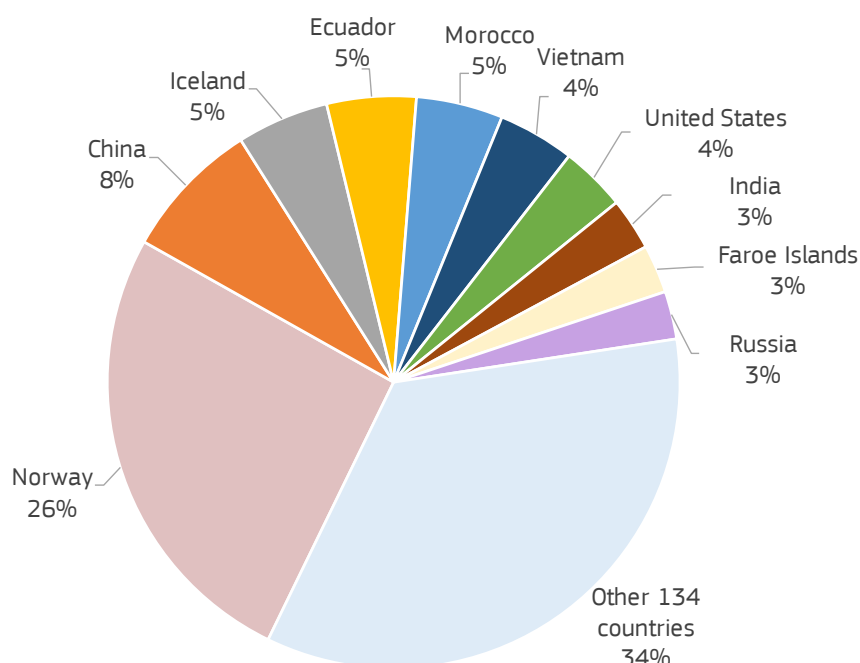


CHART 39
 TOP EXTRA-EU
 COUNTRIES OF ORIGIN IN
 2019 (IN VALUE)

Source: EUMOFA elaboration of
 Eurostat-COMEXT data
 (online data code: [DS-016890](#))



As a premise, 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 market⁵⁹.

Bearing this in mind, the top-five EU “importers” are Spain, Sweden, Denmark, the UK and the Netherlands. Each of them imported from third countries over 500.000 tonnes

⁵⁹ This phenomenon is known as “the Rotterdam effect”.

and EUR 2,5 billion of fishery and aquaculture products in 2019 (precise amounts for the EU's main importing Member States are in charts 41 and 42 below).

Of all extra-EU imports of fishery and aquaculture products, one fifth is destined for Spain, which is mainly supplied by Morocco, Ecuador and China, all of which increased their exports from 2018 to 2019. On the other hand, the total value of Spain's imports from non-EU countries in the same period decreased, due to a 27% shrinkage of the import price of octopus from Morocco.

CHART 40

VALUE OF EXTRA-EU IMPORTS PER MEMBER STATE (EUR BILLION)

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-016890](#)). Values are deflated by using the GDP deflator (base=2015).

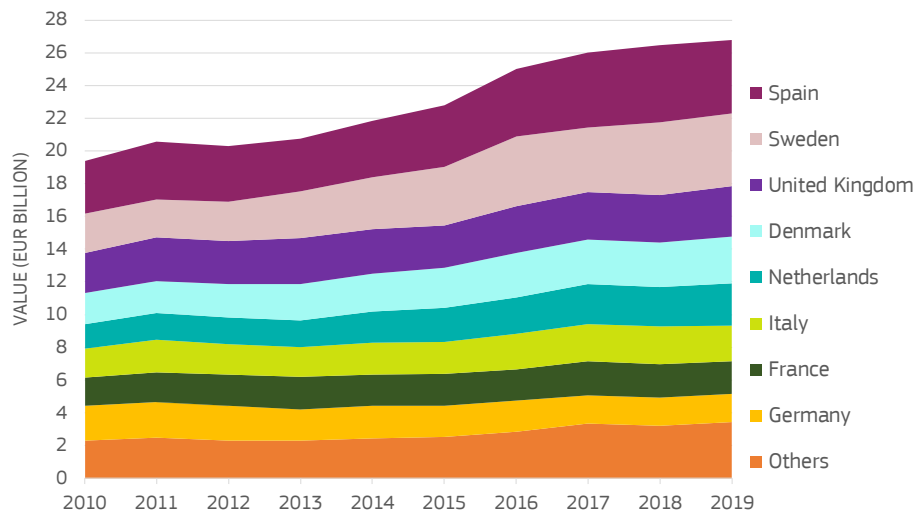


CHART 41

NOMINAL VALUE OF EXTRA-EU IMPORTS BY MEMBER STATE IN 2019 AND % VARIATION 2019/2018

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-016890](#))

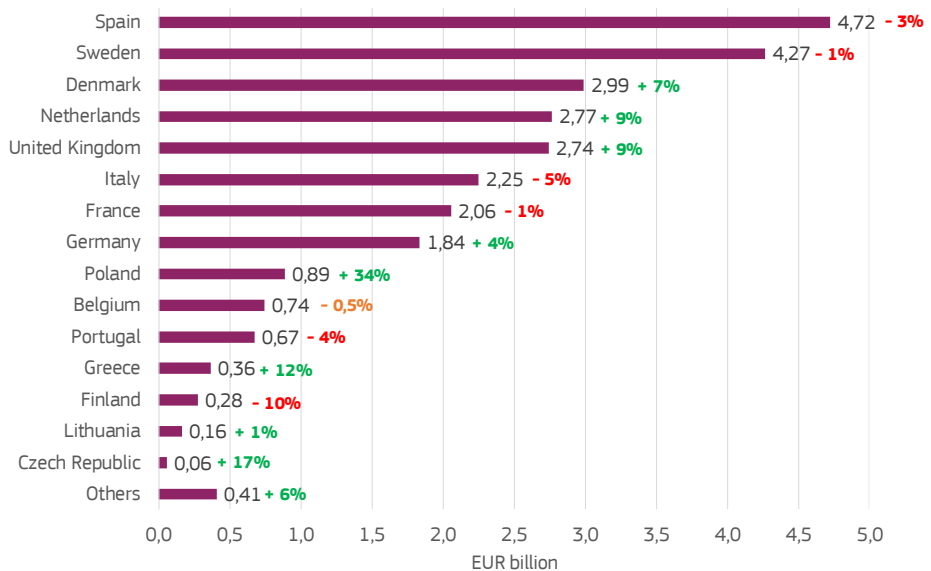
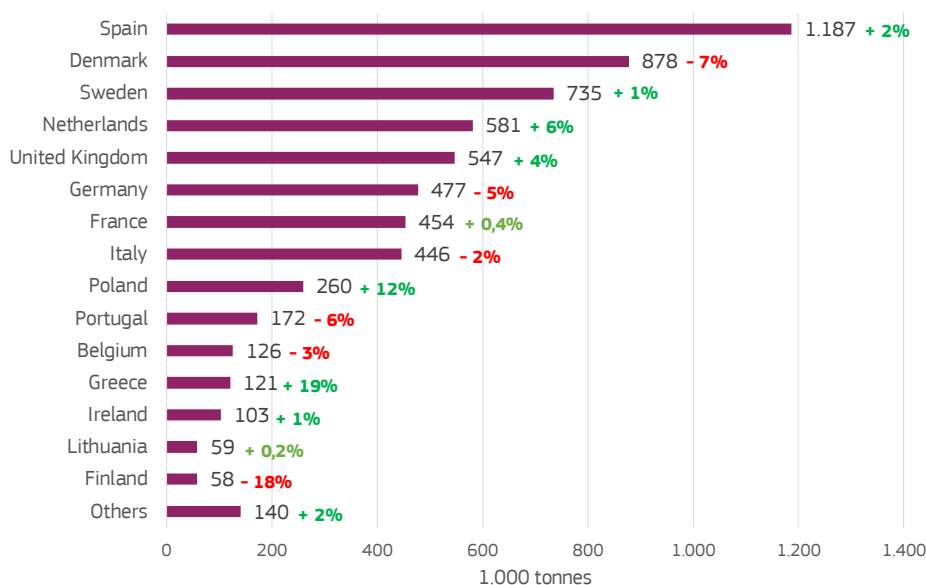


CHART 42**VOLUME OF EXTRA-EU IMPORTS BY MEMBER STATE IN 2019 AND % VARIATION 2019/2018**

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-016890](#))

**4.3.1 ANALYSIS BY MAIN SPECIES****SALMONIDS**

Salmon, the main species imported in the EU, accounted for 15% of total volume of extra-EU imports of fishery and aquaculture products in 2019, and close to one quarter of the total in value terms. Among imports of salmonids, which also include trout and other salmonid species, salmon represents 98% of the total.

SALMON

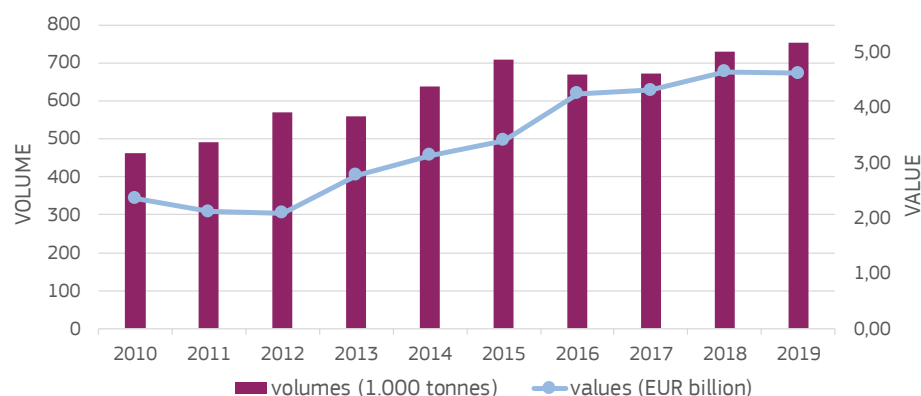
In 2019, salmon imports reached a 10-year peak of 966.220 tonnes and EUR 6,28 billion, marking a 5% increase in volume and a 3% increase in value from 2018.

Imports of salmon mainly consist of fresh whole products originating from Norway, amounting to 753.041 tonnes worth EUR 4,56 billion in 2019, with neighbouring Sweden as the first point of entry.

Over the last 10 years, fresh whole salmon imports from Norway grew at a yearly average of 6% in volume and 8% in value. It is worth mentioning that while from 2010 to 2015 the average import price was around 4,60 EUR/kg, it averaged 6,30 EUR/kg from 2016 to 2019. The increase from 2015 to 2016 was due to the 40.000-tonne drop in imports linked to decreased production due to treatments against sea lice, which led to higher mortalities, poorer growth and lower harvest weights of specimens, and lower harvest volumes. The price increase could be also explained by the slight decrease of harvest volumes from 2015 to 2016 in the UK and Ireland.

CHART 43**FRESH WHOLE SALMON IMPORTED IN THE EU FROM NORWAY**

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-016890](#)). Values are deflated by using the GDP deflator (base=2015).



CRUSTACEANS

In 2019, EU imports of crustaceans reached 632.875 tonnes with a value of EUR 4,74 billion, which represented a slightly decrease from 2018. Shrimps represented close to 90% of total value and 94% of total volume, mostly including warmwater shrimps and miscellaneous shrimps and prawns not related to "*Pandalidae*", "*Crangon*", deep-water rose shrimps "*Parapenaeus longirostris*" and "*Penaeus*".

WARMWATER SHRIMPS

Warmwater shrimps imported in the EU consist of frozen shrimps of the genus *Penaeus*. In 2019, the supply of these species from non-EU countries amounted to 284.270 tonnes and EUR 1,99 billion. This represented an almost stable 1% decrease in volume from 2018 but a 4% decrease in value, due to decreased import prices.

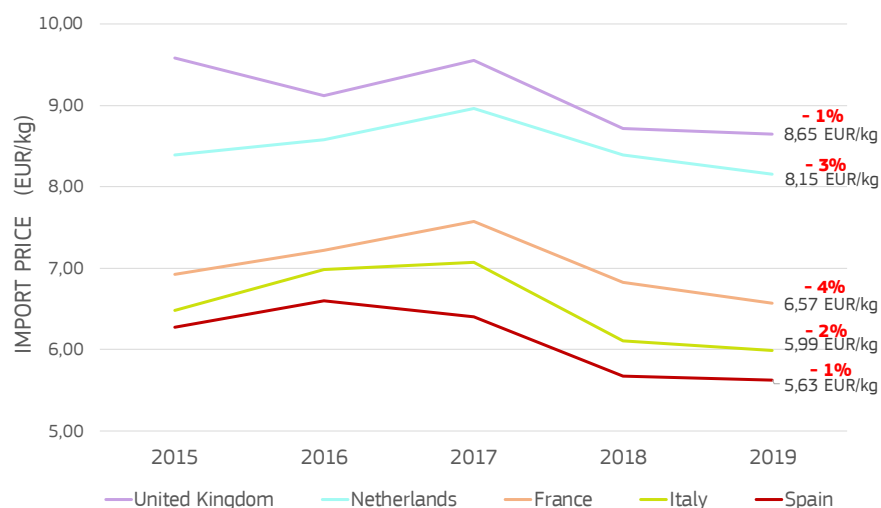
More than one third of EU imports of warmwater shrimps came from Ecuador, followed by Vietnam and India, which together accounted for another 30%. However, shrimps from the two Asian countries were imported at higher prices than those from Ecuador, as Ecuador only produces white leg shrimp (*Penaeus vannamei*), while India and Vietnam also export the higher-valued giant tiger shrimp (*Penaeus monodon*). Decreased import prices were due to the increased share of imports from Ecuador and the different product mix from the main suppliers: most of shrimps exported from Ecuador are head on-shell on (HOSO), while the majority of shrimps exported from India are peeled.

The main destinations for Ecuadorian warmwater shrimps are Spain, France and Italy, while exports from Vietnam and India are mostly destined for the UK, the Netherlands and Belgium. To be noted, however, that Rotterdam (NL) and Antwerp (BE) are important ports for landings of frozen seafood from Far East suppliers. However, these ports act as "hubs" for shrimps arriving in the EU, while the "actual" destinations might be other countries.

CHART 44

NOMINAL IMPORT PRICES OF WARMWATER SHRIMPS IN THE TOP FIVE EU IMPORTERS AND % VARIATIONS 2019/2018

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-016890](#))



MISCELLANEOUS SHRIMPS

In 2019, shrimps and prawns not related to "*Pandalidae*", "*Crangon*", deep-water rose shrimps "*Parapenaeus longirostris*" and "*Penaeus*" imported in the EU totalled 248.351 tonnes and EUR 1,89 billion, a decrease of around 2% from 2018. The downward trend was driven by decreased imports from their three main suppliers, namely Argentina, which covered 30% of total supplies and exported frozen wild-caught red shrimps (*Pleoticus muelleri*), and Vietnam and India, each of which accounted for around 10% of total supplies. The 2019 Vietnamese import prices of 8,52 EUR/kg were highest as they mostly included prepared-preserved products, while shrimps from Argentina and India were imported at 6,06 EUR/kg and 5,66 EUR/kg, respectively. Supplies from Argentina were mainly destined for Spain and Italy, while

Vietnam and India mainly exported to the Netherlands, the UK and Belgium. However, in this case, it should be considered that Rotterdam (NL) and Antwerp (BE) are important ports for frozen seafood from Far East suppliers, so the Netherlands and Belgium might not be the main final destinations.

GROUNDFISH

In 2019, groundfish imported in the EU from third countries totalled 1,32 million tonnes and EUR 5,15 billion. This represented a 2% volume decrease from 2018 but a 12% or EUR 544 million growth of total values, which was driven by imports of cod and Alaska pollock.

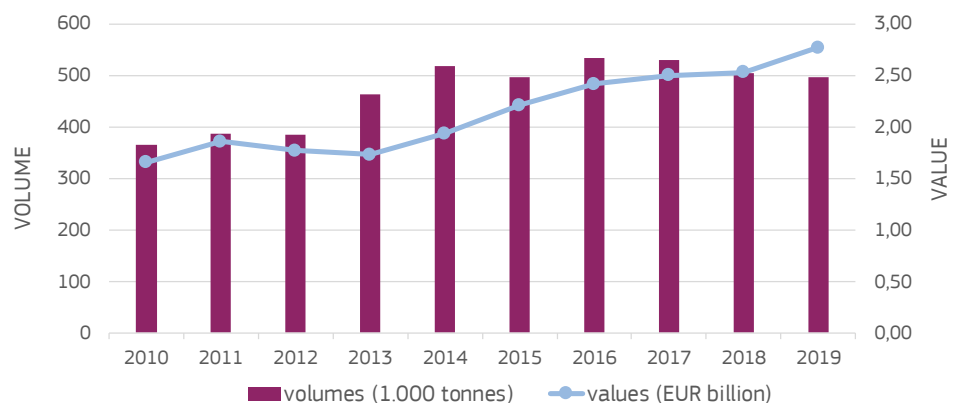
COD From 2018 to 2019, decreased entries from Norway, Iceland and Russia, the top three suppliers, partially offset increased imports from other relevant origins, namely China, the US and the Faroe Islands. Overall, extra-EU imports of cod decreased 2%, from 503.784 tonnes to 495.887 tonnes, but their average import price increased 13%, reaching a 10-year high of 5,63 EUR/kg. At the same time, the total value of cod imports also reached a 10-year high, increasing 11%, from EUR 2,51 billion to EUR 2,79 billion. Both the increase in price in real terms, and the 10-year peak were observed for all main countries of origin, apart from the US.

While imports from Russia, China, the US and the Faroe Islands largely include frozen products, those coming from Norway and Iceland are more diversified, comprising similar shares of fresh and frozen products, as well as salted and dried products.

The first point of entry of extra-EU imports of cod, the Netherlands received one quarter of the total in 2019, mainly from Iceland and, to a lesser extent, from Norway and Russia. The UK extra-EU imports of cod were second to the Netherlands, with 17% of the total, mainly from China and Iceland. Denmark and Sweden were next, each with 14% of the total and both mostly receiving cod from Norway.

CHART 45

COD IMPORTED IN THE EU
 Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-016890](#)). Values are deflated by using the GDP deflator (base=2015).



ALASKA POLLOCK More than half of EU imports of Alaska pollock comes from China, and close to one third of the total comes from the US. From 2018 to 2019, supplies from China increased by 9%, reaching 164.553 tonnes, and the average import price touched a 10-year peak at 2,64 EUR/kg, thus generating a peak in terms of total value. For both countries, Germany is the main EU destination. Indeed, the overall trend was driven by the entries in Germany coming from China increasing 11% in volume to 82.302 tonnes and increasing 26% in value to 2,63 EUR/kg, thus totalling EUR 216 million. US supplies to Germany, on the other hand, decreased by 4% to 36.578 tonnes, while their price grew 30% to a 10-year peak of 2,89 EUR/kg.

TUNA AND TUNA-LIKE SPECIES

Tunas imported in the EU in 2019 amounted to 787.613 tonnes worth EUR 3,17 billion. This consisted almost entirely of processed products, of which 72% was canned and 28% was frozen. In terms of species, skipjack tuna accounted for more than half of EU imports of tuna, followed at distance by yellowfin tuna.

SKIPJACK TUNA Almost all skipjack tuna is imported as prepared-preserved products. Ecuador is the main supplier, shipping 128.587 tonnes in 2019, followed by the Philippines which shipped 51.686 tonnes, and Mauritius which shipped 40.113 tonnes. These include tuna caught by the EU fleet, landed in these countries for processing and then re-imported in the EU.

EU imports of prepared-preserved skipjack tuna have been increasing since 2015 from all the three main origins in both volume and value terms.

Spain, the main recipient of imports from Ecuador, received 46.378 tonnes in 2019, 59% or 17.182 tonnes more than in 2018, at an average price of 3,84 EUR/kg. Thanks to such a boost in volume, and despite a 12% decrease in price, the total value of these flows grew by 41% from 2018 to 2019 to reach EUR 178 million.

The UK, the main destination of supplies from Mauritius, imported 14.249 tonnes in 2019 with a price of 4,20 EUR/kg, which was comparable in both volume and value to 2018. Supplies from the Philippines are mainly destined for Germany, which imported 19.880 tonnes in 2019 at 3,48 EUR/kg, which represented 25% volume growth from 2018 and, as the price remained almost unchanged, a 22% growth in value.

NON-FOOD USE PRODUCTS

Extra-EU imports of non-food use products in 2019 totalled 833.348 tonnes, with a value of more than EUR 1 billion. These products include fishmeal, fish oil and other products (mainly fish waste and seaweed) not destined for human consumption. Fishmeal accounted for almost half of their value.

FISHMEAL In 2019, the EU imported 309.885 tonnes of fishmeal, marking a 15% volume increase from 2018. As for value, it showed a 23% increase, achieving a 5-year peak of EUR 438 million. The increase was mainly due to the average import price, increasing 7% from 2018, reaching 1.414 EUR/tonne.

The supply of fishmeal to the EU is diversified in terms of origin. Norway, which supplied 72.566 tonnes with a value of EUR 114 million, accounted for around one quarter of the 2019 total. Peru, with 41.227 tonnes worth EUR 58 million, and Morocco, with 39.522 tonnes worth EUR 46 million, each accounted for 13% of the total. Chile, South Africa, the US, Mauritania and Iceland followed, each accounting for 7–9% of the total. Compared with 2018, imports increased from all main origins.

Fishmeal from Iceland had the highest import price, reaching 1.614 EUR/tonne, for a 14% increase from 2018. It was followed by Norway, with 1.565 EUR/tonne representing an 8% increase. Morocco registered the lowest increase, although its 1.153 EUR/tonne price still represented a 6% increase. The top-fishmeal entry point in the EU market is Germany, which is mainly supplied by Peru and Morocco. It is a major entry point primarily due to the logistics, including its harbour with overseas routes and trading traditions. Germany is also a hub for the further distribution of fishmeal, primarily for the aquafeed segment. The UK and Denmark rank second and third as entry points for fishmeal. The UK, mostly supplied by Norway, uses its fishmeal for salmon farming, while Denmark, mainly supplied by Norway and South Africa, is an important dealer of animal feed.

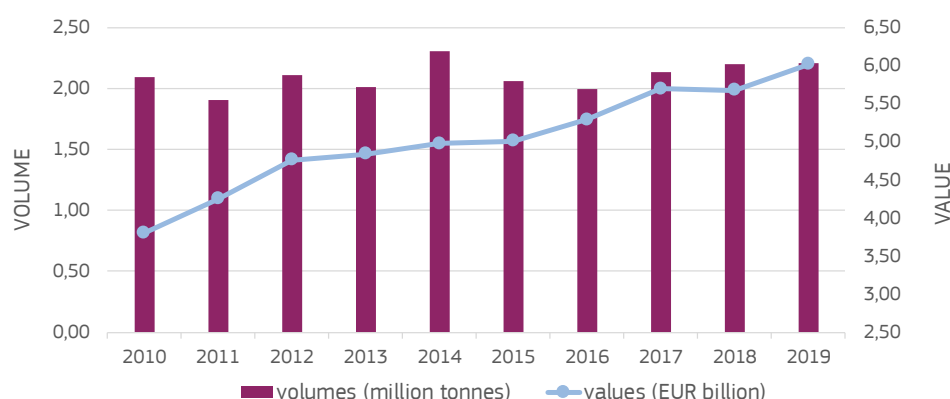
4.4 EXTRA-EU EXPORTS

In 2019, extra-EU exports of fishery and aquaculture products reached a 5-year peak of 2,21 million tonnes, and showed a growth of 145.976 tonnes or 7% with respect to 2015. If compared with 10 years before, thanks to a 6% increase, it grew by 115.275 tonnes. From 2018 to 2019, the increase was negligible.

In value terms, extra-EU exports achieved a 10-year high at EUR 6,17 billion. This was EUR 435 million or 8% more than in 2018, and 58% higher if compared with 10 years before, in real terms.

CHART 46
EXTRA-EU EXPORTS OF
FISHERY AND
AQUACULTURE
PRODUCTS

Source: EUMOFA elaboration of
Eurostat-COMEXT data
(online data code: [DS-016890](#)).
Values are deflated by using the
GDP deflator (base=2015).



The EU mainly exports herring, blue whiting, skipjack tuna, mackerel, non-food use products and salmon. Of these, salmon accounts for half of the overall value increase from 2018 to 2019. Other high-valued species exported by the EU are cod and Greenland halibut.

Nigeria is the main market for EU exports of mackerel, blue whiting and herring, the latter also having Egypt among main destinations. Fish oil and fishmeal are mostly exported to Norway, the United States is the most important destination for salmon, while exports of cod and Greenland halibut are mainly destined for China. As for tuna, exports prevalently comprise tunas caught in remote places by the Spanish fleet (close to the fishing areas of Ecuador, Mauritius, Seychelles and Mexico) and French fleet (close to the fishing areas of Seychelles, Côte d'Ivoire, Mauritius and Ghana), for being processed there, and then imported in the EU as prepared-preserved products or frozen loins. In both cases, these landings are also recorded as exports.

CHART 47
TOP EXTRA-EU
COUNTRIES OF
DESTINATION IN 2019
(IN VALUE)

Source: EUMOFA elaboration of
Eurostat-COMEXT data
(online data code: [DS-016890](#))

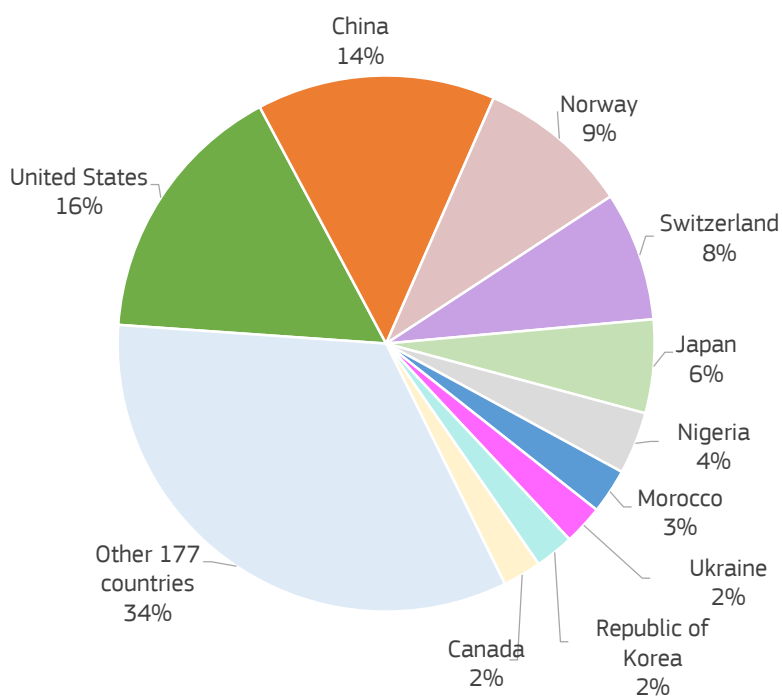


CHART 48
TOP EXTRA-EU
COUNTRIES OF
DESTINATION IN 2019
(IN VOLUME)

Source: EUMOFA elaboration of
Eurostat-COMEXT data
(online data code: [DS-016890](#))

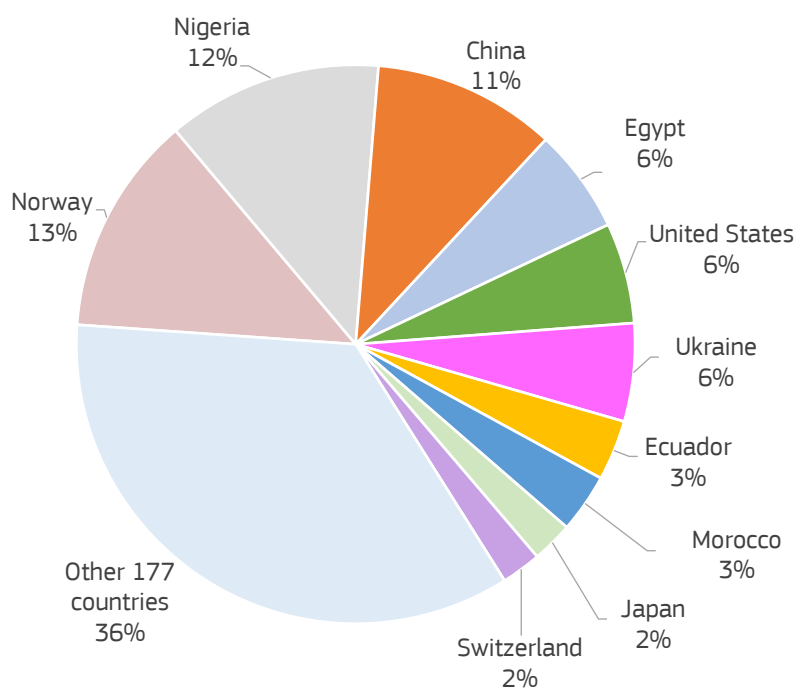
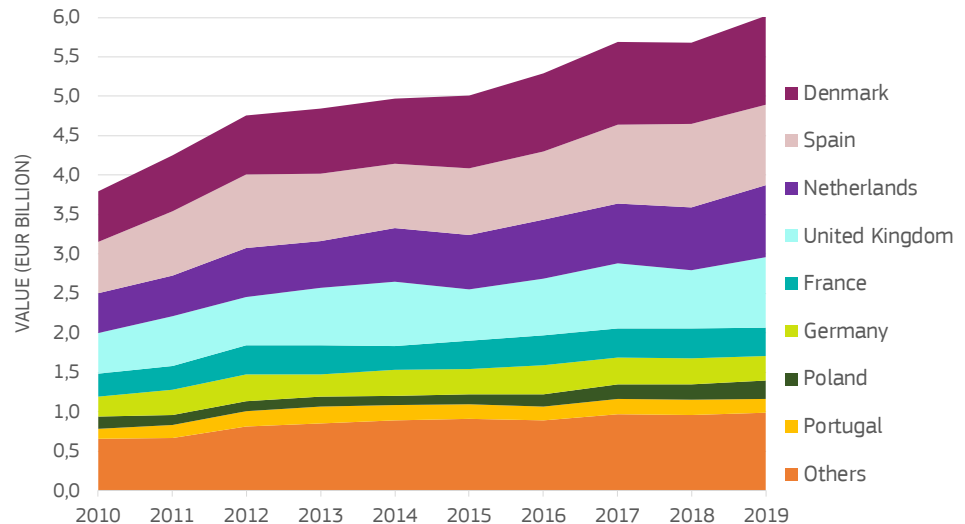
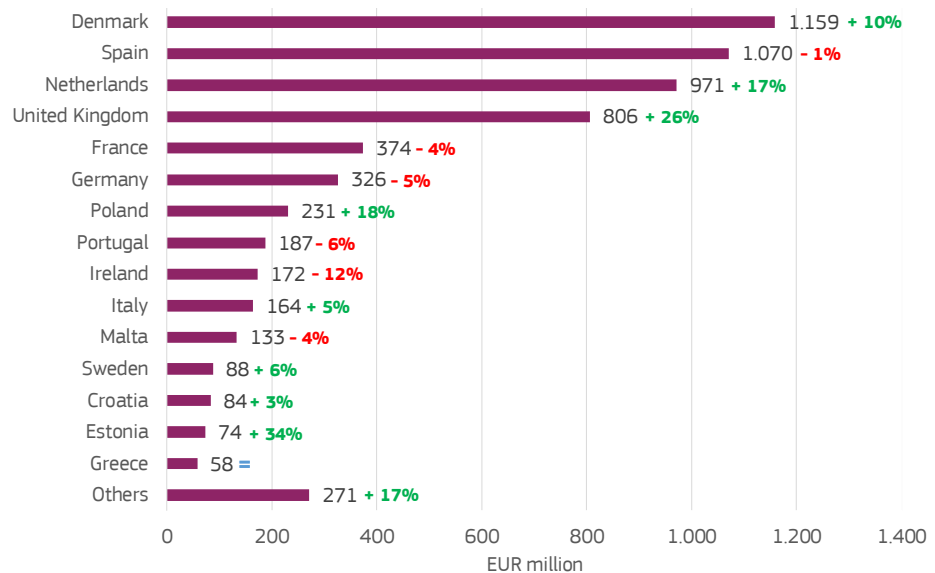


CHART 49**VALUE OF EXTRA-EU EXPORTS PER MEMBER STATE (EUR BILLION)**

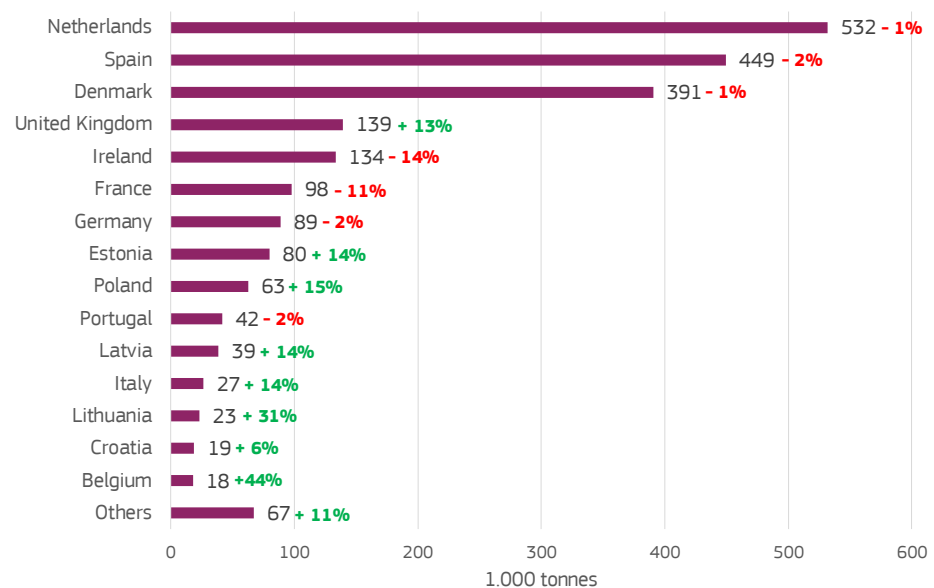
Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-016890](#)). Values are deflated by using the GDP deflator (base=2015).

**CHART 50****NOMINAL VALUE OF EXTRA-EU EXPORTS BY MEMBER STATE IN 2019 AND % VARIATION 2019/2018**

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-016890](#)).

**CHART 51****VOLUME OF EXTRA-EU EXPORTS BY MEMBER STATE IN 2019 AND % VARIATION 2019/2018**

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-016890](#)).



4.4.1 ANALYSIS BY MAIN SPECIES

SALMONIDS

Salmon is by far the most valued species exported by the EU. Among exports of salmonids, which also include trout and other salmonid species, it represents close to 90% of the total.

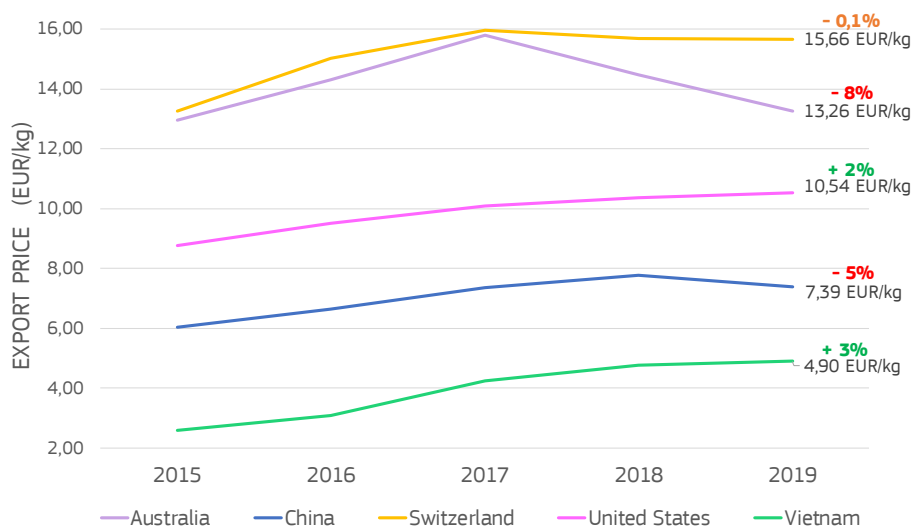
SALMON

Extra-EU exports of salmon achieved a 10-year peak in 2019 at 121.310 tonnes and EUR 1,12 billion. With respect to 2018, they grew by around 20% in both volume and value, corresponding to an increase of almost 20.000 tonnes and EUR 205 million. If compared with 10 years before, exports increased by over 50.000 tonnes and their value grew by over EUR 680 million in real terms. The UK drove the overall trend, largely exporting fresh salmon (49.077 tonnes sold at 8,96 EUR/kg in 2019). Other relevant EU exporters of salmon are Denmark, Poland, the Netherlands, Germany and France (all exporting salmon of foreign origin).

Chart 52 show the five-year trend of the average price of salmon exported to main extra-EU destinations.

CHART 52
NOMINAL EXPORT PRICES
OF SALMON TO TOP-5
EXTRA-EU DESTINATIONS
AND % VARIATIONS
2019/2018

Source: EUMOFA elaboration of
Eurostat-COMEXT data
(online data code: [DS-016890](#))



Exports to the United States and China mainly originate from the UK and predominantly include fresh products. Further, the Netherlands is also an important supplier to the US of both smoked and fresh salmon fillets. Exports to Australia mainly originate from Denmark and Poland and include frozen and smoked products. Poland is also the main supplier of salmon to Vietnam, providing mainly frozen products. Switzerland is the main market for exports of smoked salmon from Germany and of fresh salmon from France and Denmark.

SMALL PELAGICS

In 2019, EU exports of small pelagics to third countries amounted to 590.078 tonnes and EUR 740 million. Two main commercial species in this group, namely mackerel and herring, accounted for almost 20% of the total volume of fishery and aquaculture products exported by the EU.

MACKEREL

After the 2014 peak of nearly 592.000 tonnes, EU catches of Atlantic mackerel started to decline, as did landings in EU Member States. Accordingly, extra-EU exports also declined, dropping to 145.216 tonnes in 2019.

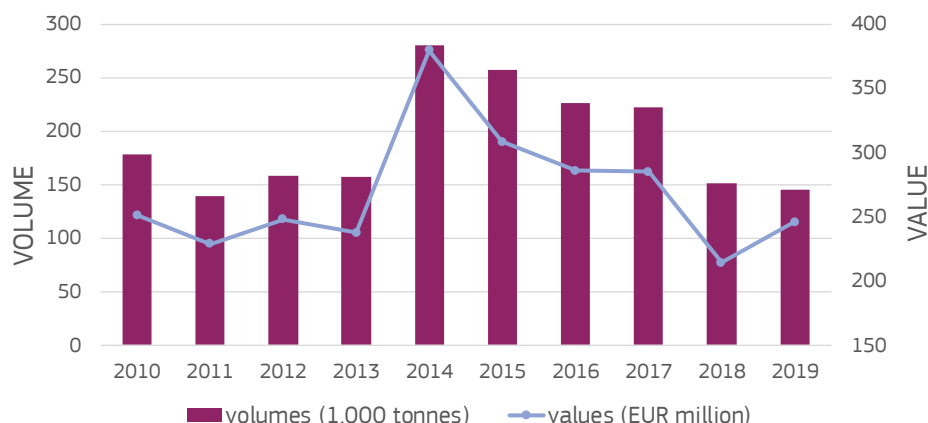
Compared with 2018, against a 4%-volume decrease, total values grew by 15%, rising from EUR 217 million to EUR 253 million, thanks to a 22% price increase which reached a 10-year peak of 1,74 EUR/kg. This value growth was driven by increased exports

from the Netherlands and Ireland to Nigeria, combined with increases registered by exports from Denmark and Sweden to Norway, which compensated for decreased exports to Egypt.

CHART 53

**MACKEREL EXPORTED
FROM THE EU TO THIRD
COUNTRIES**

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-016890](#)). Values are deflated by using the GDP deflator (base=2015).



HERRING

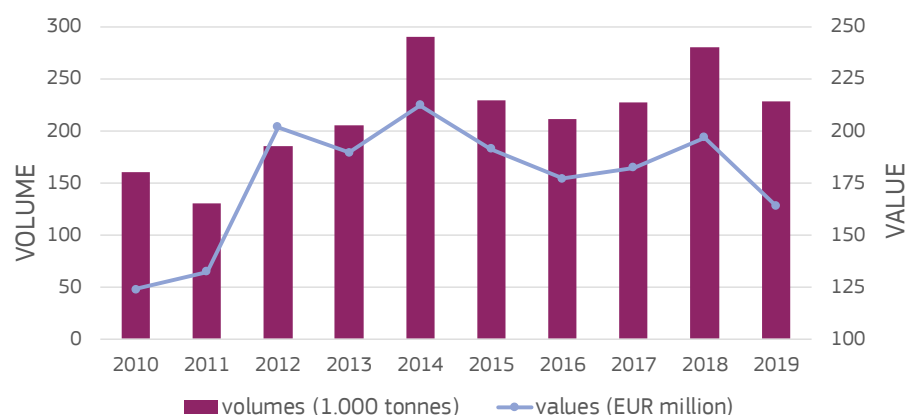
From 2018 to 2019, extra-EU exports of herring fell by 18%, decreasing by over 50,000 tonnes to 228,378 tonnes. Although there was a slight 5% increase in the export price at 0,76 EUR/kg, herring value dropped 14% to EUR 174 million, the lowest value since 2012.

Dutch exports to Nigeria were the major contributors to the downward trend: in 2019, they totalled 70,116 tonnes, 41% less than 2018, and sold at 0,80 EUR/kg, which was a 10% increase, but the total value dropped 35% to EUR 57 million.

CHART 54

**HERRING EXPORTED
FROM THE EU TO THIRD
COUNTRIES**

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-016890](#)). Values are deflated by using the GDP deflator (base=2015).



GROUNDFISH

In 2019, extra-EU exports of groundfish totalled 359,898 tonnes and EUR 606 million. Cod and blue whiting accounted for 75% of the total in volume, and 70% of the value.

COD

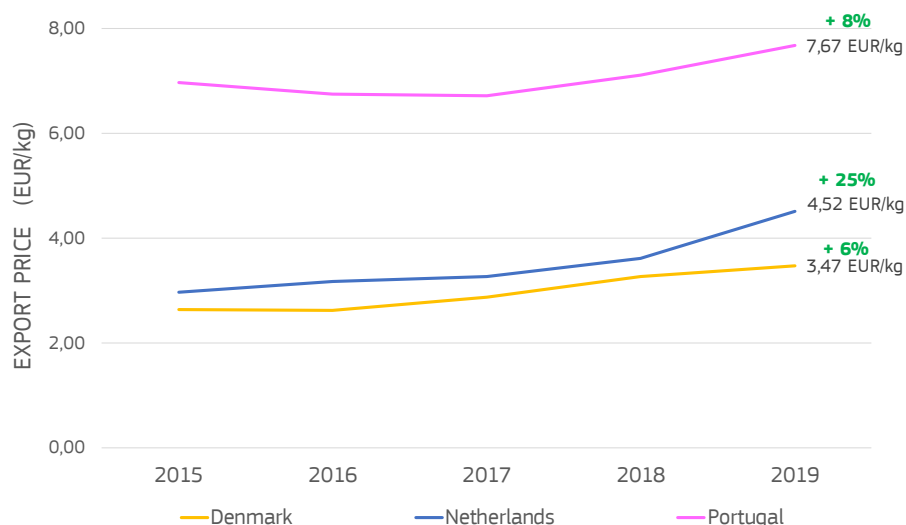
The total value of extra-EU exports of cod has been following an upward trend for the last decade. With a 19% increase from 2018 to 2019, cod exports achieved a 10-year peak of EUR 299 million, which was more than twice the value registered ten years before. In volume terms, they reached 59,543 tonnes, for an 8% increase from 2018 and the second highest amount of the decade.

The main EU exporter of cod was the Netherlands, which exported 24,242 tonnes in 2019, 32% more than in 2018. Other major 2019 exporters were Denmark, with 11,240 tonnes that represented a 17% decrease from 2018, and Portugal, with 10,970 tonnes for a 1% increase. While exports from the Netherlands and Denmark have China as their main destination, exports from Portugal are mainly destined for Brazil. Frozen

products prevail but, in addition, Portugal also exports significant amounts of dried and salted cod.

CHART 55
NOMINAL EXPORT PRICES
OF COD FROM MAIN EU
EXPORTERS AND %
VARIATIONS 2019/2018

Source: EUMOFA elaboration of
Eurostat-COMEXT data
(online data code: [DS-016890](#))



BLUE WHITING

In 2019, extra-EU exports of blue whiting reached a 10-year peak of 211.696 tonnes and EUR 124 million, thanks to a 26.196 tonnes or 14% increase in volume and a EUR 23 million or 22% increase in value from 2018. With respect to 10 years ago, volumes almost doubled and value increased by nearly 70% in real terms.

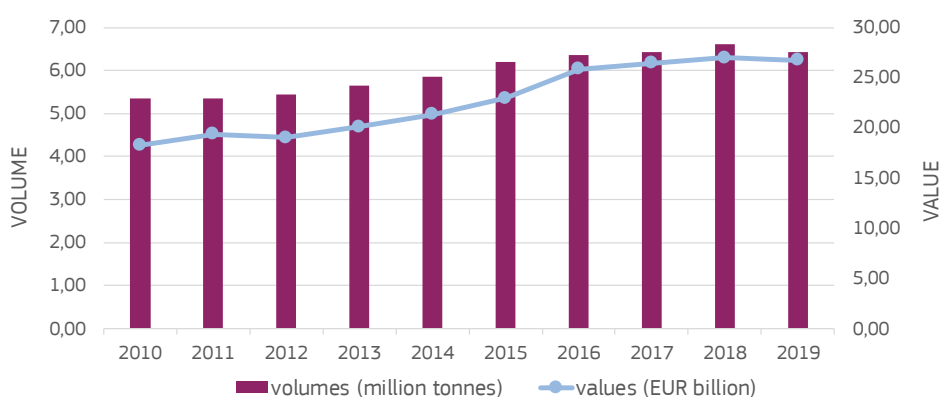
Over four-fifths of total extra-EU exports of blue whiting originate from the Netherlands: in 2019, this corresponded to 176.403 tonnes worth EUR 106 million. They mainly comprised frozen products destined for Nigeria, sold at an average price of 0,63 EUR/kg which was 15% higher than 2018.

4.5 INTRA-EU TRADE

In 2019, intra-EU trade⁶⁰ amounted to 6,43 million tonnes and EUR 27,41 billion. From 2018, this marked a 3% volume decrease of 170.380 tonnes, while value increased by 0,3% (+EUR 85 million).

CHART 56
INTRA-EU TRADE OF
FISHERY AND
AQUACULTURE
PRODUCTS

Source: EUMOFA elaboration of
Eurostat-COMEXT data
(online data code: [DS-016890](#)).
Values are deflated by using the
GDP deflator (base=2015).



⁶⁰ 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.

The 15 flows with the highest value at country and main commercial species level in 2019 are shown in Chart 57. To be noted, they almost exclusively concern exports of salmon from northern Member States (main entry points of Norwegian products) to other EU countries⁶¹.

CHART 57
TOP-15 FLOWS OF
FISHERY AND
AQUACULTURE
PRODUCTS WITHIN THE
EU IN 2019
(IN NOMINAL VALUE)
Source: EUMOFA elaboration of
Eurostat-COMEXT data
(online data code: [DS-016890](#))

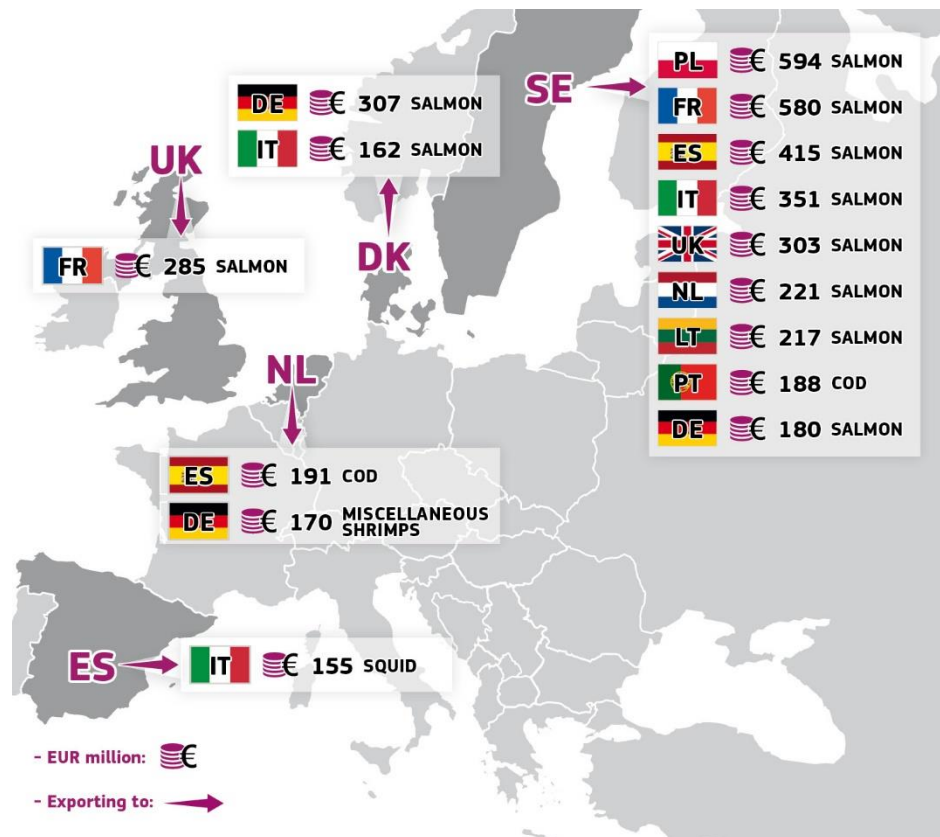
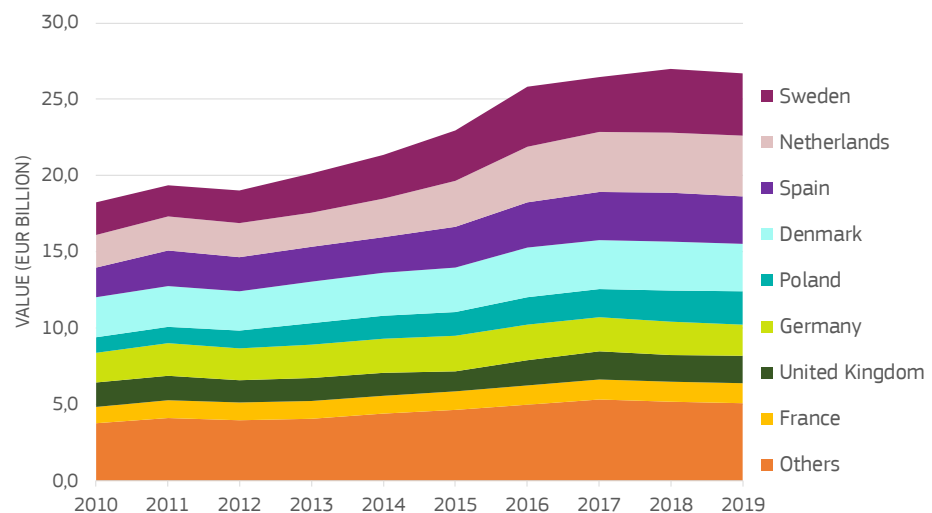


CHART 58
VALUE OF INTRA-EU
EXPORTS
PER MEMBER STATE
(EUR BILLION)
Source: EUMOFA elaboration of
Eurostat-COMEXT data
(online data code: [DS-016890](#)).
Values are deflated by using the
GDP deflator (base=2015).

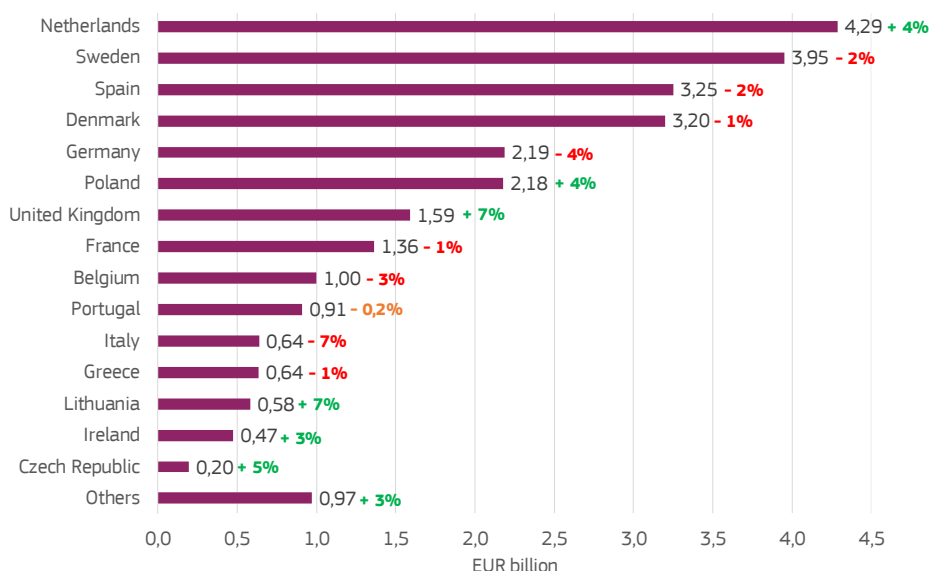


⁶¹ It has to be underlined that despite "exports" are reported as such by Eurostat-COMEXT according to flows recorded by national customs, in most cases the northern EU Member States are not the actual exporters but rather countries through which products are transported.

CHART 59

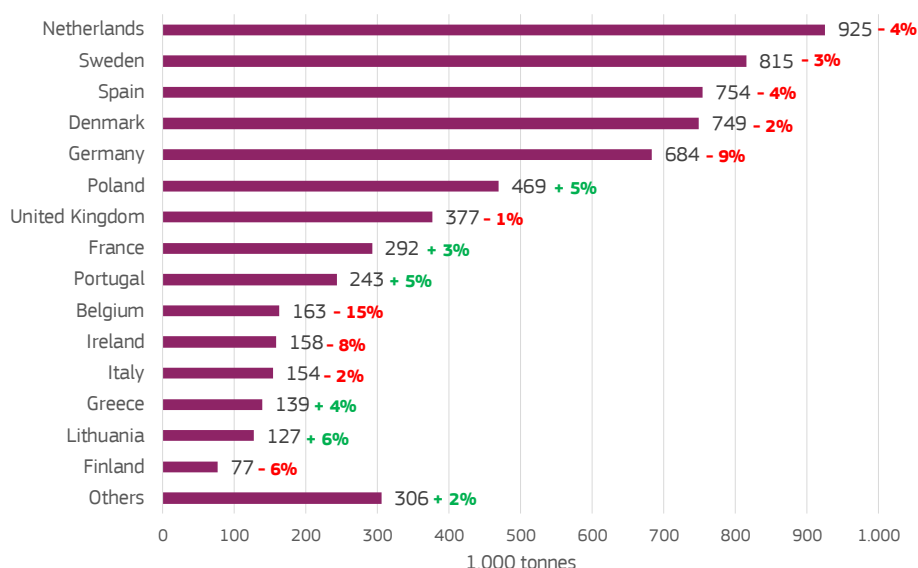
**NOMINAL VALUE OF
INTRA-EU EXPORTS BY
MEMBER STATE IN 2019
AND % VARIATION
2019/2018**

Source: EUMOFA elaboration of
Eurostat-COMEXT data
(online data code: [DS-016890](#))

**CHART 60**

**VOLUME OF INTRA-EU
TRADE BY MEMBER STATE
IN 2019 AND %
VARIATION 2019/2018**

Source: EUMOFA elaboration of
Eurostat-COMEXT data
(online data code: [DS-016890](#))



4.5.1 ANALYSIS BY MAIN SPECIES

SALMONIDS

Exports of salmon prevail in the intra-EU trade of fishery and aquaculture products⁶². In 2019, they totalled almost 1 million tonnes and EUR 7,87 billion, accounting for 15% of total volume and 30% of total value. Among salmonids, which also include trout and other salmonid species, salmon represents 91% of the total in volume and 94% of the total in value.

SALMON

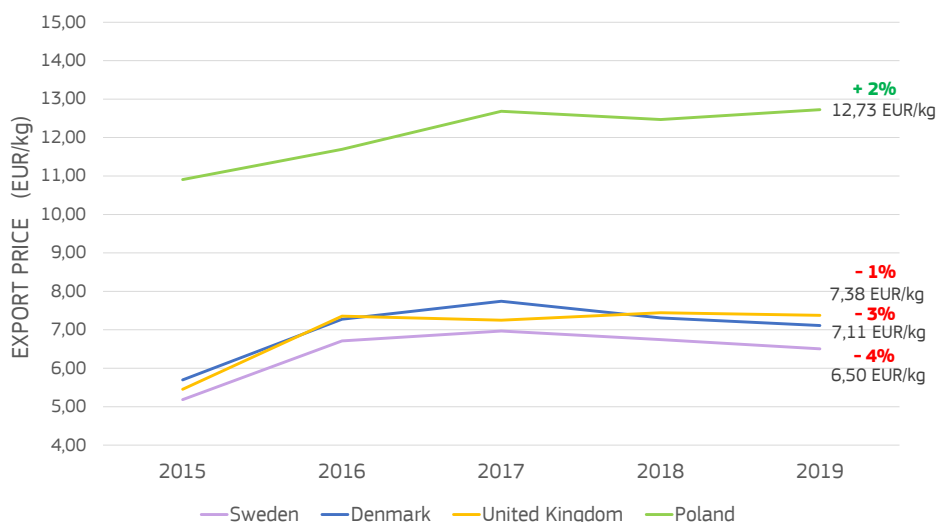
In 2019, more than four fifths of the 996.706 tonnes of intra-EU exports of salmon was traded by four countries according to Eurostat-COMEXT: Sweden, with 505.628 tonnes, accounted for half, Denmark's 161.913 tonnes accounted for 16%, Poland's 95.977 tonnes was 10%, and the UK, with 63.295 tonnes, accounted for 6%. Since Poland has a thriving smoking industry, which is mainly fed by salmon from Norway, its exports mainly include smoked products and, to a lesser extent, fresh products. Exports from other Member States, on the other hand, consist almost entirely of fresh products. From 2018 to 2019, the volume of intra-EU exports of salmon remained

⁶² *Ibidem*.

almost flat for all EU Member States, except for the UK, where it rose by 24% or 12.310 tonnes. Sweden and Denmark recorded slight decreases in value, of 2% and 3%, respectively, reaching EUR 3,26 billion in Sweden and EUR 1,15 billion in Denmark. Exports from Poland grew by 4% to reach EUR 1,22 billion, and those from the UK rose by 23% to reach EUR 467 million, both of which represented 5-year peaks.

CHART 61
NOMINAL PRICES OF
SALMON IN THE INTRA-EU
TRADE BY THE TOP
EXPORTERS AND
% VARIATIONS
2019/2018

Source: EUMOFA elaboration of
Eurostat-COMEXT data
(online data code: [DS-016890](#))



GROUND FISH

In 2019, groundfish traded in the EU reached a 10-year value peak of EUR 3,78 billion, an increase of 4% from 2018. However its volume of 914.138 tonnes was 8% less than in 2018.

COD

Cod is by far the main groundfish species and the second most valued species among all fishery and aquaculture products traded in the EU⁶³. In 2019, 393.311 tonnes of cod with a total value of EUR 2,29 billion were exchanged, representing a 18% volume decrease and a 3% value increase compared with 2018.

Two thirds of the total was traded by the Netherlands, which amounted to 143.270 tonnes worth EUR 705 million. With respect to 2018, this marked a 54.359 tonne or 28% drop against a sharp 52% price increase from 3,24 EUR/kg to 4,92 EUR/kg. This caused total value to rise by EUR 65 million and reach EUR 705 million, a 10% increase from 2018 and a 10-year high. Spain is the main EU market for Dutch exports of cod, mainly for frozen products.

Denmark and Sweden follow as main cod traders. In 2019, they exported 73.021 tonnes and 56.851 tonnes respectively, which represented decreases of 12% and 16% from 2018. Although prices of Danish exports grew by 10% from 5,73 EUR/kg to 6,31 EUR/kg, and prices of Swedish exports grew by 16% from 5,45 EUR/kg to 6,34 EUR/kg, both countries experienced a decline in terms of total value, with Denmark decreasing 4% and Sweden decreasing by 2%. France and the Netherlands are the main EU markets for Danish exports of cod, mainly fresh, while cod from Sweden is mainly destined for Portugal and sold mainly dried and salted.

⁶³ Ibidem.

5/ LANDINGS IN THE EU

5.1 OVERVIEW

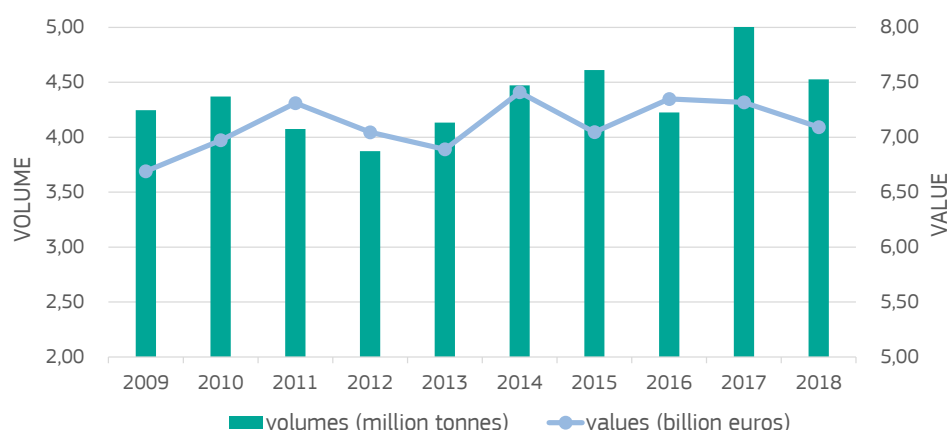
TOTAL EU

Data on landings in the EU⁶⁴ cover the initial unloading of any fisheries products from a fishing vessel in any of the EU Member States. This includes landings of species not destined for human consumption and seaweed. The data analysed in this report refer to products landed by vessels of EU Member States, Iceland, Norway and the UK.⁶⁵

In 2018, landings in the EU totalled 4,53 million tonnes, with a total value of EUR 7,13 billion. Compared with 2017, this amounted to an 11% or 563.588-tonne decrease in volume, and a 3% or EUR 225 million decrease in value. With respect to 2009,⁶⁶ the volume of 2018 landings was 7% or 280.956 tonnes higher, and the value, in real terms, was 6% or EUR 403 million higher.

CHART 62
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).



From 2017 to 2018, landings of several of the most landed main commercial species in the EU increased, as can be seen from chart 63.

Despite increased landings of several main commercial species in the EU, the drop of sandeel landings in Denmark drove the overall decrease from 2017 to 2018.

In particular, landings of frozen skipjack tuna and fresh scallop saw significant increases in both volume and value, due to increased tuna landings in Spain and scallop landings France.

As concerns skipjack tuna, it should also be noted that EU catches in the Atlantic represent less than half of total landing volume, as a major share of skipjack landings are caught in the Indian and Pacific Oceans and then landed in the EU, where they are often processed into canned products.

Despite such increases, total landings in the EU decreased, a trend mainly driven by lower landings of sandeels destined for industrial use in Denmark – the same species

⁶⁴ In line with the approach adopted by EUMOFA following BREXIT, the United Kingdom is considered part of the EU till 2019 and its data until that year are available in all tables, charts and analyses at EU level. In addition, EU data include Croatia since 2013, date of the EU's enlargement to this country.

⁶⁵ Data regarding landings do not refer to landlocked EU Member States, namely the Czech Republic, Luxembourg, Hungary, Austria and Slovakia. As for Denmark, the analyses in this chapter are not detailed by vessel nationality, as this information is confidential within EUROSTAT.

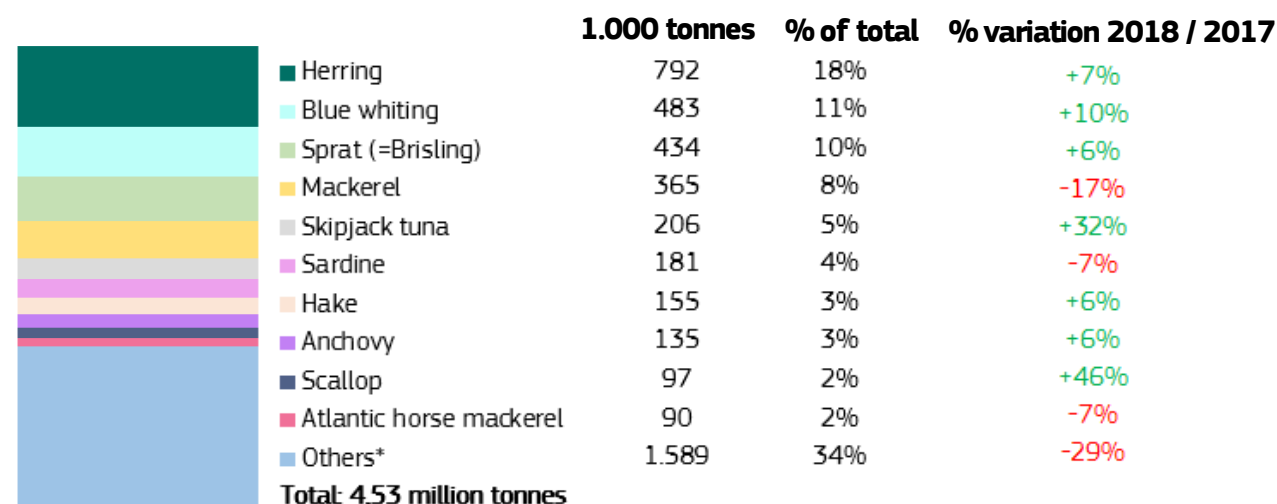
⁶⁶ In this report, value and price variations for periods longer than 5 years are analysed by deflating values using the GDP deflator (base=2015); for shorter periods, nominal value and price variations are analysed.

that contributed to a boost recorded one year before, from 2016 to 2017. Landings of these species had risen from 45.944 tonnes and EUR 16 million in 2016, to 402.030 tonnes and EUR 62 million in 2017, and then dropped to 195.777 tonnes and EUR 44 million in 2018. It also should be noted that within EUMOFA, sandeel does not constitute a “main commercial species” but falls other the aggregation “other groundfish”⁶⁷.

CHART 63

MOST IMPORTANT MAIN COMMERCIAL SPECIES LANDED IN THE EU VOLUME IN 2018, % OF TOTAL AND % VARIATIONS 2018 / 2017

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.

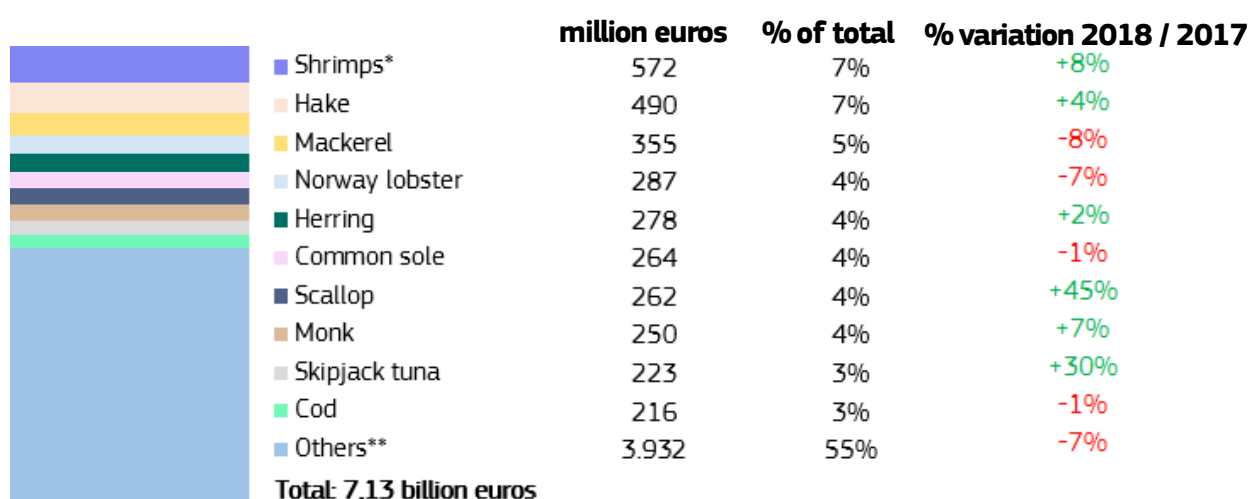


*Others largely include the EUMOFA aggregation “other groundfish” – mainly comprising sandeels that covered alone 4% of total volumes landed.

CHART 64

MOST IMPORTANT MAIN COMMERCIAL SPECIES LANDED IN THE EU NOMINAL VALUE IN 2018, % OF TOTAL AND % VARIATIONS 2018 / 2017

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.



* “Shrimps” includes *Crangon* spp., coldwater shrimps, deep-water rose shrimps, warmwater shrimps and miscellaneous shrimps.

**Among other main commercial species, the ones with the highest landing value in 2018 were squid, anchovy, octopus and blue whiting, each covering 3% of the total

⁶⁷ The correlation table used for harmonizing data on fish species landed in the EU to the EUMOFA standards is available at the link http://www.eumofa.eu/documents/20178/24415/Metadata+2+-+DM+-+Annex+3+Corr+of+MCS_CG_ERS.PDF/1615c124-b21b-4bff-880d-a1057f88563d.

TABLE 20
AVERAGE NOMINAL
PRICES AT LANDING
STAGE OF TOP-20 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.

Main commercial species	2014	2015	2016	2017	2018	2018/2017	2018/2014
Anchovy	1,74	1,55	1,68	1,67	1,50	-10%	-14%
Atlantic horse mackerel	0,69	0,77	0,77	0,88	0,96	+8%	+39%
Blue whiting	0,31	0,35	0,34	0,23	0,27	+17%	-13%
Clam	2,55	2,41	2,96	3,18	2,84	-11%	+11%
Cod	2,22	2,34	2,47	2,69	3,18	+18%	+43%
Common sole	9,83	10,90	11,60	11,31	12,03	+6%	+22%
Cuttlefish	4,92	4,50	5,30	5,93	6,82	+15%	+39%
Hake	3,60	3,28	3,22	3,23	3,16	-2%	-12%
Herring	0,33	0,40	0,53	0,37	0,35	-4%	+6%
Mackerel	0,88	0,77	0,89	0,88	0,97	+11%	+10%
Monk	5,08	5,07	4,91	4,62	5,44	+18%	+7%
Norway lobster	7,95	8,38	8,35	7,72	8,15	+6%	+3%
Octopus	4,54	5,07	5,33	5,98	6,96	+16%	+53%
Sardine	0,99	0,94	0,82	0,81	0,93	+15%	-6%
Scallop	2,19	2,52	2,66	2,71	2,69	-1%	+23%
Shrimp <i>Crangon</i> spp.	3,57	3,63	7,28	7,69	3,78	-51%	+6%
Skipjack tuna	1,15	0,99	1,02	1,11	1,08	-2%	-6%
Sprat (=Brisling)	0,24	0,25	0,27	0,20	0,22	+12%	-8%
Squid	5,44	3,60	5,33	4,42	5,53	+25%	+2%
Yellowfin tuna	2,19	3,26	4,11	4,09	1,93	-53%	-12%

BY MEMBER STATE

In 2018, the highest landed volumes were recorded in Denmark, where almost all sandeel landings take place, and in Spain, where landings mainly consisted of skipjack tuna. Landings in Spain also registered the highest value, mainly due to hake and both skipjack and yellowfin tuna.

With respect to changes from 2017, the most relevant volume increases were registered by the Netherlands, which showed growth of 7% or 36.722 tonnes, due to herring and blue whiting, and France, which increased 9% or 27.610 tonnes, due to scallop. As for volume decreases, the highest were registered by Denmark, which

dropped 32% or 517.740 tonnes, due to sandeels, and Germany, which dropped 35% or 56.670 tonnes, mostly due to blue whiting.

As for value changes, France registered a noticeable 7% or EUR 63 million value increase, again for scallop, while Spain recorded a significant 10% value decrease, dropping by almost EUR 220 million, due to yellowfin and bigeye tuna.

It is also worth noting that landings in Malta increased a remarkable 55% or 1.135 tonnes in volume and 38% or EUR 3 million in value, due to mackerel.

CHART 65
VOLUMES OF LANDED
PRODUCTS IN MAIN EU
COUNTRIES IN 2018
AND % VARIATIONS
2018/2017

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.

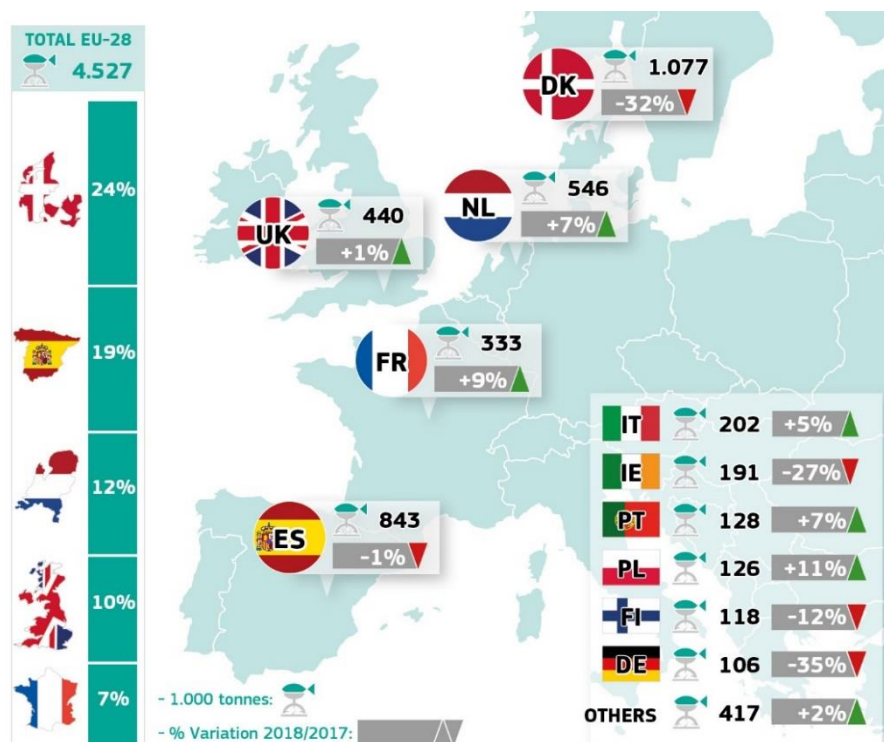
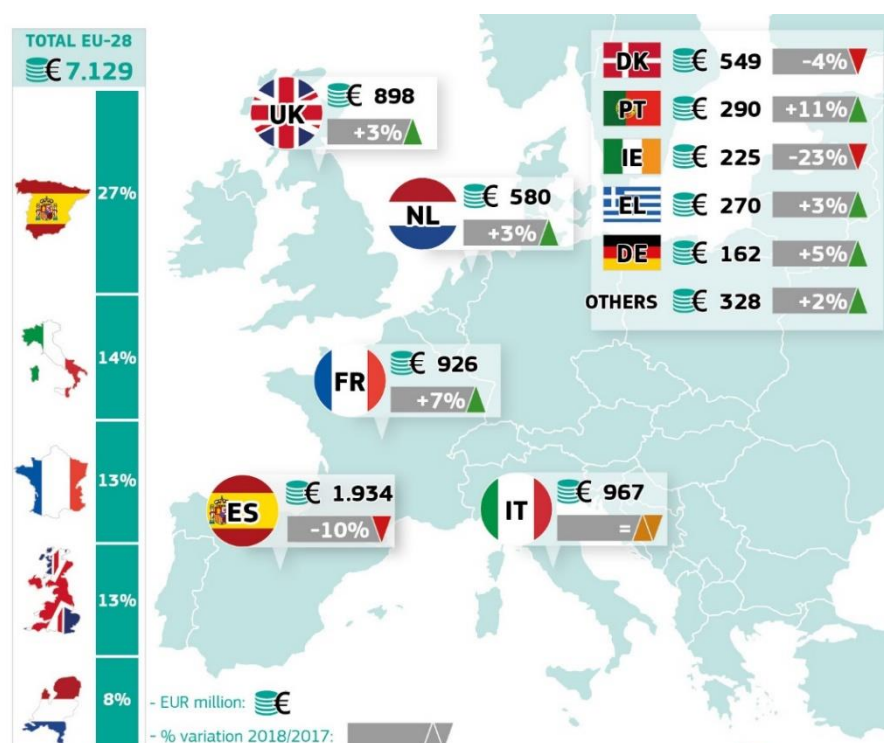


CHART 66
NOMINAL VALUES OF
LANDED PRODUCTS IN
MAIN EU COUNTRIES IN
2018 AND %
VARIATIONS 2018/2017

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 2018, the landings of small pelagics in the EU totalled 2,06 million tonnes. This was 22.700 tonnes or 1% lower than 2017, and 122.217 tonnes or 6% lower than the 10-year peak registered in 2015. Their value at EUR 1,23 billion represented a EUR 11,39 million or 1% decrease from 2017. Compared with ten years before, volume had decreased 109.708 tonnes or 5%, and value had decreased EUR 97 million or 7% in real terms.

Five of small pelagics' main commercial species, namely herring, sprat, mackerel, sardine and anchovy, together accounted for 43% of total landed volumes.

HERRING

In 2018, herring, the most landed main commercial species in the EU, accounted for 18% of total volume and reached a 10-year peak of 792.458 tonnes, 7% higher than in 2017. With an average landing price of 0,35 EUR/kg, herring's total landing value increased by 2% from the previous year, reaching EUR 278 million.

Driven by increased landings in Denmark and the Netherlands, herring, already the most landed main commercial species in the EU, reached a 10-year peak in volume terms in 2018.

As for total herring volume, 28% was landed in Denmark, 23% in the Netherlands and 13% in Finland, with most of the rest landed in other EU northern Member States. Denmark and the Netherlands drove the overall increase in herring landings in the EU in 2018: with Denmark's landings 17% higher than in 2017, volume increased from 187.564 to 220.024 tonnes, and with the Netherlands' landings 18% higher, volume increased from 152.005 to 179.244 tonnes. Herring in Denmark was mainly landed by Danish and Swedish vessels, which together accounted for 68% of the Danish total landings, while in the Netherlands, herring was mainly landed by the national and German fleets, which together covered 87% of the total Dutch volume.

As for the value trend, only the Netherlands and Sweden recorded price increases in 2018. Nevertheless, many countries had significant increases in value from 2017, the most remarkable being Sweden with a 45% increase, the Netherlands with 21%, and Denmark and Latvia, both with 7%.

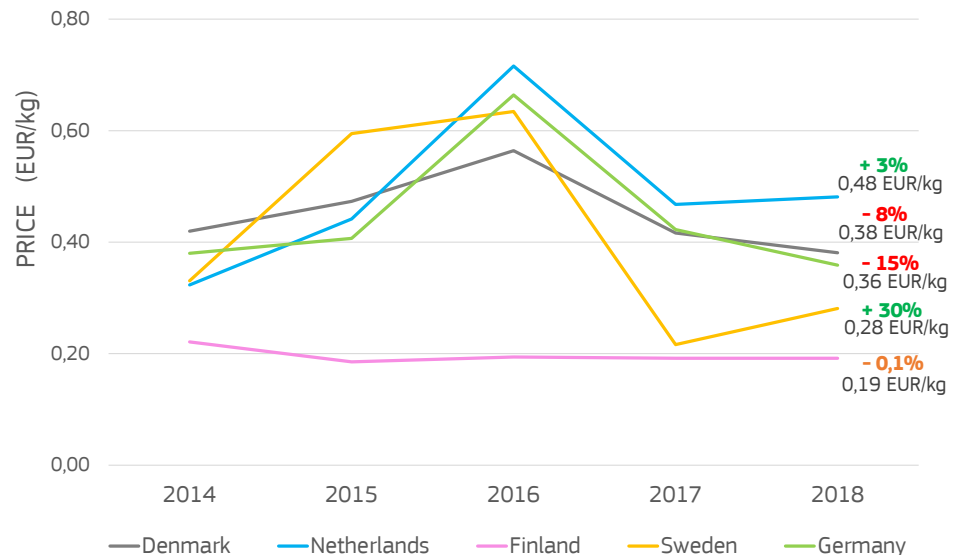
It should be considered that landings of herring originate from different stocks, including North Sea stock, Atlantic spring spawning stock and Baltic stock. Each of these has unique characteristics that cater to specific market preferences and, hence, they bring different prices on the market. Another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

The general drop in prices from 2016 to 2017 was most likely caused by increased quotas and, therefore, increased landings in Norway. In 2017, the Norwegian quota for herring increased by 66%, thus enabling landing volumes to grow by more than 40% compared with the year before. The volume growth led to a 40% decrease in the yearly average landing prices in Norway and a 29% decrease in export prices of frozen herring. As Norway lands the highest volume of herring in northern Europe, its landings and exports affect prices of herring landed in other northern EU countries.

CHART 67

**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

The landings of sprat in the EU amounted to 433.617 tonnes and EUR 96 million in 2018. Compared with 2017, volume increased by 6%, value increased by 19%, and the average price increased 10%, moving from 0,20 to 0,22 EUR/kg.

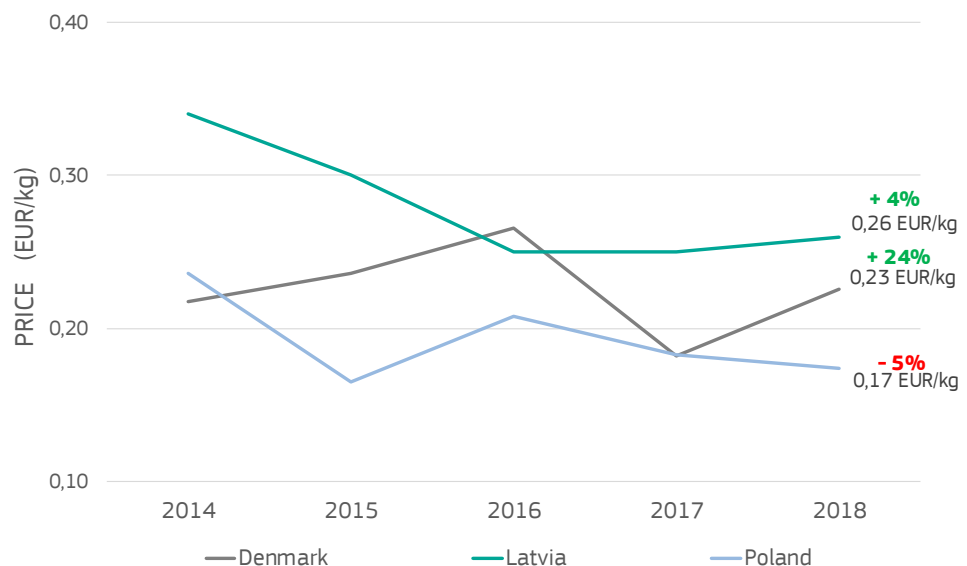
Denmark, by far the main landing country of this species, accounted for 61% of EU volume in 2018, mainly consisting of products destined for the fishmeal industry. From 2017, its share increased even further: the volume landed grew 11%, from 240.546 to 267.990 tonnes, while value, led by a 24% price increase, grew 38%, from EUR 44 to EUR 60 million.

Poland and Latvia followed far behind, even though their shares of total EU landings of sprat also increased in 2018 compared with 2017. In Poland, volume of sprat landings grew by 13%, from 49.878 to 56.311 tonnes, and value grew by 8%, from EUR 9,1 to EUR 9,8 million. In Latvia, sprat landings grew by 12% in volume, from 34.710 to 38.866 tonnes, and by 16% in value, from EUR 8 to EUR 10 million. In both countries, the increase in sprat volume, mainly landed by their national vessels, was connected to higher quotas in the Baltic Sea.

CHART 68

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

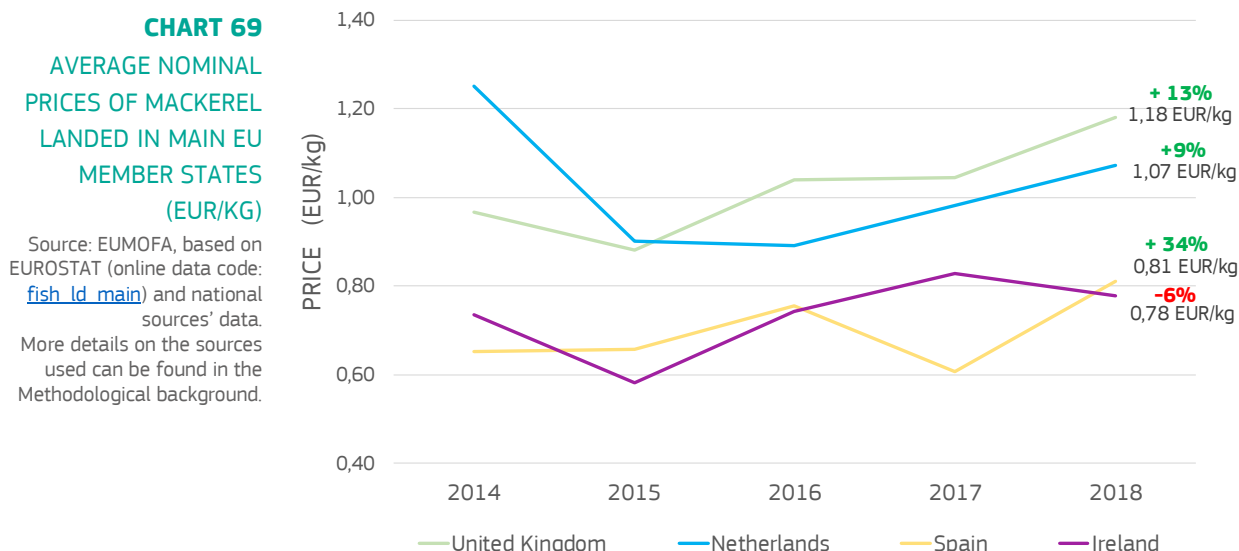
Source: EUMOFA, based on EUROSTAT (online data code: [fish_ld_main](#)) and national sources' data. More details on the sources used can be found in the Methodological background.



MACKEREL In 2018, the landings of mackerel in the EU totalled 364.633 tonnes, worth EUR 355 million, which amounted to drops of 17% in volume and 8% in value from 2017.

One-quarter of mackerel was landed in the United Kingdom, where 94.907 tonnes in 2018 represented a 12% decrease from 2017, reaching the lowest level of the last six years. Of these landings, 85% originated from national vessels, while the rest was from other northern EU Member States' fleets. The United Kingdom also recorded a 13% price increase, from 1,04 EUR/kg in 2017 to 1,18 EUR/kg in 2018. Due to the volume-decrease, the total value declined by 1%, reaching EUR 112 million.

Member States other than the United Kingdom also contributed to the overall trend of mackerel landings at EU level. Spain, Ireland and the Netherlands, which accounted for 53% of the total in 2018, all recorded significant drops in volume compared with 2017. The most remarkable variation was recorded in Ireland, which had a 32% volume decrease, from 84.187 tonnes in 2017 to 57.371 tonnes in 2018. This volume decrease was accompanied by a 6% price decline, which resulted in value dropping by 36%, to EUR 45 million. In all three countries, mackerel was mainly landed by national vessels.



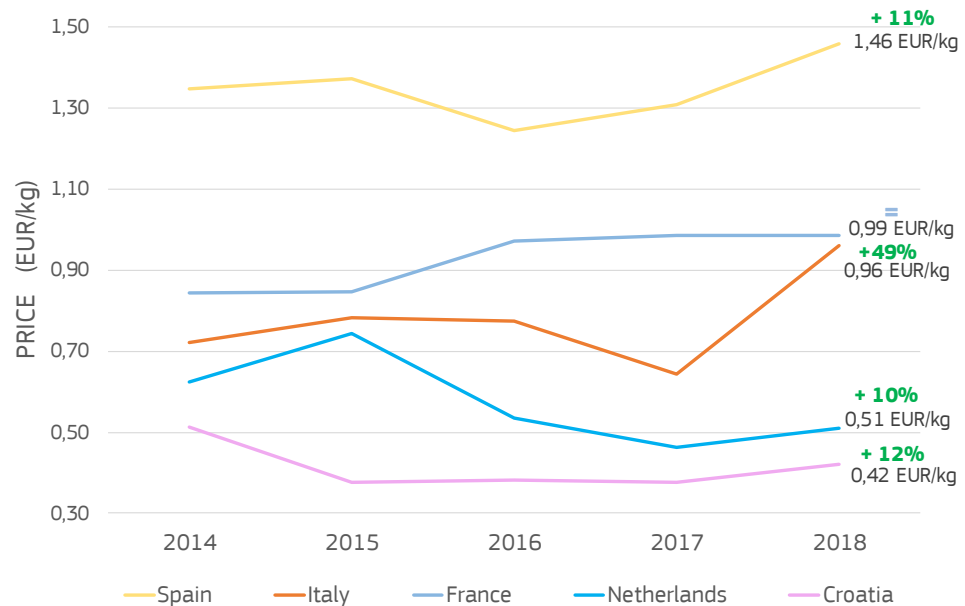
SARDINE In 2018, the landings of sardine in the EU suffered a 7% volume decrease from 2017, dropping to 181.322 tonnes. Nevertheless, values grew by 8%, to EUR 165 million, due to the average price increasing 16%, from 0,81 to 0,93 EUR/kg.

The decrease in sardine landings was driven by three of the main EU Member States landing sardine, namely Croatia, Spain and the Netherlands. The most remarkable variation was registered in the Netherlands, where sardine landings dropped by 32%, from 29.553 to 19.952 tonnes. Both Croatia and Spain recorded a 4% reduction: in Croatia, sardine landings decreased from 48.461 to 46.351 tonnes, while in Spain, they dropped from 31.561 to 30.446 tonnes.

As for total values, all the main EU sardine landing countries, except the Netherlands, followed an upward trend from 2017 to 2018. The highest variation was reported by Italy, where a 49% increase in average price, from 0,64 to 0,96 EUR/kg, caused total values to grow from EUR 16 to EUR 26 million. On the other hand, although the average 2018 price in the Netherlands increased by 10%, from 0,46 to 0,51 EUR/kg, value decreased by 26%, due to reduced landings.

CHART 70
AVERAGE NOMINAL
PRICES OF SARDINE
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.



ANCHOVY

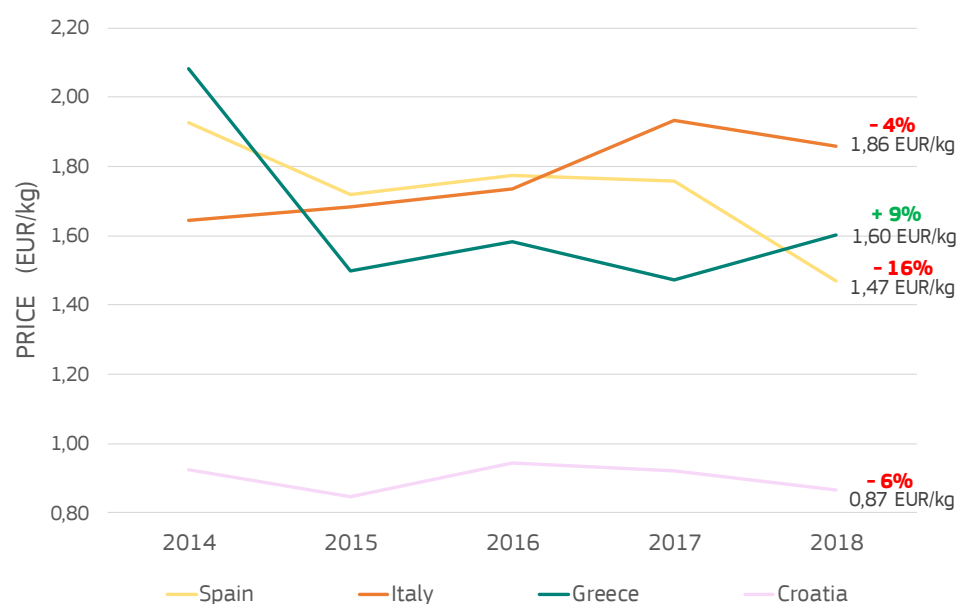
In 2018, the landings of anchovy in the EU reached a 10-year peak of 135.460 tonnes, 6% higher than in 2017. During the same time period, the average landing price dropped by 10%, from 1,67 to 1,50 EUR/kg, thus causing total value to decrease by 4%, to EUR 204 million.

The EU trend was determined by Spain, the main EU country where anchovy is landed, which accounted for 44% of total volumes in 2018. Compared with 2017, Spain's landings volume increased by 17%, from 50.774 to 59.502 tonnes, and its value declined by 2%, from EUR 89 to EUR 87 million. The upward trend in volume from 2017 to 2018 was linked to the 30% increase of Spanish quotas in the North-East Atlantic.

The other main EU countries for landings of anchovy – Italy, Croatia and Greece – together contributed 47% of total volume in 2018. While Croatia and Greece reported increases in both volume and value compared with 2017, Italy had a 7% drop in volume and 11% drop in value.

CHART 71
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.



GROUNDFISH

The landings of groundfish in the EU suffered a significant drop in 2018 compared with 2017: the total volume amounted to 1,09 million tonnes, which represented a decrease of 34% or 565.766 tonnes, while value declined 5%, from EUR 1,29 billion to EUR 1,22 billion. This was due to the fact that, after the peak recorded in 2017, the 2018 landings of sandeel in the EU fell by 51% in volume, from 402.030 tonnes to 195.777 tonnes, and by 28% in value, from EUR 62 million to EUR 44 million. The decrease was mainly due to landings in Denmark. It should be noted that within EUMOFA, sandeel does not constitute a “main commercial species” but falls under the aggregation “other groundfish”⁶⁸.

The most landed groundfish species in the EU is blue whiting, which in 2018 accounted for 44% of total volume of this commodity group. Hake and cod followed, with shares of 20% and 14%, respectively.

BLUE WHITING

Over the last ten years, blue whiting's landings in the EU grew by almost four times in volume and more than doubled in value.

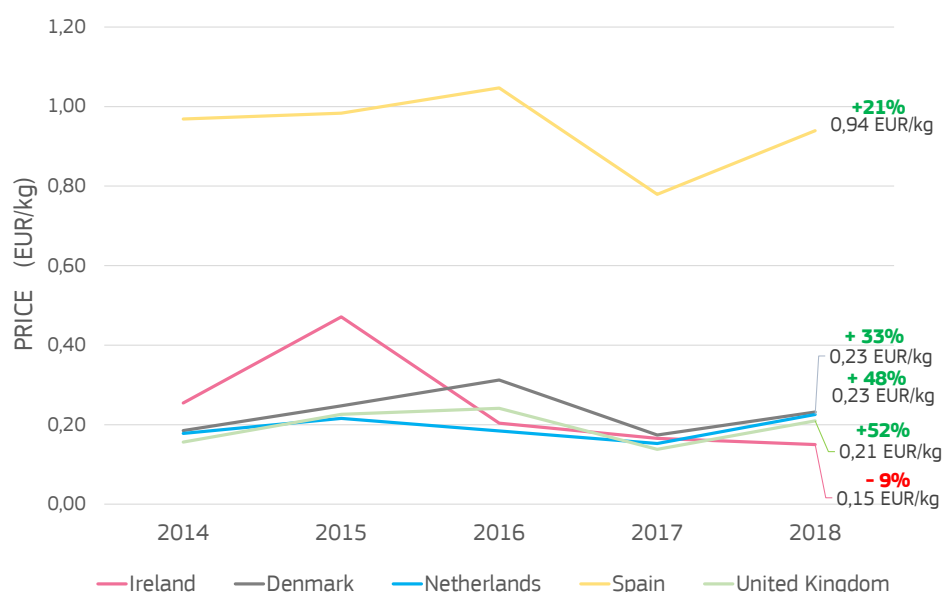
In 2018, the landings of blue whiting in the EU reached a ten-year peak of 482.809 tonnes and EUR 130 million. Compared with 2017, volume increased by 10% while value grew by 28%. If compared with 2009, when the landings of blue whiting in the EU amounted to 100.671 tonnes worth almost EUR 57 million in real terms, volume had grown by 380% while value more than doubled. As for the average price, it had fallen 50% from 2009, although from 2017 to 2018, it increased 16%, growing from 0,23 to 0,27 EUR/kg.

The upward trend in volume was driven by Denmark and the Netherlands, which recorded 25% more blue whiting landings than in the previous year, due to the higher blue whiting quotas in all fishing areas of the North Atlantic from 2017 to 2018. The two countries also reached their 10-year peaks both in volume and value: in Denmark, blue whiting landings totalled 223.474 tonnes worth almost EUR 52 million, while in the Netherlands, they amounted to 150.025 tonnes and nearly EUR 34 million.

It is worth noting that most of the blue whiting landings in the EU are not destined for human consumption.

CHART 72
AVERAGE NOMINAL
PRICES OF BLUE
WHITING 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.



⁶⁸ The correlation table used for harmonizing data on fish species landed in the EU to the EUMOFA standards is available at the link http://www.eumofa.eu/documents/20178/24415/Metadata+2+-+DM+-+Annex+3+Corr+of+MCS_CG_ERS.PDF/1615c124-b21b-4bff-880d-a1057f88563d.

HAKE In 2018, the volume of hake landings was 6% higher than 2017, reaching 154.977 tonnes. Although the average price declined 2%, from 3,22 to 3,16 EUR/kg, the total value increased 4%, reaching EUR 490 million. In terms of volume, European hake (*Merluccius merluccius*) accounted for 66%, Argentine hake (*Merluccius hubbsi*) accounted for 28%, and Senegalese hake (*Merluccius senegalensis*) and Cape hakes (*Merluccius capensis*, *M.paradox.*) accounted for the rest.

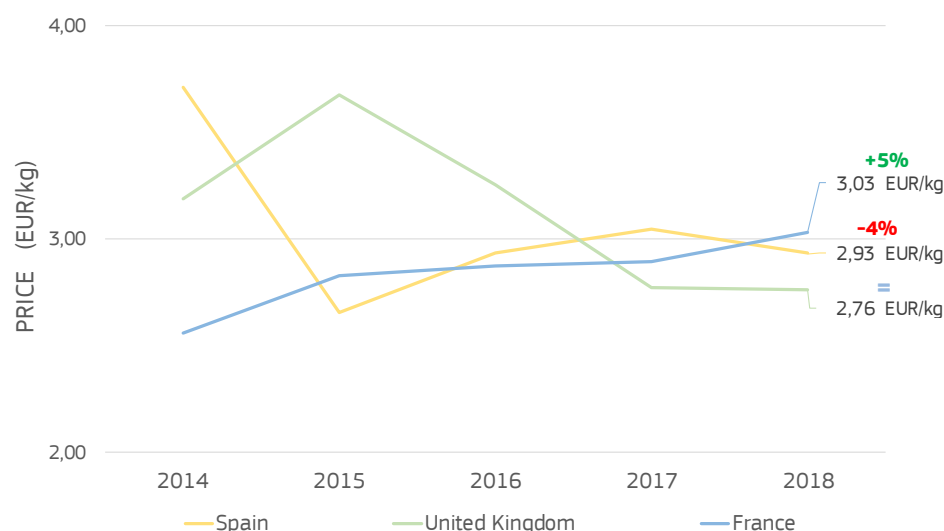
Spain accounts for more than 60% of total landings of hake in the EU and is the Member State reporting the highest volumes and values. In 2018, Spain totalled 98.083 tonnes – a 10-year peak – and EUR 288 million, which represented an increase of 34% in volume and 29% in value from 2017.

It is worth noting that Spain, Portugal and the Netherlands are the only countries where European hake (*Merluccius merluccius*) is not the only hake species landed. The upward trend recorded in Spain in 2018 was due to a combination of the landings of European hake (*Merluccius merluccius*) and Argentine hake (*Merluccius hubbsi*), whose volumes increased by 25% and by 62%, respectively, from 2017.

CHART 73

**AVERAGE NOMINAL
PRICES OF HAKE 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.

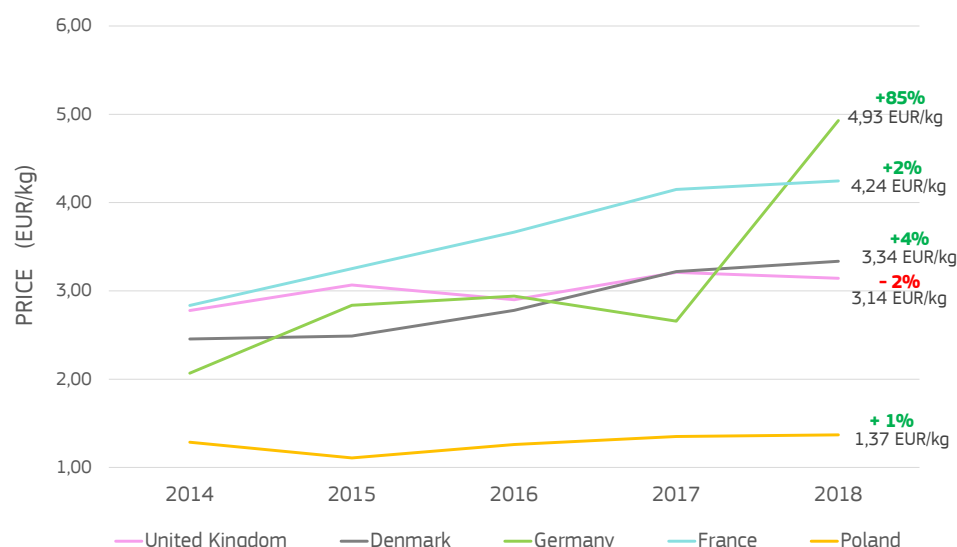


COD In 2018, the landings of cod in the EU totalled 67.965 tonnes with a value of almost EUR 216 million. This was a decrease of 16% in volume and 1% in value from the year before. The average price increased by 18%, from 2,69 to 3,18 EUR/kg, thus reaching the highest level since 2009.

The United Kingdom was the main EU country landing cod. It also was among those few Member States that experienced an upward trend from 2017, as its volume of cod landed increased by 16% and its value increased by 13%.

CHART 74
AVERAGE NOMINAL
PRICES OF COD 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.



On the other hand, Spain influenced the downward trend recorded at EU level. In 2018 it landed 4.313 tonnes of cod for a value of EUR 14 million, registering a drop of 71% in volume and 64% in value from 2017. This corresponded to decreases of 10.750 tonnes and more than EUR 26 million, and was linked to a 26% price increase, from 2,66 to 3,34 EUR/kg.

CRUSTACEANS

In 2018, the landings of crustaceans in the EU reached a 10-year peak of 182.615 tonnes worth EUR 1,14 billion. Compared with 2017, volumes grew by 12%, or 20.200 tonnes, while values increased by 4%, or EUR 42 million.

SHRIMPS

Shrimps are the highest value product landed in the EU. With 81.061 tonnes landed worth EUR 572 million, in 2018, they reached a decade peak in both volume and value. The main EU countries where they were landed varied depending on the species.

Crangon shrimp was mainly landed in the Netherlands, where it reached 24.000 tonnes worth EUR 80 million. From 2017, landed volumes more than doubled, while values grew by 26%, thus driving an EU-level increase of 105% in volume and 1% in value. It is worth noting that, compared with 2017, in 2018 the landing price of this species halved in all of the main landing countries.

Other types of coldwater shrimps were mainly landed in Denmark and Sweden. Both countries recorded a drop in 2018 compared with 2017: Denmark's total of 1.493 tonnes worth EUR 8 million equalled a decrease of 31% in volume and 16% in value; Sweden dropped to its lowest point in 10 years with 1.313 tonnes valued at almost EUR 14 million, declining by 15% in volume and 9% in value.

Italy and Spain, the two main landing countries for deep-water rose shrimps, covered 74% of total landed volumes in 2018. Compared with 2017, both countries reported an upward trend in volume and a decrease in value: Italy's volume grew 7%, from 9.210 to 9.827 tonnes, and value decreased 1%, from EUR 57,07 million to EUR 56,69 million; Spain's volume increased 16%, from 3.937 to 4.583 tonnes, and value declined 6%, from EUR 41 million to EUR 38 million.

Italy was also the main landing country for warmwater shrimps, namely Caramote prawns (*Penaeus kerathurus*). In 2018, Italy reported landings of 1.676 tonnes worth

EUR 25 million for this species, amounting to an increase of 5% in volume and 2% in value from 2017.

As for “miscellaneous shrimps”, this group mainly includes blue and red shrimp (*Aristeus antennatus*), giant red shrimp (*Aristaeomorpha foliacea*) and striped red shrimp (*Aristeus varidens*). Spain and Italy together accounted for around 93% of all landings recorded in the EU in 2018, both in volume and value. While landings in Spain mainly comprised blue and red shrimps, and striped red shrimps, in Italy they mainly included giant red shrimp. Spain landed 4.652 tonnes worth EUR 111 million, an increase of 31% in volume and 84% in value from 2017. Italy landed 4.241 tonnes worth EUR 86 million, for a decrease of 8% in volume and 13% in value from the previous year.

CHART 75

LANDINGS OF SHRIMPS IN THE EU IN 2018

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.

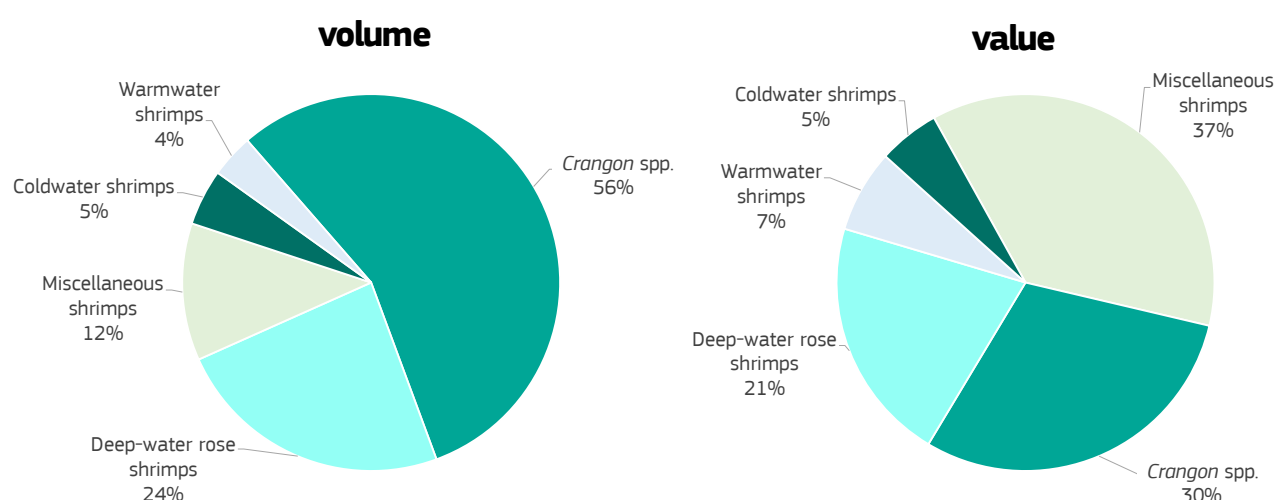


TABLE 21

AVERAGE NOMINAL PRICES OF SHRIMPS IN THE EU COUNTRIES WHERE MOST LANDINGS WERE RECORDED IN 2018 (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.

Main commercial species	Member State	2014	2015	2016	2017	2018	2018/2017	2018/2014
Shrimp <i>Crangon</i> spp.	Netherlands	3,34	3,65	6,98	7,28	3,34	-54%	=
	Germany	3,43	3,47	7,66	7,99	3,92	-51%	+14%
Coldwater shrimps	Denmark	3,02	3,79	4,65	4,44	5,41	+22%	+79%
	Sweden	9,71	9,15	8,51	9,69	10,37	+7%	+7%
Deep-water rose shrimps	Italy	6,32	6,35	6,33	6,20	5,77	-7%	-9%
	Spain	13,28	14,02	10,47	10,35	8,40	-19%	-37%
	Greece	5,25	4,80	2,28	3,80	4,58	+20%	-13%
Warmwater shrimps	Italy	15,07	16,30	17,40	15,45	14,99	-3%	-1%
Miscellaneous shrimps	Spain	31,16	15,93	16,96	17,03	23,93	+41%	-23%
	Italy	20,10	22,02	21,43	21,61	20,25	-6%	+1%

TUNA AND TUNA-LIKE SPECIES

In 2018, the volume of tuna and tuna-like species landed in the EU registered a 13% increase from 2017 and totalled 385.511 tonnes. Nevertheless, the value decreased by 22%, from EUR 975 million to EUR 761 million. This was due to a remarkable price drop in Spain, where the price of yellowfin tuna plummeted 53% from 2017 to 2018, dropping from 4,19 EUR/kg to 1,94 EUR/kg, while the price of bigeye tuna fell 66%, from 4,01 EUR/kg to 1,37 EUR/kg.

Spain, by far the EU Member State landing the most tuna, accounted for 88% of its total volume and 77% of its total value. In the country, landings reached 337.493 tonnes, 12% higher than 2017, while value dropped 27%, to EUR 571 million.

SKIPJACK TUNA

Among all tuna landed in the EU in 2018, skipjack had the highest volume and value, reaching 205.631 tonnes and EUR 223 million. Compared with the previous year, this corresponded to an increase of 32% in volume and 30% in value.

Of the total volume, 93% was landed in Spain by the national fleet and mainly consisted of frozen products. Spain thus determined the overall EU trend, as in 2018 it totalled 191.795 tonnes worth EUR 202 million and, compared with 2017, its landings increased by 30% in volume and 33% in value. The average yearly price increased by 2%, from 1,03 to 1,05 EUR/kg.

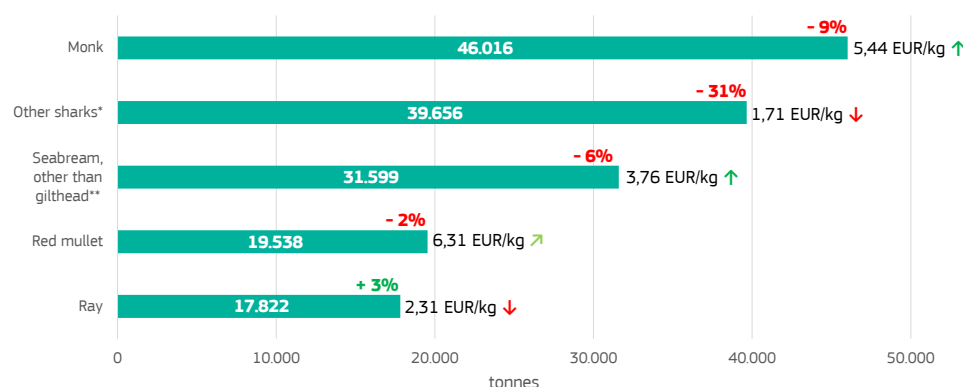
OTHER MARINE FISH

In 2018, the EU landings of the commodity group “Other marine fish” decreased to 259.682 tonnes worth EUR 975 million, which amounted to a drop of 18% in volume and 5% in value from 2017.

CHART 76 MAIN SPECIES OF “OTHER MARINE FISH”: VOLUME LANDED IN 2018, % VARIATIONS 2018/2017 AND NOMINAL PRICES AT LANDING STAGE

Source: EUMOFA, based on
EUROSTAT (online data code:
[fish_ld_main](#)).

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



*The grouping “Other sharks” mainly includes blue shark (57% of the total), small-spotted catshark (20%), smooth-hounds (10%), shortfin mako (7%), and tope shark, catsharks nei and catsharks, nursehounds nei (1% each).

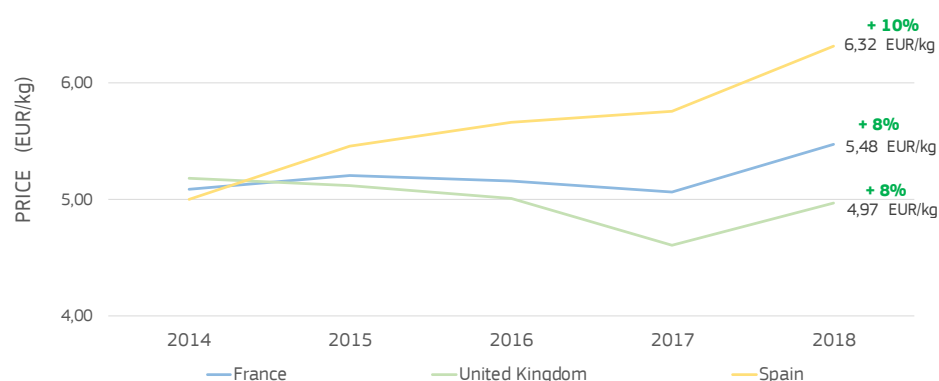
**The grouping “Seabream, other than gilthead” mainly includes bogue (39% of the total), black seabream (11%), common pandora (10%), white seabream and axillary seabream (6% each), red porgy (5%), large-eye dentex (4%), blackspot seabream and saddled seabream (3% each), sand steenbras, common dentex, annular seabream, common two-banded seabream and dentex nei (2% each), and pink dentex and red pandora (1% each).

MONK In 2018, the landings of monk in the EU amounted to 46.016 tonnes worth EUR 250 million. Compared with 2017, this was a decrease of 9% in volume but an increase of 8% in value. Of the total volume, 40% was reported under Anglerfishes nei (*Lophiidae*), 31% under Monkfishes nei (*Lophius* spp.) and the rest was reported under Blackbellied angler (*Lophius budegassa*), Angler (*Lophius piscatorius*) and American angler (*Lophius americanus*).

France, the United Kingdom and Spain together accounted for almost 80% of total volume landed in 2018. While in France most monk landings were reported under the species Monkfishes nei (*Lophius* spp.), in the United Kingdom they were reported under Anglerfishes nei (*Lophiidae*), and in Spain they were reported under Blackbellied angler (*Lophius budegassa*). From 2017, both France and the United Kingdom presented a downward trend in both volume and value, while monk landings in Spain increased by 60% in volume and 76% in value.

CHART 77
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.



6/ AQUACULTURE⁶⁹

6.1 OVERVIEW

TOTAL EU

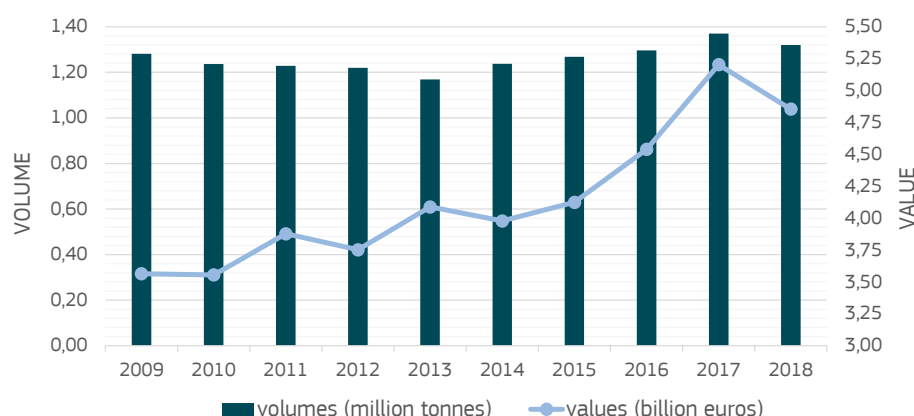
After the peak of the previous year, in 2018 the EU aquaculture production showed a decline in both volume and value terms.

In 2018, EU⁷⁰ aquaculture production amounted to 1,32 million tonnes, with a total value of EUR 4,80 billion. This represented a 4% or 50.330 tonne decrease in volume and a 5% or EUR 348 billion decrease in value compared with 2017 – a reversal of the upward trend seen during the previous four years. Compared with ten years before⁷¹, production grew by 3%, which was an increase of less than 40.000 tonnes, while value had grown by a remarkable 36% in real terms, which meant an increase of almost EUR 1,30 billion.

The value increase in aquaculture during the 2009–2018 decade was due to increased production of high value species, such as salmon, seabass and bluefin tuna, combined with the strong price increase of some major species, such as salmon, seabass, gilthead seabream, oyster and clam. Price increases might have been connected to an increase in demand, in addition to other factors that came into play, such as the higher quality of products, including organic, as well as a supply decrease, due to high mortality of some species, such as oysters. It should also be considered that the decade's 3% volume increase was a minor variation, caused by licensing issues and conflict of interest in terms of spatial planning. This slight volume increase combined with increased demand contributed to a price increase.

CHART 78
AQUACULTURE
PRODUCTION IN THE EU

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=2015).



Production of bivalves and other molluscs and aquatic invertebrates declined by 1% in volume in 2018 compared with 2017, but it still covered almost half of total farmed production in the EU, mainly thanks to the productions of mussel in Spain and oyster in France. Salmonids⁷² and the grouping “other marine fish”⁷³ followed, with salmonids

⁶⁹ The main source of data for EU aquaculture production is EUROSTAT. 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.

⁷⁰ In line with the approach adopted by EUMOFA following BREXIT, the United Kingdom is considered part of the EU till 2019 and its data until that year are available in all tables, charts and analyses at EU level. In addition, EU data include Croatia since 2013, date of the EU's enlargement to this country.

⁷¹ In this report, value and price variations for periods longer than 5 years are analysed by deflating values using the GDP deflator (base=2015); for shorter periods, nominal value and price variations are analysed.

⁷² Salmonids include salmon and trout, plus other types of salmonids species.

⁷³ Farmed species belonging to this group include gilthead seabream and other seabreams, seabass, 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>.

registering an 11% decrease from the previous year, and “other marine fish” increasing by 2%.

In value terms, the above-mentioned commodity groups showed different patterns. Both bivalves, other molluscs and aquatic invertebrates, and salmonids declined considerably compared with 2017, decreasing by 10% and 12%, respectively, due to the lower production value of mussel in France and salmon in the United Kingdom. On the other hand, “other marine fish” reached its five-year peak in 2018, driven by the increasing production value of European seabass in Spain.

The volume and value composition of the EU’s farmed production detailed by main commercial species is shown in charts 81 and 82.

CHART 79
VOLUMES OF MOST
PRODUCED COMMODITY
GROUPS IN THE EU AND
% VARIATIONS
2018/2017

Source: EUMOFA, based on EUROSTAT (online data code: [fish_aq2a](#)), FAO, national administrations and FEAP data. More details on the sources used can be found in the Methodological background.

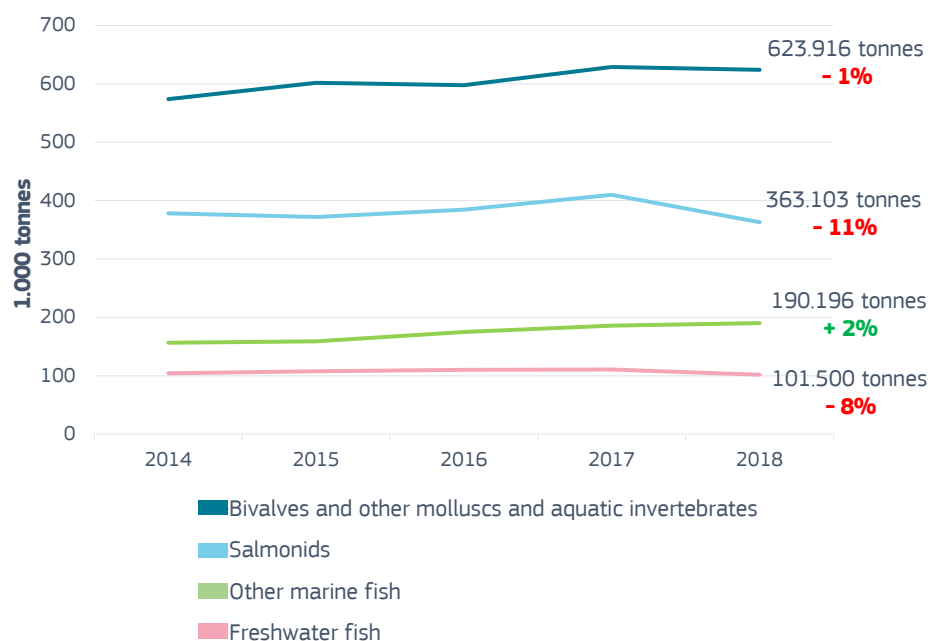


CHART 80
VALUES OF MOST
VALUED COMMODITY
GROUPS FARMED IN THE
EU AND % VARIATIONS
2018/2017

Source: EUMOFA, based on EUROSTAT (online data code: [fish_aq2a](#)), FAO, national administrations and FEAP data. More details on the sources used can be found in the Methodological background.

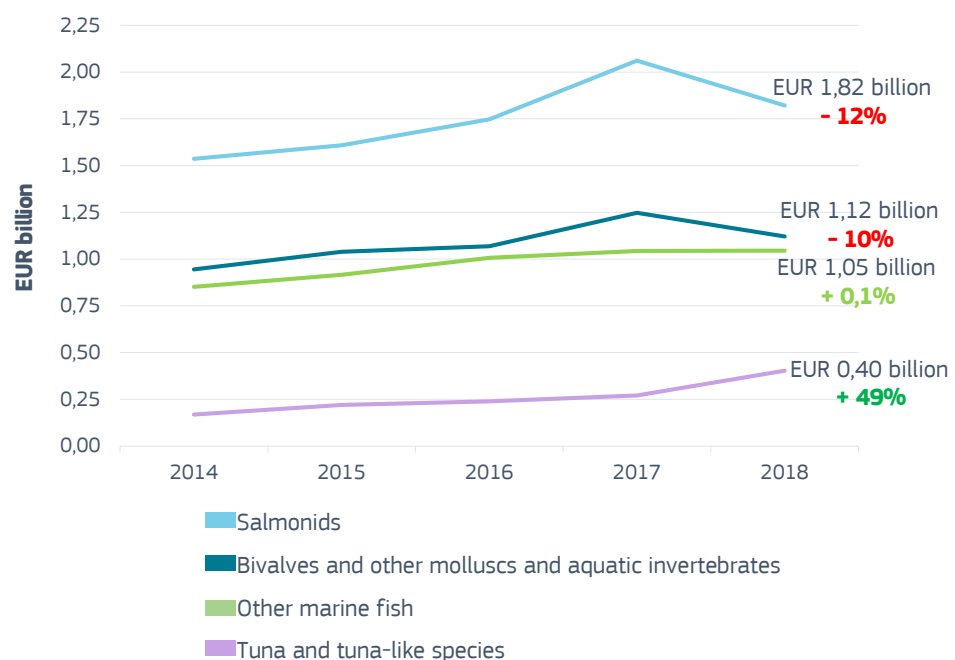


CHART 81

COMPOSITION OF EU AQUACULTURE PRODUCTION BY MAIN COMMERCIAL SPECIES (IN VOLUME)

Source: EUMOFA, based on EUROSTAT (online data code: [fish_aq2a](#)), FAO and FEAP data.
 More details on the sources used can be found in the Methodological background.

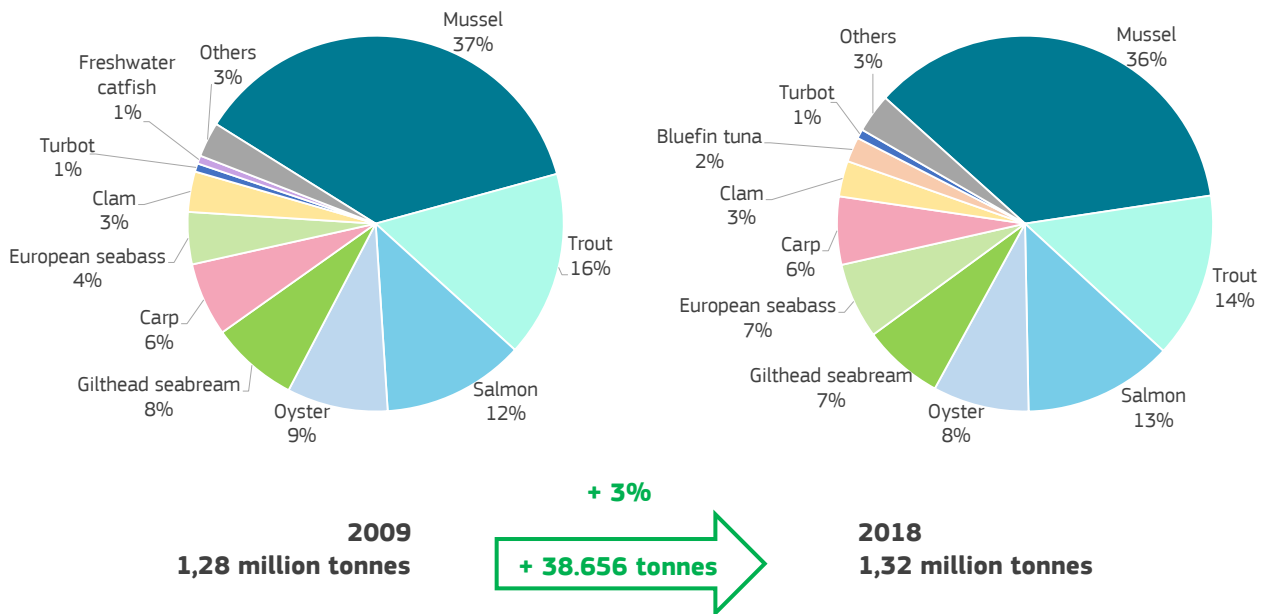
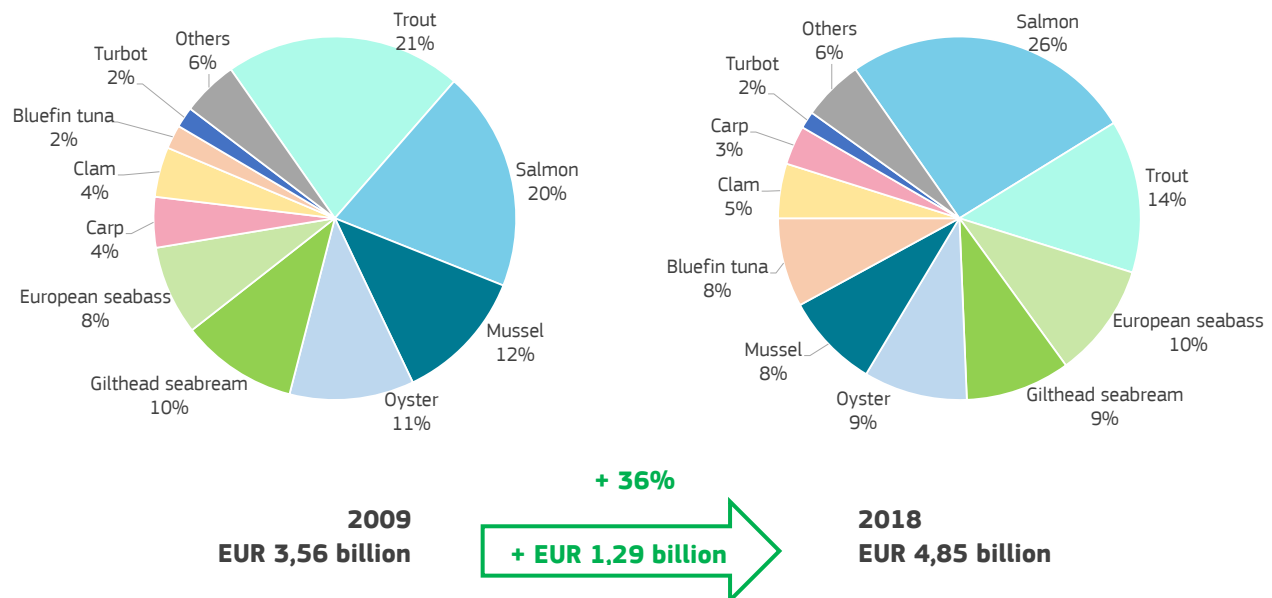


CHART 82

COMPOSITION OF EU AQUACULTURE PRODUCTION BY MAIN COMMERCIAL SPECIES – IN REAL VALUE (BASE=2015)

Source: EUMOFA, based on EUROSTAT (online data code: [fish_aq2a](#)), 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.



In volume terms, the species composition of EU aquaculture production remained similar to ten years before, although there were significant variations in its value structure in real terms. The shift in the top-ranked species, namely salmon and trout, was due to a trend that saw trout decreasing in value in Italy, while salmon was

doubling in value, mainly in the UK. The price increase of salmon in Europe was caused by a production decline from 2015 to 2017.

From 2009 to 2018, the real value of European seabass and gilthead seabream augmented considerably, with Greece and Spain registering the strongest increases. In Greece, the value of European seabass grew by 70%, while the value of gilthead seabream grew by 18%. In Spain, the value of European seabass rose by 120%.

In the last ten years, the real values of salmon, European seabass, gilthead seabream, bluefin tuna and clam recorded a considerable increase.

An even more significant increase was reported for bluefin tuna and clam. The bluefin tuna increase was due to an outstanding trend in Maltese production, which skyrocketed by more than 400%, growing by 13.885 tonnes from 2009 to 2018. Bluefin tuna production thus reached 17.326 tonnes for a value of EUR 229 million in Malta, which represented a 375% increase, almost four times higher than ten years before, even after adjusting for inflation⁷⁴. Also to be noted, from 2017 to 2018, Spanish production also grew notably, increasing 49% in volume and 74% in value due to three different economic occurrences: some companies actually increased their production in 2018, others recovered from activities that had stopped in 2016, and some decided to stock their quantities in 2017 and sell them in 2018. This upward trend in bluefin tuna's value has been possible thanks to a significant increase in Mediterranean quotas between 2016 and 2018, as "farmed production" of this species calls for fattening of wild-caught tuna.

Although farmed clam volume declined 9% from 2009 to 2018, its real value in the EU grew by almost 50%. This was led by a 55% increase in Italian production value, which advanced from EUR 101 million to EUR 156 million. Its markedly upward trend, due to a strong 64% price increase, was mainly linked to a shortage of the Italian supply in 2015.

The above mentioned trends, together with a decline of the value of mussels' production, reduced the share of mussel in the total value of the EU's aquaculture production.

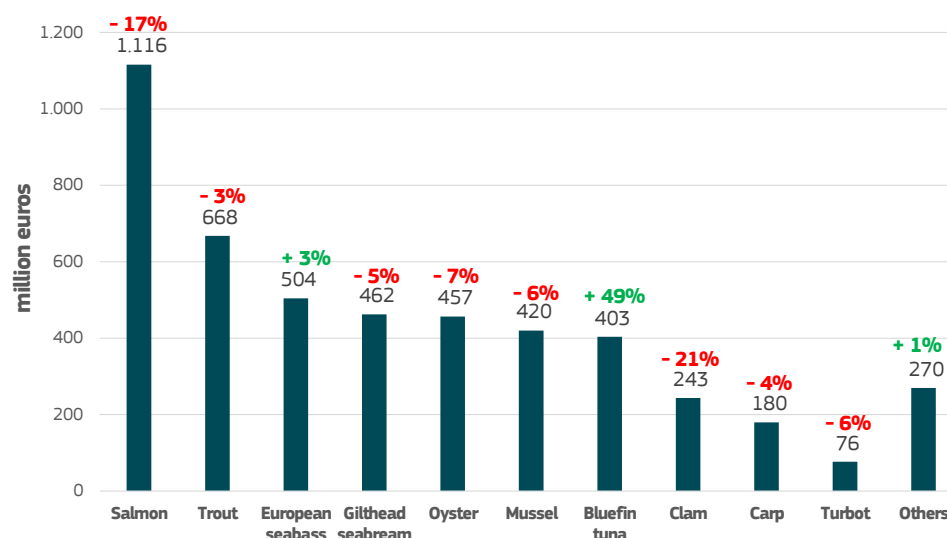
Further on this topic, two more species need to be mentioned: meagre and Senegalese sole. Their production in the EU rose progressively and strongly over the decade, with meagre increasing 270% and reaching 6.827 tonnes in 2018, and Senegalese sole increasing 1318% and reaching 893 tonnes. Spain, the leading producer of both species, accounted for 59% of meagre's total EU production and 100% of Senegalese sole's. Other notable producers of meagre are Greece and Croatia.

As for the evolution between 2017 and 2018, chart 83 shows that only two of the top ten species farmed in the EU increased in value: European seabass and bluefin tuna. Conversely, the drops observed for salmon and clam corresponded to decreases of EUR 225 million and EUR 66 million, respectively. The salmon decrease was due to reduced production in the United Kingdom, while clam's decrease reflected a 32% drop of the value of production in Italy.

⁷⁴ The increase seen in Maltese fattening of bluefin tuna could also be related to illegal and unreported farming of the species in Malta. Inspections on the island's tuna pens between September and October of 2018 uncovered how ranchers had concealed hundreds of extra fish, and that consequently resulted in an upward adjustment of declared volumes.

CHART 83
VALUES OF MAIN SPECIES
FARMED IN THE EU IN
2018 AND % VARIATION
2018/2017

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.



BY MEMBER STATE

In 2018, the top five EU aquaculture producing countries, namely the UK, France, Spain, Greece and Italy, accounted for more than 70% of total EU aquaculture production in both volume and value. Spain and Greece showed upward trends in both the short and long terms, while France, the UK and Italy followed a different path.

Spain's increase in aquaculture production was linked to a progressive growth of both farmed European seabass, which in 2018 reached 22.526 tonnes worth EUR 147 million, and farmed bluefin tuna. Greece registered a five-year peak in volumes of both farmed gilthead seabream and European seabass, which in 2018 reached 56.185 tonnes and 47.028 tonnes, respectively. In value terms, these two species reached their five-year peaks in 2017, and then both declined by 3% in 2018. Although farmed mussel in France saw decreases of 7% in volume and 26% in value from 2017 to 2018, its total production increased in the last five years, mainly linked to increased farmed oyster and trout. The UK and Italy showed aquaculture production decreases from 2017, recording a drop in volume but an increase in value in the long term. The trends were strongly influenced by salmon in the UK and clam in Italy.

As for the other main producers, Malta registered a five-year peak in 2018, thanks to the increased production of bluefin tuna. The aquaculture production in the Netherlands, although increasing slightly from 2017 to 2018, showed a 4% decrease in volume and a 16% decrease in value compared with 2014, because of a drop in farmed mussel. In the last five years, Ireland's total production grew by 18%, from 29.327 tonnes in 2014 to 34.605 tonnes in 2018. It also showed a 56% increase in total value, growing from EUR 106 million in 2014 to EUR 165 million in 2018, due to a 56% price increase in salmon.

TABLE 22
VOLUME OF
AQUACULTURE
PRODUCTION IN THE
EU TOP-5 PRODUCING
COUNTRIES
(1.000 TONNES)

Source: EUMOFA, based on
EUROSTAT (online data code:
[fish_aq2a](#)), FAO and FEAP data.
More details on the sources
used can be found in the
Methodological background.

Member State	2014	2015	2016	2017	2018	2018/2017
Spain	285	294	287	315	319	+1%
France	181	164	182	189	187	-1%
United Kingdom	215	212	194	222	185	-17%
Italy	149	148	142	159	143	-10%
Greece	88	108	123	126	132	+5%

TABLE 23
VALUE OF AQUACULTURE
PRODUCTION IN THE
EU TOP-5 PRODUCING
COUNTRIES (MILLION
EUROS)

Source: EUMOFA, based on
EUROSTAT (online data code:
[fish_aq2a](#)), FAO and FEAP data.
More details on the sources
used can be found in the
Methodological background.

Member State	2014	2015	2016	2017	2018	2018/2017
United Kingdom	953	995	1.019	1.283	1.079	-16%
France	634	626	727	771	687	-11%
Spain	472	513	559	578	658	+14%
Greece	439	477	526	546	536	-2%
Italy	366	438	420	555	439	-21%

CHART 84
VOLUME OF
AQUACULTURE
PRODUCTION IN THE
MAIN EU PRODUCING
COUNTRIES
IN 2018 AND
% VARIATION 2018/2017

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.

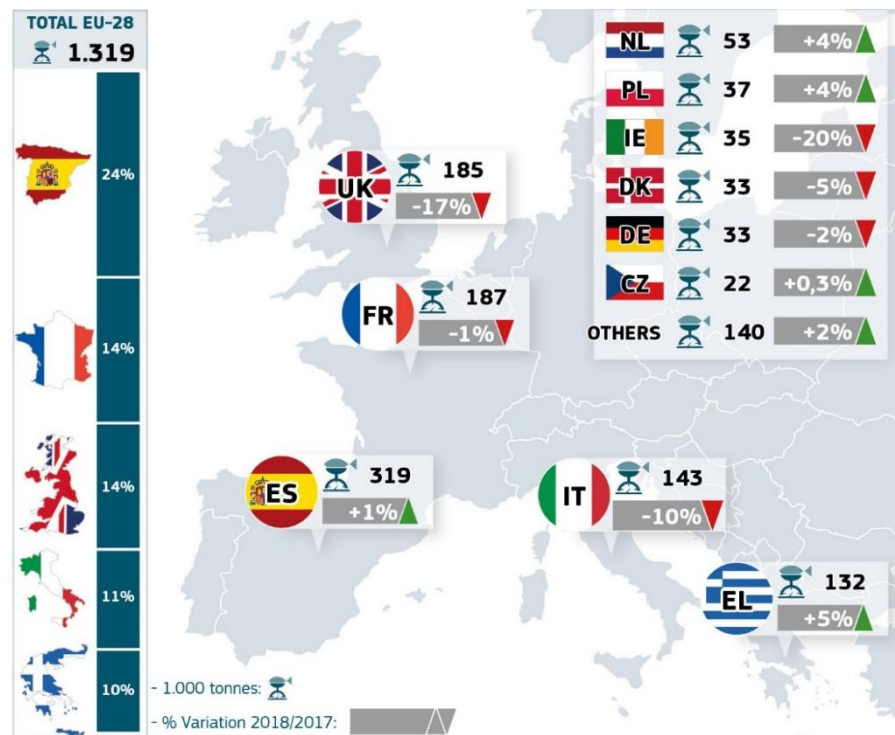
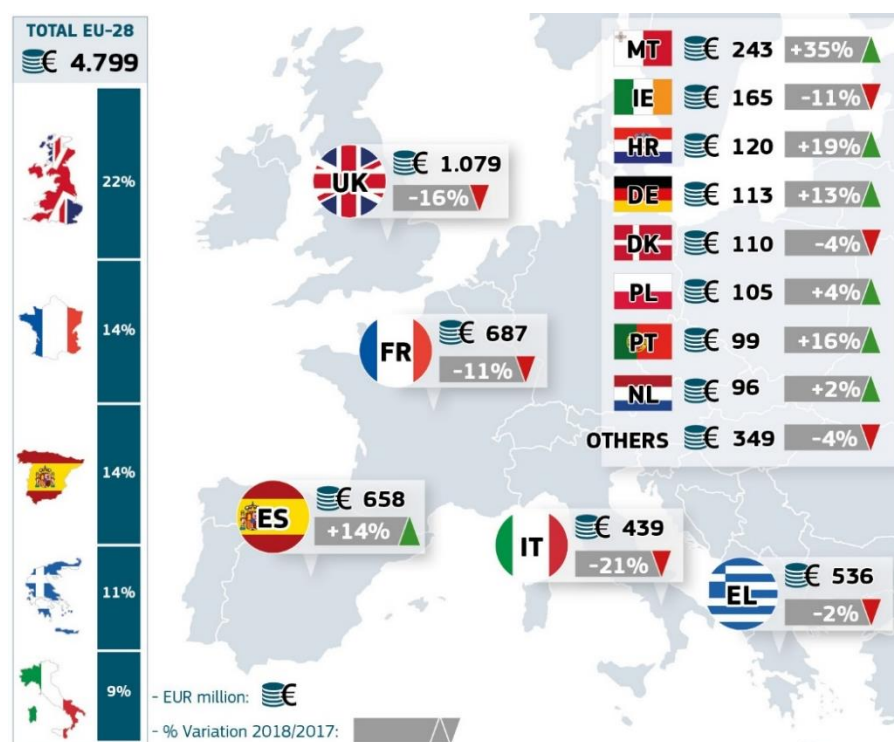


CHART 85

VALUE OF AQUACULTURE PRODUCTION IN THE MAIN EU PRODUCING COUNTRIES IN 2018 AND % VARIATION 2018/2017

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.



6.2 ANALYSIS BY MAIN SPECIES

SALMONIDS

Salmonids account for almost 40% of the value of EU farmed production. In 2018, salmon accounted for 23% of all species farmed in the EU, and trout accounted for 14%.

SALMON

EU production of salmon reached 169.587 tonnes in 2018, a 20% decrease from the peak it achieved in 2017. The average price was 6,58 EUR/kg, the highest ever registered for this species, resulting in a total value of EUR 1,11 billion.

As EU salmon is almost entirely farmed in the UK, which produces 90% of the total, the trend at EU level reflects what is seen at UK level, as shown in chart 86. Compared with 2017, salmon in the UK dropped 18% in volume in 2018, declining from 189.707 to 156.025 tonnes, and 17% in value, from EUR 1,20 billion to EUR 993 million. The price level in 2018 remained stable compared with 2017.

Ireland was a far second, farming 11.984 tonnes of salmon for a total value of EUR 115 million in 2018. This represented decreases of 35% in volume and 14% in value compared with 2017. The average price increased 31%, from 7,28 EUR/kg to 9,56 EUR/kg.

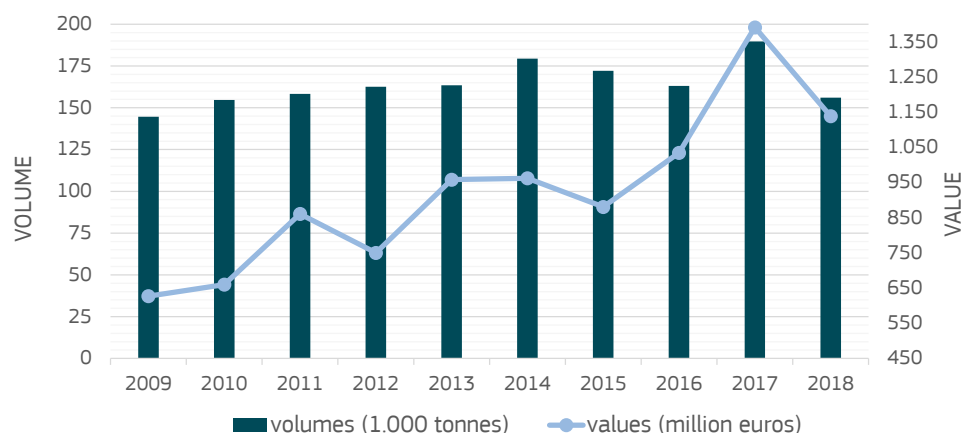
Salmon production in Ireland is exclusively organic, while only around 3% of salmon farmed in the UK is organic⁷⁵.

⁷⁵ Source: 2017 estimates from BIM (Bord Iascaigh Mhara) and experts.

CHART 86

UK PRODUCTION OF FARMED SALMON

Source: EUMOFA, based on EUROSTAT data (online data code: [fish_aq2a](#)). More details on the sources used can be found in the Methodological background. Values are deflated by using the GDP deflator (base=2015).



TROUT

In 2018, the EU produced 187.858 tonnes of trout – mostly rainbow trout (*Oncorhynchus mykiss*) – valued at EUR 668 million. Compared with 2017, the production decreased by 4% in volume and 3% in value. The average price increased from 3,53 EUR/kg to 3,55 EUR/kg, the highest in the last ten years.

More than half of EU trout production takes place in Italy, France and Denmark, which in 2018 accounted for 18%, 18% and 15% of total volume, respectively. Compared with 2017, Denmark saw the most volume reduction, which pushed the price to 3,34 EUR/kg, the highest in the last five years.

As for the other producers, it is worth mentioning Germany's downward trend of the last ten years. From 2009 to 2018, its farmed trout fell by 61% in volume and 49% in real value, corresponding to 13.209 tonnes and EUR 32 million, while its average price in real terms increased 31%, from 3 EUR/kg to 3,92 EUR/kg.

TABLE 24

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.

Member State	2018			% variations 2018/2017		
	Volume (tonnes)	Price (EUR/kg)	Value (million euros)	Volume	Price	Value
France	33.540	3,66	123	-6%	-5%	-11%
Italy	34.286	2,95	101	-4%	-1%	-6%
Denmark	28.280	3,34	95	-8%	+2%	-6%

BIVALVES AND OTHER MOLLUSCS AND AQUATIC INVERTEBRATES

In 2018, EU Member States farmed 623.916 tonnes of bivalves and other molluscs and aquatic invertebrates, which represented a 1% or 5.127-tonne decline from 2017. Their value reached EUR 1,82 billion, indicating a decrease of 12% or EUR 240 million from the peak registered in 2017.

Three main commercial species – mussel, clam and oyster – accounted for 98% of the total volume and value of this commodity group.

MUSSEL

Among all species farmed in the EU, mussel accounts for the highest volume, covering more than 35% of total EU aquaculture production.

After reaching a peak in 2017, the 2018 EU production of mussel amounted to 458.251 tonnes with a total value of EUR 400 million. This represented a decline of 1% in volume and 5% in value from the previous year.

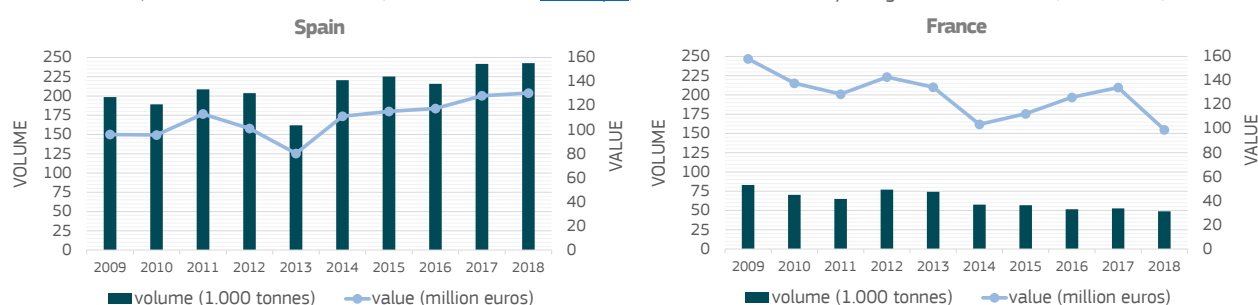
Spain and France accounted for 34% and 25%, respectively, of total mussel value in the EU. However, Spain covers more than half of total volume. This is because Spain mainly produces Mediterranean mussel (*Mytilus galloprovincialis*), of which a large share is used as raw material for processing, while France mostly produces the more valuable blue mussel (*Mytilus edulis*).

The two countries showed different patterns in the last ten years. In 2018, the Spanish production reached a ten-year peak of 242.725 tonnes and EUR 134 million, which represented growth of 22% in volume and 35% in real values from 2009. On the other hand, France followed a downward trend, dropping to 48.818 tonnes and EUR 101 million in 2018, which amounted to decreases of 7% in volume and 62% in value compared with 2017. However, when looking at the ten-year comparison, these represented drops of 41% in volume and 37% in real value from 2009.

CHART 87

PRODUCTION 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=2015).



CLAM In 2018, the EU production of clam dropped remarkably from 2017, with volumes decreasing 17% to 40.472 tonnes, and values decreasing 21% to EUR 243 million. This was mainly driven by the decrease registered in Italy for Japanese carpet shell (*Ruditapes philippinarum*).

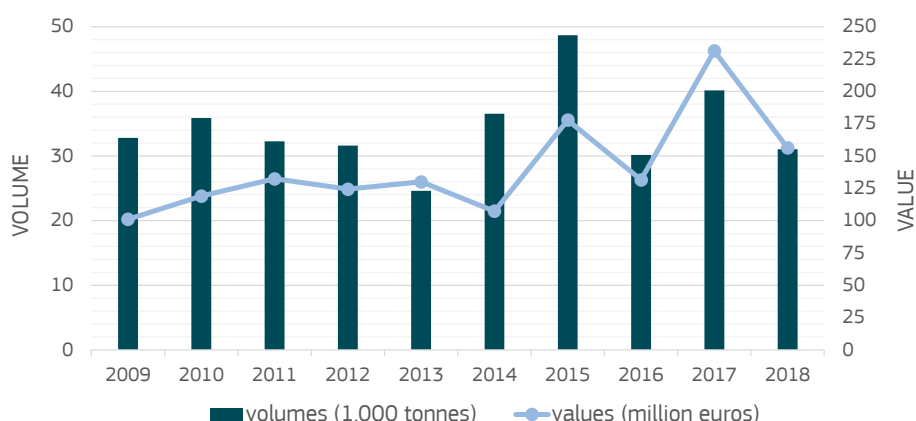
Italy is by far the main EU producer of clams. In 2018, its production of 31.056 tonnes, worth EUR 161 million, represented 77% of the volume and 66% of the value of total EU production. After reaching a peak in 2015, the country followed a fluctuating trend which in 2018 resulted in a 36% contraction of the supply and a 42% price increase. The EU production continues to be too low to meet demand, primarily in Italy, its major market. Thus, demand in Italy is increasingly being met by imports of frozen clams from Asia.⁷⁶

⁷⁶ Ibidem

CHART 88

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=2015).



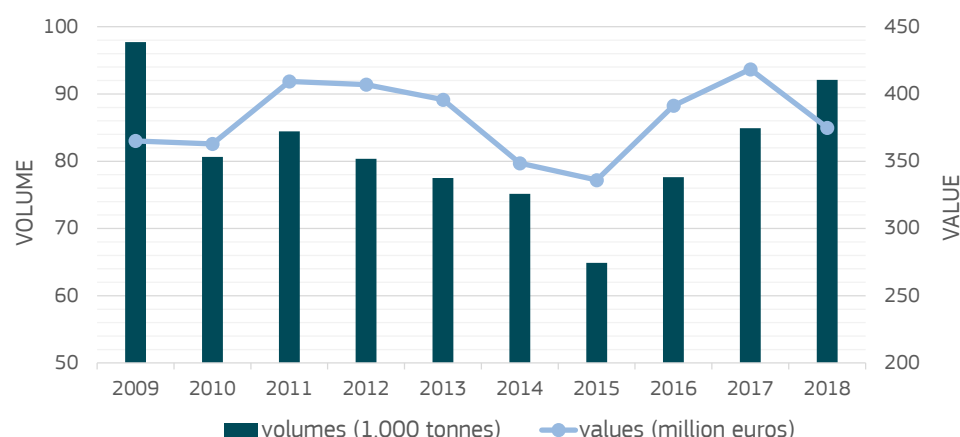
OYSTER

In 2018, the EU farmed 109.039 tonnes of oysters with a total value of EUR 457 million. In volume terms, the production was 9% higher than 2017 and only 2% below the peak of ten years before. On the other hand, the value, although 14% higher than in 2009 in real terms, was 7% less than the 2017 peak. Pacific cupped oyster (*Crassostrea gigas*) is by far the main oyster species farmed in the EU. Almost 85% of EU oyster production takes place in France. In 2018, 92.092 tonnes were farmed in the country, an 8% increase from 2017, and sold at an average price of 4,14 EUR/kg, the lowest price since 2009. The total value reached EUR 382 million, a 10% decrease from 2017.

CHART 89

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=2015).



OTHER MARINE FISH

Two species of this commodity group, namely gilthead seabream and European seabass, together accounted for over 20% of the total value of EU aquaculture production (10% and 11%, respectively). If compared with total production of the commodity group they belong to, their combined share was higher than 90% (48% for European seabass, 44% for gilthead seabream).

They are usually farmed in the same plants in the Mediterranean, prevalently in Greece and Spain.

GILTHEAD SEABREAM

In 2018, the EU production of gilthead seabream declined by 3% in volume and 5% in value compared with 2017, totalling 92.107 tonnes and EUR 462 million.

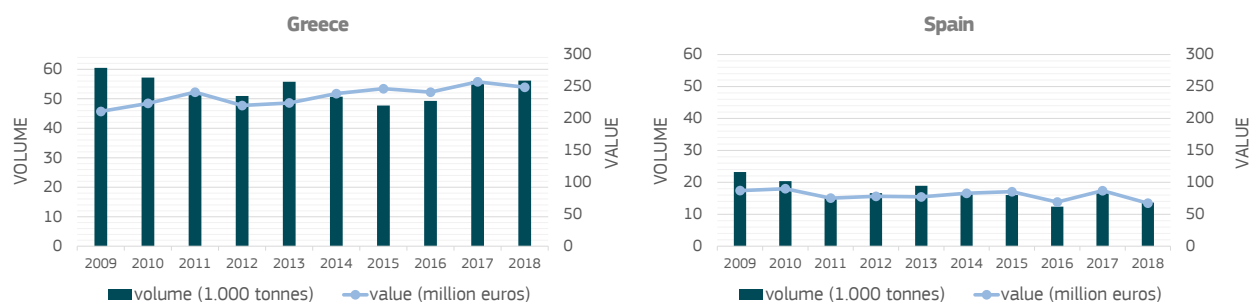
Volume remained stable in Greece, whereas its price dropped by 3% from 4,62 to 4,47 EUR/kg, causing value to decrease by the same extent. During 2017–2018, a more significant decrease was observed in Spain, where the volume dropped by 20% to 13.662 tonnes and the value diminished by 22% to EUR 69 million, despite prices decreasing by only 3%, from 5,20 to 5,07 EUR/kg. To be noted, Spain's production of gilthead seabream also followed a downward trend in the long term, with 2018 volumes and real values dropping by 41% and 23%, respectively, compared with 2009.

Export prices of whole fresh gilthead seabream from EU Member States decreased by 1% in 2019 compared with 2018. Turkish exports of the same species to the EU continued to increase, growing 7% in 2019, while export prices declined a slight 1%. In 2019, the average price for Turkish fresh seabream exported to the EU was 1,20 EUR/kg lower than for fresh seabream exported by EU producers to the EU market. In the first quarter of 2020, EU market prices of fresh whole seabream trended up, and EU export prices averaged 7% higher than in the corresponding quarter of 2019.

CHART 90

PRODUCTION OF FARMED GILTHEAD SEABREAM IN MAIN EU PRODUCING COUNTRIES

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=2015).



EUROPEAN SEABASS

European seabass production in the EU posted a record year in 2018, with volume of 86,236 tonnes and value of EUR 504 million. Compared with 2017, total volumes and values increased by 9% and 3%, respectively, while over the 10-year 2009–2018 period, they grew significantly in real terms, by 50% and 74%, respectively.

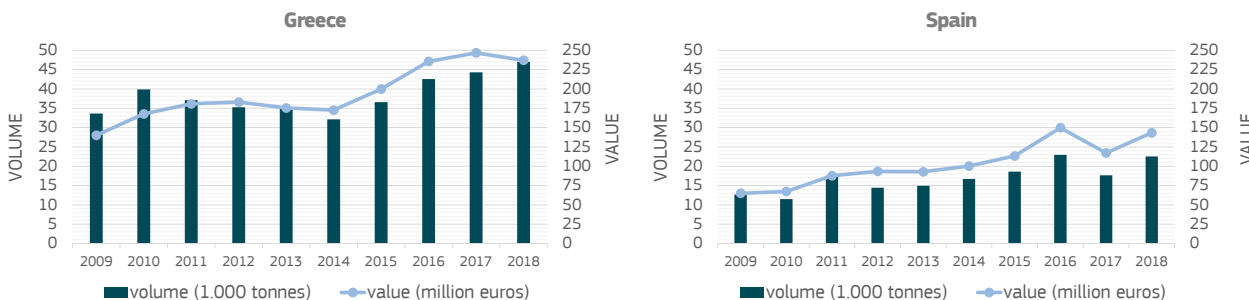
Greece and Spain together accounted for more than 80% of the EU production. From 2017, farmed European seabass in Greece increased by 6% in volume. However, due to its price declining 9% from 5,59 EUR/kg to 5,09 EUR/kg, its value decreased 3% from the peak recorded the previous year.

After the drop recorded in 2017, the production of European seabass in Spain started to grow again in 2018, thus making both its volume and value 2% lower than the peak registered in 2016. Nevertheless, they were, respectively, 78% and 120% higher than ten years before in real terms. The average 2018 price of 6,36 EUR/kg marked a 4% decline from 2017, but was 23% higher than 2009, in real terms.

CHART 91

PRODUCTION OF FARMED EUROPEAN SEABASS IN MAIN EU PRODUCING COUNTRIES

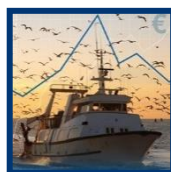
Source: EUMOFA, based on EUROSTAT (online data code: [fish_aq2a](#)) and FAO data. More details on the sources used can be found in the Methodological background. Values are deflated by using the GDP deflator (base=2015).



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