

# THE EU FISH MARKET

## 2019 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

*Maritime affairs  
 and fisheries*

[WWW.EUMOFA.EU](http://WWW.EUMOFA.EU)

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# Scope

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*“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. The report is made analysing nominal values (and prices).*

*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 2019. 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](http://www.eumofa.eu).*

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# METHODOLOGICAL BACKGROUND

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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/Od849918-162a-4d1a-818c-9edcbb4edfd2>
- The correlation table used for harmonizing data on fish species at ERS<sup>1</sup> 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 level<sup>2</sup> (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.

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

<sup>2</sup> 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 a eight digit level according to EU needs.



- **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	<p>EU expenditure data are provided by Eurostat. These data are compiled basing on a common methodology elaborated within the “Eurostat – OECD PPP Programme” (<a href="http://www.oecd.org/std/prices-ppp/eurostat-oecdmethodologicalmanualonpurchasingpowerparitiesppps.htm">http://www.oecd.org/std/prices-ppp/eurostat-oecdmethodologicalmanualonpurchasingpowerparitiesppps.htm</a>).</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>“Food” is an aggregate of products, corresponding to COICOP 01.1 (<a href="https://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM_DTL&amp;StrNom=HICP_2019&amp;StrLanguageCode=EN&amp;IntPcKey=43907206&amp;StrLayoutCode=HIERARCHIC">https://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM_DTL&amp;StrNom=HICP_2019&amp;StrLanguageCode=EN&amp;IntPcKey=43907206&amp;StrLayoutCode=HIERARCHIC</a>). 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:</p> <ul style="list-style-type: none"> <li>○ “Fish and seafood”, 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.</li> <li>○ “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.</li> </ul>
HOUSEHOLD CONSUMPTION OF FRESH FISH AND SEAFOOD	<p>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”.</p> <p>Households’ purchases are recorded daily by a sample of households, reporting to EUROPANEL many information, among which species, quantities and values.</p> <p>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:</p>

Member State	Sample size (Households)
Denmark	3.000
Germany	30.000
Ireland	5.000
Spain (excluding Canary Islands)	12.000
France	20.000
Italy	10.000
Hungary	2.000
Netherlands	10.000
Poland	8.000
Portugal (excluding Madeira and Azores Islands)	4.000
Sweden	3.000
United Kingdom (Northern Ireland is excluded)	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	Miscellaneous shrimps	Mackerel	Hake
Mackerel	Mussel <i>Mytilus</i> spp.	Miscellaneous 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	Swordfish		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
	Miscellaneous shrimps	Pike-perch	Pollack
	Octopus	Salmon	Salmon
	Salmon	Other salmonids	Seabass
	Sardine	Other unspecified products	Sole
	Scabbardfish		Trout
	Other unspecified products		Other unspecified products

OUT-OF-HOME CONSUMPTION Data for the 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.

In this edition of the EU Fish Market, the out-of-home consumption of fish and seafood is analysed for more products categories and countries compared with the previous years. Data refer to both unprocessed and processed products.

Data for the out-of-home consumption of unprocessed products are collected for 5 EU Member States: France, Germany, Italy, Spain and the UK. Data for the out-of-home consumption of processed products are collected for all EU Member States.

#### Unprocessed fish and seafood

Data are provided for the category “fish and seafood”, as well as for the subcategories fish, crustaceans and molluscs and cephalopods, more detailed below:

**Unprocessed fish and seafood:** This is the aggregation of fish, 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 fish (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 fish and seafood

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:

**Processed 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 (eg 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>.

Moreover, data comprehend around 260 "suspicious" instances of prices > 100,00 EUR/kg for low valued species. However, volumes concerned by these instances range between 100 kg and 26 tonnes, so these observations may be considered as negligible.

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)<sup>3</sup>, 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. They concern landings 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. These instances concern the following countries, years and species:
  - **Denmark**  
2017 Eurostat data are confidential for 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”. Confidential figures are related to destination use and/or presentations/preservations and corresponding data are excluded. Only totals are available and were collected from Statistics Denmark.
  - **Greece**  
2016 and 2017 Eurostat 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 deep-water rose shrimp.

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<sup>3</sup> 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, 2016 and 2017 data do not include confidential figures for 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”.

In both cases, confidential figures are related to destination use and/or presentations/preservations and corresponding data are excluded.

- Malta  
Eurostat data for the period 2012-2017 regarding landings made by vessels with Cyprus flag are excluded as they are confidential.

#### ➤ **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 SFP (Sea Fisheries Protection Authority):
  - 2013 and 2014 data regarding hake
  - 2014 data regarding mackerel
  - 2016 data regarding herring
- Lithuania  
2017 volumes and values are national estimates available in Eurostat.
- Netherlands  
Most of 2017 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 and 2014
  - Germany – 2009 and 2014
  - Ireland – 2009 and 2010
  - 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

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 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 values for seaweed and eel were collected from FAO.  
2017 data 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.  
2014, 2015 and 2016 Eurostat confidential data were integrated with figures from FAO. Those on eel and seaweed for 2016 are FAO estimates.  
2011 and 2017 data for pike-perch were collected from FAO.  
2017 Eurostat confidential data for salmon and the grouping “other salmonids” were collected from FAO.
- Germany  
Data on carp for the years 2008-2012 and 2014-2015 were collected from FAO.  
2011-2017 Eurostat confidential data were collected from FAO, those of oyster for 2012-2015 being estimates.  
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.  
2017 Eurostat confidential data on the grouping “other freshwater fish” were integrated with FAO estimates.
- 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 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.
- France  
For sole, data are FAO estimates.  
For salmon, 2015-2017 data are FAO estimates. 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 estimates. 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.
- Italy  
2015 data are National estimates and forecasts available in Eurostat.  
2016 data are FAO estimates.
- Latvia  
2014, 2015 and 2017 Eurostat confidential data were integrated with figures from FAO.
- Hungary  
Data for the grouping “other freshwater fish” were collected from FAO.
- Netherlands  
For eel, catfish and the grouping “other marine fish”, 2012 and 2015 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 estimates.  
Data on pike-perch are FAO estimates.
- Austria  
2010-2017 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 estimates.  
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 estimates.

- Portugal  
2013 and 2014 data on clam are National estimates available in Eurostat.  
For 2015, data on trout and clam are National estimates available in Eurostat while data on all other species are National provisional figures available in Eurostat.
- Romania  
2015 data are National estimates available in Eurostat.  
For turbot, 2015-2016 data are FAO estimates.
- Slovenia  
2010 and 2012 data on mussel *Mytilus* spp. were collected from FAO (the latter being estimates).  
2013, 2014, 2015 and 2016 Eurostat confidential data were integrated with figures from FAO.  
2016 data on clam and European seabass are FAO estimates.  
2017 Eurostat confidential data on the grouping “other salmonids” were integrated with figures from FAO and those on European seabass with FAO estimates.
- 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.  
2014-2017 values are National estimates available in Eurostat.

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# HIGHLIGHTS

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## INCREASED EXPENDITURE OF THE EU HOUSEHOLDS FOR PURCHASING FISH AND SEAFOOD DESPITE HIGHER PRICES

Between 2009 and 2018, the average annual increases in consumer prices for fish and seafood were higher than the increases recorded for meat and food in general.

Moreover, none of the EU countries spends more for fish and seafood than they do for meat. In fact, of the total expenditure on all goods and services purchased by EU households, fish and seafood accounted for less than 1%, which was four times lower than the share of the amount spent on meat purchases.

Nonetheless, from 2017 to 2018, households in all EU countries, except Sweden, increased their expenditure for fish and seafood. In particular, processed fish and seafood consumed out-of-home through foodservice channels (restaurants or catering) reached their highest volumes since 2014.

## LESS FISH AND SEAFOOD AVAILABLE FOR EU CONSUMERS IN 2017 COMPARED WITH 2016

Data regarding the EU supply of fish and seafood for EU consumers are available up to 2017.

In 2017, the supply (domestic production + imports) reached 14,61 million tonnes, one of the highest amounts since 2008. However, this also represented a slight decrease of 48,640 tonnes from 2016 (-0,3%), due to a reduction in catches.

Internal demand was primarily met through imports. The EU self-sufficiency ratio<sup>4</sup>, which measures the capacity of EU Member States to meet demand from their own production, remained in line with the 10-year average, namely 43%.

Per capita apparent consumption, estimated at 24,35 kg of mostly wild-caught products, signalled that EU citizens consumed, on average, half a kilo of fish and seafood less in 2017 than in 2016. Tuna, mackerel and sprat were the only species for which apparent consumption estimated for 2017 was higher than in 2016, with each of them achieving their highest level since 2009.

Portugal remains by far the most relevant country in the EU in terms of per capita consumption. In 2017, its level of apparent consumption of 56,8 kg per capita was more than twice the EU level.

## GROWTH OF EU AQUACULTURE PRODUCTION AND INCREASED LANDINGS

Also for aquaculture production and landings of fisheries products in EU Member States, the last available data are from 2017.

In 2017, aquaculture production in the EU reached a decade high. This 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, including salmon, seabass, gilthead seabream, oyster and clam. In addition to the increase in demand,

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<sup>4</sup> Ratio between EU production and apparent consumption of the EU market.

the price increases were related to other factors such as the higher quality of products (including organic) as well as the decrease of supplies due to high mortalities (e.g. of oysters). Aquaculture saw development of some new species, such as meagre and Senegalese sole, which both recorded production increases of around 25% from 2016.

Landings, including species not destined to human consumption and seaweed, recorded a notable volume increase from 2016 to 2017 and reached a 10-year peak, thanks to the 797% boost registered by sandeel landings, which were mainly in Denmark. Indeed, an increase of the reproductive biomass of this species in recent years has contributed to the full reproductive capacity of its stock in the North Sea. In addition, a decrease of fishing mortality led to a growth of sandeel catches. At the same time, a fall in the prices of some of the main landed species, especially of blue whiting and herring, contributed to a slight decline in the overall value of fisheries production.

**INCREASED EU TRADE  
 DEFICIT FOR FISHERIES  
 AND AQUACULTURE  
 PRODUCTS**

The value of extra-EU trade of fisheries and aquaculture products, which comprises both imports and exports, is the highest in the world.

As a net importer of these products, the EU has seen its deficit rise since 2013, and reach its negative peak of more than EUR 20 billion in 2018. Prices of most imported species (cod, salmon, skipjack tuna and shrimps) were above their average of the 2009-2018 period, which contributed to this trend.

At the same time, the value of EU exports rose to a 10-year peak, mainly due to the increased dispatch of one of the main export species, skipjack tuna, to Ecuador and Mauritius. These trade flows mostly consist of tunas caught by the EU fleet, landed in these countries for processing purposes and then re-imported in the EU.

Intra-EU trade flows showed increases from 2009 to 2018. They cover all main commercial species, but largely consist of salmon and cod exported by northern Member States to other EU countries, as well as squid exported by Spain to Italy.

**RECENT DYNAMICS FOR  
 SOME MAIN SPECIES**

The volume of EU imports of fisheries and aquaculture products from non-EU countries rose 4% from 2017 to 2018. In the same period, average import prices dropped 2%.

From an all-time high in 2017, the prices of fresh whole farmed Atlantic salmon imported to the EU market fell by 3% in 2018, while volumes imported rose by 8% thanks to increased production in Norway. In the first semester of 2019, import prices trended on a slightly lower level than in the corresponding period of 2018, driven by increases in both EU imports and EU harvest. In the third quarter of 2019, high harvest activity in Europe contributed to putting further pressure on prices and, at the end of the quarter, EU import prices of fresh whole salmon of Norwegian origin fell below 5,00 EUR/kg for the first time since 2015<sup>5</sup>.

EU imports of tuna fell by 2% in volume terms from 2017 to 2018, while the average import price rose by close to 5%. Whole tuna imports showed a downward trend while imports of processed tuna products remained stable.

Along with reduced quotas and catches of Atlantic cod, import prices trended up from 2017 to 2018. For the two main cod products imported to the EU, namely frozen whole and frozen fillets, import prices rose by 11% and 4%, respectively. In 2018, import price of frozen fillets went above 5,00 EUR/kg for the first time. In the first 10 months

<sup>5</sup> Source: European Commission.

of 2019, the upward price trend continued, with frozen whole cod up 10% and frozen fillets up 16% from the level seen in 2018.

The supply of Alaska pollock to the EU market, which mainly consists of frozen fillets, reached 305.000 tonnes in 2018 – the highest volume ever. This was due to a 6% increase from 2017 to 2018 which was mainly driven by higher volumes imported from Russia. In the first eight months of 2019, Alaska pollock's import volume fell by 7%, while its average import price rose by 26%.

Over the last years, reduced quotas have pushed export prices of Atlantic mackerel to record high levels. Prices of whole mackerel (fresh and frozen) of EU origin sold to non-EU countries averaged 1,56 EUR/kg in the first eight months of 2019. This is the highest price level ever recorded for this species.

Turkey's increased production and supply of farmed seabass and seabream to the EU continues to keep prices low on the EU market. From January to August 2019, EU imports of these species from Turkey increased by 16% and 26%, respectively. From 2016 to 2019,<sup>6</sup> EU import prices of European seabass dropped 28% while those of gilthead seabream dropped 20%. Up to the end of October 2019, volumes of seabass and seabream imported from Turkey remained high, with no significant price movements<sup>7</sup>.

#### MACROECONOMIC TRENDS

In 2018, the EUR strengthened against four currencies of importance to operators in the fish and seafood industry, both in and outside the EU. The EUR appreciated the most against the USD (+5%) and Icelandic króna, ISK (+6%). It also appreciated 1% against the British pound (GBP) and 3% against the Norwegian Krone (NOK).

In the first 10 months of 2019, the biggest EUR exchange rate movements were observed for the NOK and USD, with an appreciation of 4% against the NOK and a 3% depreciation against USD of 3%.

The consumer price index for fish and seafood in the EU remained flat from January to December 2018, a trend that continued during the first nine months of 2019.

In 2018, spot prices of crude oil peaked in October, then fell steeply in the last two months of the year. Since the main price driver for marine fuel is spot price for crude oil, marine fuel prices followed the same trend<sup>8</sup>. Compared with 2017, they dropped by 5% in 2018, but then showed an upward trend, rising 6% in the first 10 months of 2019.

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<sup>6</sup> Data up to August 2019.

<sup>7</sup> Source: European Commission.

<sup>8</sup> Source: MABUX.

# 1/ THE EU IN THE WORLD

## 1.1 PRODUCTION

In 2017, world catches and aquaculture production<sup>9</sup> increased by 3% compared with 2016, rising from 198 to 205 million tonnes. Both contributed to the overall increase: catches rose 3%, from 90 million tonnes to 93 million tonnes, and farmed production grew 4%, from 108 million tonnes to 112 million tonnes. Both catches and aquaculture production reached their 12-year peak in 2017.

**TABLE 1**

MAIN PRODUCING COUNTRIES IN 2017 (1.000 TONNES)

Source: Eurostat (online data codes: [fish\\_ca\\_main](#) and [fish\\_aq2a](#)) and FAO.

Country	Catches	Aquaculture	Total production	% of total	% evolution of total production 2017/2016
China	15.577	64.358	79.935	39%	↑ +2%
Indonesia	6.736	15.896	22.632	11%	↗ +0,2%
India	5.450	6.182	11.632	6%	↑ +8%
Vietnam	3.278	3.831	7.109	3%	↑ +6%
<b>EU-28</b>	<b>5.253</b>	<b>1.372</b>	<b>6.625</b>	<b>3%</b>	<b>↑ +5%</b>
United States	5.040	440	5.480	3%	↑ +2%
Russian Federation	4.879	187	5.066	2%	↑ +2%
Japan	3.274	1.022	4.296	2%	↘ -1%
Peru	4.185	100	4.285	2%	↑ +9%
Bangladesh	1.801	2.333	4.134	2%	↑ +7%
Philippines	1.890	2.238	4.128	2%	↓ -2%
Norway	2.533	1.309	3.842	2%	↑ +9%
Republic of Korea	1.366	2.306	3.672	2%	↑ +14%
Chile	2.334	1.220	3.554	2%	↑ +24%
Myanmar	2.150	1.049	3.199	2%	↑ +4%
Thailand	1.479	890	2.369	1%	↓ -2%
Others	25.979	7.233	33.212	16%	↑ +4%
<b>Total</b>	<b>93.204</b>	<b>111.966</b>	<b>205.170</b>	<b>100%</b>	<b>↑ +3%</b>

<sup>9</sup> The source of data for non-EU countries is FAO. For EU-28 countries, the source of data on catches is Eurostat and the sources of data on aquaculture are Eurostat and FAO. Catches include all products fished by a country's fleet in any fishing area, independently from the area of landing/selling. Eurostat does not include inland waters. More details can be found in the Methodological background.

In the EU, as well as in India and Vietnam, the 2017 volumes of both fishery and aquaculture production were larger than in 2016. An overall upward trend was seen also for the top two producers, China and Indonesia, where increased farmed production offset a decrease of catches.

As a matter of fact, since 2000, aquaculture’s share of total world production has increased continuously and, since 2013, aquaculture production has been higher than that of catches. In each of the world’s top four producing countries, the majority of production originates from aquaculture: more than 80% in China, 70% in Indonesia, and more than half in Vietnam and India. By contrast, only 21% of EU production originates from aquaculture.

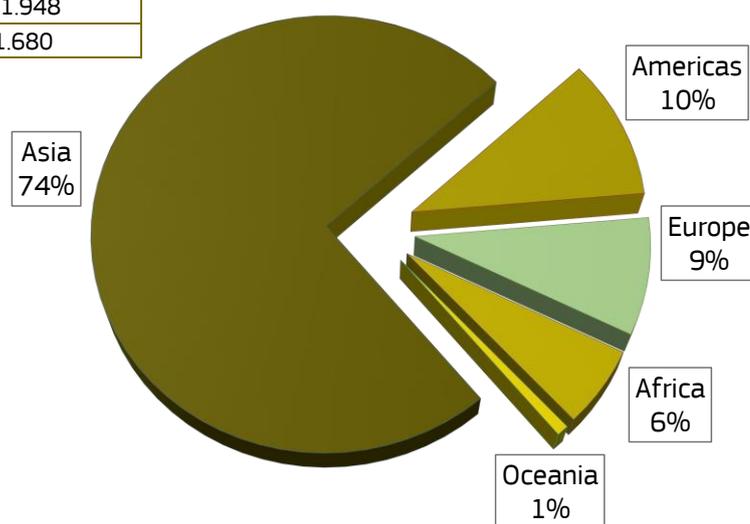
It is worth noting that aquaculture in China accounts for 57% of total global fish and seafood production.

**CHART 1**

**WORLD CATCHES AND AQUACULTURE PRODUCTION IN 2017**

Source: Eurostat (online data codes: [fish\\_ca\\_main](#) and [fish\\_aq2a](#)) and FAO.

Continent	Volume (1.000 tonnes)
Asia	152.421
Americas	21.426
Europe	17.704
Africa	11.948
Oceania	1.680



**ASIA** Overall, Asia leads the world in both farmed and wild production, accounting for 74% of total world production in volume terms. It is the only continent where farmed production is higher than wild production. In 2017, Asian aquaculture grew by 3% with respect to the previous year, moving from 99 million tonnes to 103 million tonnes, while its catches recorded a slight 1% increase, growing from 49 million tonnes to 50 million tonnes. China accounts for more than half of Asian production, mainly due to its farming of carps which are almost exclusively destined for internal consumption. In 2017, China’s carp aquaculture reached 16 million tonnes, which accounted for 85% of the world’s farmed carp. By comparison, carp aquaculture in the EU totalled less than 90.000 tonnes.

**AMERICA** In the Americas (including North, Central and South America), both farmed and wild production were 7% higher in 2017 than 2016. The United States contribute more than 25% of the Americas’ production. Its 2017 total included almost entirely caught products, mainly Alaska pollock, which showed a 1% increase from 2016. Peru and Chile follow, covering 20% and 17% of the total, respectively. Anchovy is the main

species fished in both countries, especially in Peru, where catches of *Engraulis ringens*, designated for fishmeal production, reached 3,3 million tonnes in 2017, which was 15% higher than in 2016. In Chile, where aquaculture is more important, salmon is the main species farmed. In 2017, Chilean production of salmon totalled almost 780.000 tonnes, with Atlantic salmon accounting for nearly 80% of salmon production and Coho (silver) salmon covering the remaining share. This represented a 21% increase from 2016, as Chile recovered from drops of 8% between 2014 and 2015 and of 13% between 2015 and 2016. The increase in 2017 resulted mainly from two phenomena: i) an algae outbreak in 2016 led to substantial mortality and, thus, lower production volume and ii) the Chilean salmon industry experienced strong productivity in 2017, with a good growth rate, low mortality and high average harvest weights.

As for salmon in EU Member States, total production reached around 209.000 tonnes, which was much lower than that of Chile. However, Chilean production was 37% lower than Norway's 1,24 million tonnes, and equal to half of the overall European production, which reached 1,56 million tonnes when including both EU and non-EU countries.

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## EUROPE

In Europe, three non-EU countries accounted for almost 60% of total production in 2017: Russian, Norway and Iceland. Russian production, mainly consisting of Alaska pollock, was 1.560 tonnes lower than the combined total of all EU-28 Member States. In Norway, Atlantic salmon is the main species farmed and Atlantic herring is the main species caught. By comparison, the EU Member States fished almost 777.000 tonnes of Atlantic herring in 2017, which was 7% lower than in 2016, while Norway fished around 526.000 tonnes, which was 50% higher than 2016.

Both the EU and Norway catch herring from the North Sea stock, where quotas were marginally down from 2016 until 2017. The strong increase in the Norwegian catch is linked to the Norway Spring Spawning (NSS-herring stock), which saw quotas rebounding noticeably in 2017, after the two historically low years of 2015 and 2016. As for Iceland, production mostly consists of Atlantic cod and blue whiting. In 2017, Iceland's Atlantic cod catch of 250.000 tonnes was 5% less than in 2016, while its blue whiting catch of 229.000 tonnes was 22% higher than in 2016. Quotas and catches for blue whiting, whether in the Atlantic or in the North Sea, can fluctuate remarkably from one year to another, explaining the strong increase for Iceland. While Icelandic catches of Atlantic cod were double those of EU Member States, its catches of blue whiting were only one-third of those in the EU.

Looking more specifically at the EU level, production is more focused on pelagic and demersal fish than in the rest of the world. Pelagic fish cover more than one-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 5%, while in non-EU countries, they have a combined share of around 25%.

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## AFRICA

In Africa, the main producers are Egypt, mainly farming Nile tilapia; Morocco, mainly catching sardine; and Nigeria, mainly catching and farming catfish. In 2017, Moroccan production of sardine was almost five times higher than that of EU Member States.

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## OCEANIA

In Oceania, almost 90% of total production is wild, and mainly consists of catches of skipjack tuna by Papua New Guinea: the country fished 190.000 tonnes of this species in 2017, which was almost the same amount fished by the EU.

## 1.2 IMPORT - EXPORT<sup>10</sup>

**EU-28** The value of EU trade of fisheries and aquaculture products, which comprises both extra-EU imports and exports, reached EUR 32,28 billion in 2018, making it the highest of the world. Of this, imports accounted for EUR 26,53 billion, which was 82% of the total. The EU is indeed a net importer, and availability of these products in the domestic market mostly relies on extra-EU supplies.

Detailed analyses on imports and exports of EU Member States can be found in Chapter 4 of this report. This section focuses on trade flows of the top 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** China ranks second in the world for total trade of fisheries and aquaculture products, with a value of EUR 30,93 billion in 2018. It is a net exporter, with a significant share of its trade surplus coming from its large processing sector, which processes both internally produced and imported fisheries and aquaculture products for export.

In 2018, its exports totalled EUR 18,48 billion, triple those of the EU, while its imports reached EUR 12,45 billion, which was around half of the EU's total imports. China's trade balance worsened from 2017 to 2018, as its import value rose by 28% and export value increased by 1%. As trade exchanges are paid in USD, this was also due to a 4,7% appreciation of the USD during 2018 against the CNY. Increased imports were mainly linked to a significant 37% increase in value and 8% increase in volume of imports from Russia, which mostly involved frozen salmon. Other relevant suppliers to China are Peru for fishmeal and the US for salmon.

As for Chinese exports, the main destinations are Japan, the US and the EU, with Japan mainly receiving frozen fillets of marine fish<sup>11</sup> but also eels, cuttlefish and squid; the US receiving shrimps and prepared/preserved fish<sup>12</sup>; and the EU importing its Alaska pollock and cod.

**UNITED STATES** The total value of imports and exports of fisheries and aquaculture products to/from the US was EUR 22,36 billion in 2018. However, the US trade balance for these products was negative. In 2018, US exports reached EUR 4,91 billion and imports totalled EUR 17,45 billion. The US mainly imports shrimps from India and Indonesia, salmon from Chile, and crab from Canada. Supplies from the EU, which were mostly salmon, accounted for only 3% of US imports.

Canada is also an important destination for US exports of salmon and lobster *Homarus*, and significant amounts of these species are also exported to China and other Asian markets. In addition, the EU receives almost 20% of US exports, mostly importing Alaska pollock.

**JAPAN** In 2018, Japan registered imports and exports of fisheries and aquaculture products with a total value of EUR 15,11 billion. That said, Japan's trade deficit is half that of the EU.

The EU plays a minor role in Japanese trade of these products. It absorbs 2% of Japan's exports, mainly molluscs<sup>13</sup>, and supplies 3% of its total imports, mainly tuna. Japan's main partner countries for both imports and exports are the US and China. Its exports to the US largely include frozen fillets of marine fish<sup>14</sup>, while its imports from the US are mostly Alaska pollock.

<sup>10</sup> Sources used in this chapter are: Eurostat for EU countries (online data code [DS-016890](#)) and IHS Markit for non-EU countries.

<sup>11</sup> No detail is available in terms of species.

<sup>12</sup> *Ibidem*.

<sup>13</sup> *Ibidem*.

<sup>14</sup> *Ibidem*.

**NORWAY** Norway recorded total imports and exports of fisheries and aquaculture products at EUR 11 billion in 2018, for a trade surplus of almost EUR 9 billion.

Norwegian exports rank second in the world after those from China, due to the significant amounts of salmon it exports all over the world. The EU, its main destination, absorbs more than two-thirds of total Norwegian exports.

EU Member States are also relevant suppliers to Norway, accounting for 36% of Norway's imports of fisheries and aquaculture products. In addition, Peru and Iceland are important suppliers of products not destined for food use, with Peru supplying fish oil and Iceland supplying fishmeal.

**THAILAND** Thailand is a net exporter of fisheries and aquaculture products, with a 2018 trade surplus of almost EUR 1,70 billion. Exports, amounting to more than EUR 5 billion, were at almost the same level as those from the EU. Its exports are mostly destined for Japan and the US, both of which mainly receive shrimps and tuna. Its imports are mainly from China which supplies mostly cuttlefish and squid, as well as from India, Vietnam and Taiwan. India mainly supplies frozen marine fish of unspecified species, Vietnam mainly supplies frozen fish meat<sup>15</sup> and freshwater catfish (pangasius), and Taiwan mainly supplies skipjack tuna. The EU is not a relevant partner for Thailand: only 7% of Thailand's exports are destined for the EU and 2% of products imported by Thailand originate in the EU. Both flows mostly include skipjack tuna.

**TABLE 2**  
 VALUE OF EXPORTS OF  
 FISHERIES AND  
 AQUACULTURE  
 PRODUCTS OF MAIN  
 WORLD TRADERS  
 (EUR BILLION)

Country	2014	2015	2016	2017	2018
China	15,96	17,86	18,31	18,21	18,48
Norway	8,20	8,21	9,77	10,06	9,91
<b>EU-28</b>	<b>4,84</b>	<b>5,01</b>	<b>5,24</b>	<b>5,63</b>	<b>5,75</b>
Thailand	4,97	5,07	5,25	5,26	5,08
United States	4,73	5,45	5,35	5,46	4,91
Japan	1,43	1,73	1,85	1,82	1,98

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

**TABLE 3**  
 VALUE OF IMPORTS OF  
 FISHERIES AND  
 AQUACULTURE  
 PRODUCTS OF MAIN  
 WORLD TRADERS  
 (EUR BILLION)

Country	2014	2015	2016	2017	2018
<b>EU-28</b>	<b>21,42</b>	<b>22,80</b>	<b>24,84</b>	<b>25,98</b>	<b>26,53</b>
United States	15,43	17,03	17,77	19,22	17,45
Japan	11,36	12,28	12,73	13,52	13,12
China	6,67	7,84	8,15	9,70	12,45
Thailand	2,11	2,33	2,85	3,24	3,39
Norway	1,05	1,12	1,15	1,08	1,12

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

<sup>15</sup> *Ibidem*.



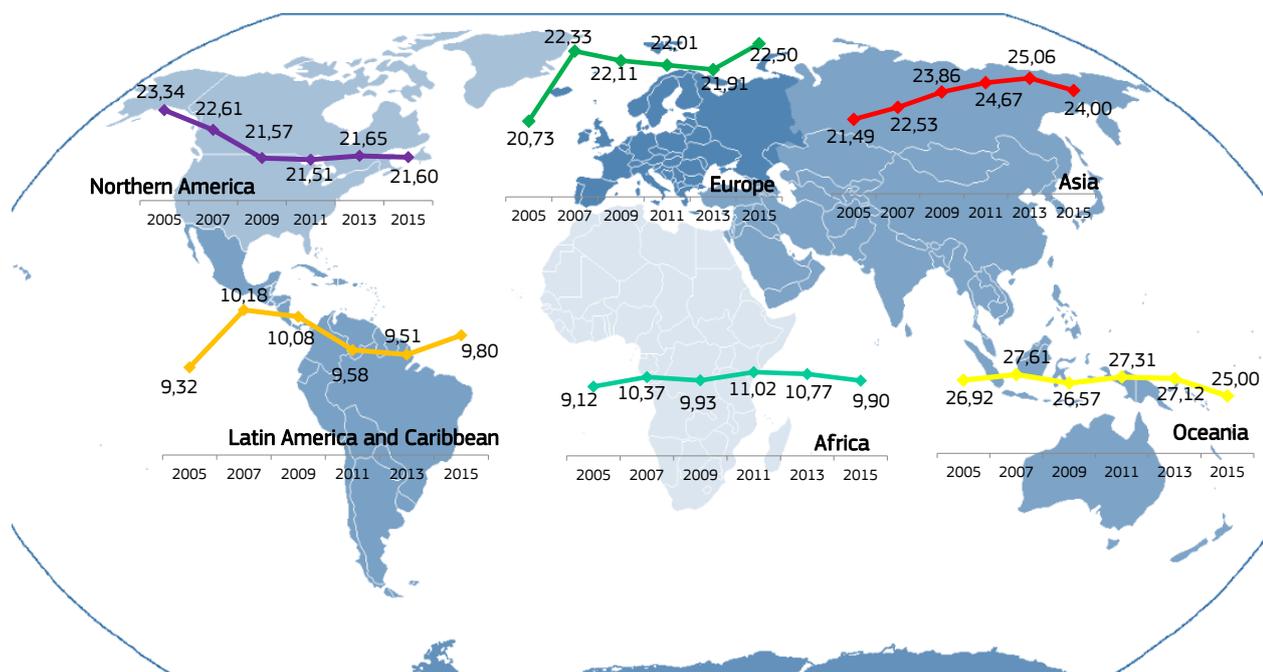
According to the latest data from FAO<sup>17</sup>, per capita world consumption in 2015 was 8% higher than in 2005, moving from 18,8 to 20,2 kg.

From 2005 to 2015, Asia registered the highest growth, with a 12% increase. It was followed by Europe, Africa, and Latin America and the Caribbean, which increased by 9%, 9% and 5%, respectively. With an amount of 24 kg per capita, Asia almost reached the level of Oceania, which, despite a 7% decrease since 2005, still records the highest per capita consumption at 25 kg per capita. North America also registered a 7% reduction between 2005 and 2015.

**CHART 3**

**WORLD CONSUMPTION OF FISHERIES AND AQUACULTURE PRODUCTS BY CONTINENT (KG PER CAPITA)**

Source: FAO



<sup>17</sup> Data on world consumption are available within FAO until 2013. Data for 2015 are taken from the "State of world fisheries and aquaculture 2018" <http://www.fao.org/s-tate-of-fisheries-aquaculture>. Data referring to 2014 are averages between 2013 and 2015.

## 2/ MARKET SUPPLY

### 2.1 SUPPLY BALANCE AND SELF-SUFFICIENCY OVERVIEW

In 2017, the EU supply for human consumption of fishery and aquaculture products (domestic production + imports) amounted to 14,61 million tonnes in live weight equivalent. This was 48.640 tonnes less than in 2016 (-0,3%), but still one of the highest supplies of 2008-2017.

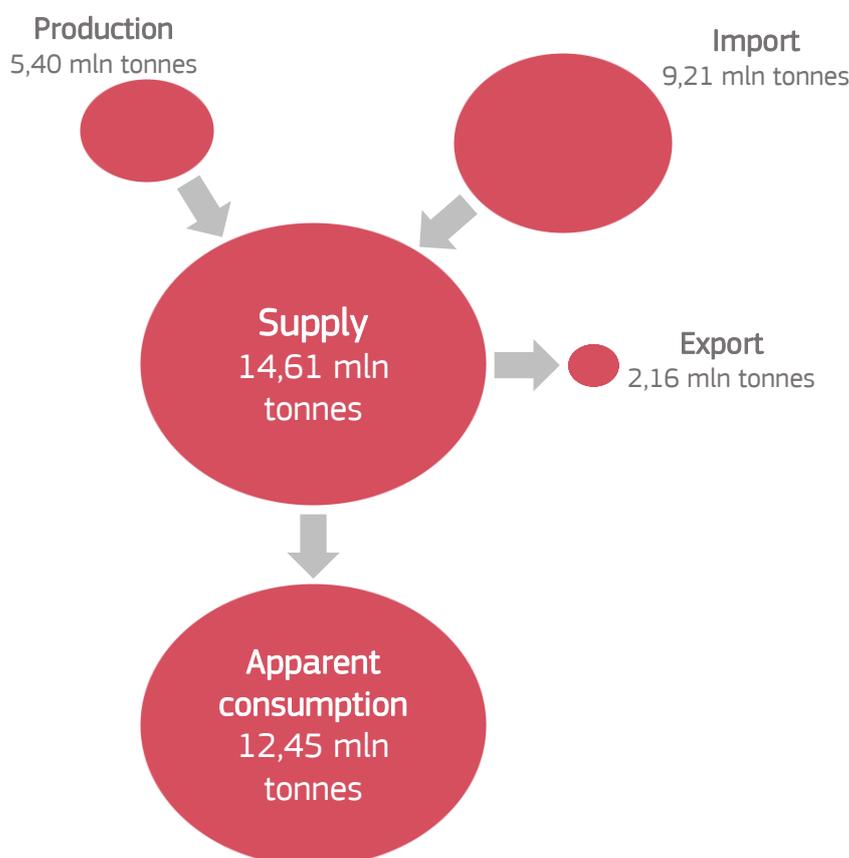
The decline from 2016 to 2017 was caused by decreased catches: in fact, the increases registered for aquaculture production (+67.172 tonnes or +5%) and imports (+15.061 tonnes or +0,2%) did not offset the 3% decline (-130.873 tonnes) of catches.

Consequently, and also due to a major 187.079-tonne increase of exports, apparent consumption<sup>18</sup> decreased from 12,69 to 12,45 million tonnes in live weight equivalent, a 2% decrease of 235.719 tonnes.

**CHART 4**  
**EU SUPPLY BALANCES**  
 (2017, LIVE WEIGHT EQUIVALENT, FOOD USE ONLY)

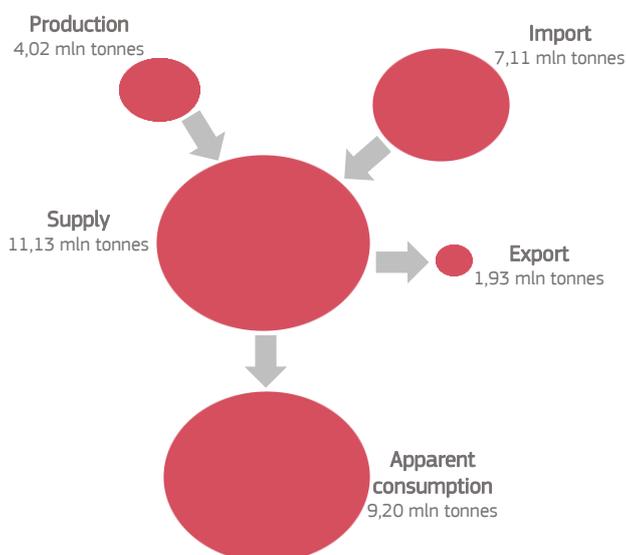
Source: EUMOFA, based on Eurostat (online data codes: [fish\\_aq2a](#), [fish\\_ca\\_main](#) and [DS-016890](#)) and FAO data. Details on the sources used can be found in the Methodological background.

#### TOTAL FISHERIES AND AQUACULTURE PRODUCTS

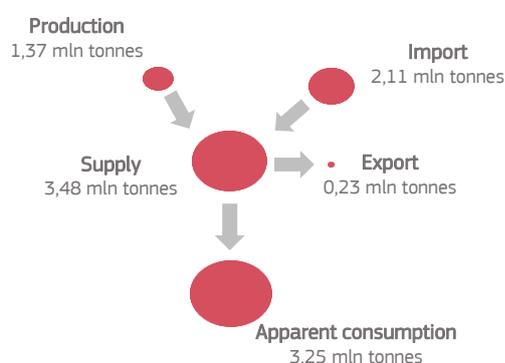


<sup>18</sup> The definition of "apparent consumption" is available in the "Supply balance sheet" section of the Methodological background.

## FISHERIES PRODUCTS



## AQUACULTURE PRODUCTS



Catches of the EU fleet can be destined for human consumption or non-food use purposes. While catches for food use registered a decrease from 2016 to 2017, non-food catches<sup>19</sup> recovered, registering a noteworthy 43% increase from 2016, mainly thanks to sandeel fisheries in Denmark.

Wild-caught products cover 74% of total apparent consumption. The average EU citizen consumed 24,35 kg of fish and seafood in 2017, of which 18 kg originated from catches and 6,35 kg from aquaculture. Consumption of both wild and farmed products decreased from 2016, when total per capita consumption of fisheries and aquaculture products was 24,87 kg. Lower catches and reduced imports of farmed products led to the decline of supply for EU consumers.

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

**TABLE 5**  
**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.

		2013	2014	2015	2016	2017
Food use	Catches	4.037.046	4.422.100	4.088.121	4.156.816	4.025.943
	Aquaculture	1.168.283	1.236.808	1.247.453	1.304.840	1.372.012
<b>Total production destined to food use</b>		<b>5.205.329</b>	<b>5.658.908</b>	<b>5.335.574</b>	<b>5.461.656</b>	<b>5.397.955</b>
Non-food use	Catches	791.944	959.567	1.056.098	857.663	1.227.070

<sup>19</sup> Source: Eurostat. For the species considered not to be destined to human consumption, please refer to the Methodological background.

**TABLE 6**  
**EU SUPPLY BALANCE FOR FISHERIES AND AQUACULTURE PRODUCTS BY COMMODITY GROUP AND PRODUCTION METHOD (2017, 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	226.229	625.895	128.433	192.499	39.866	15.370	314.796	803.024	1.117.820	0,62	1,57	2,19
Cephalopods	98.578	2	688.864	0	45.579	1	741.864	1	741.864	1,45	0	1,45
Crustaceans	194.503	576	488.007	394.952	127.547	781	554.963	394.747	949.710	1,09	0,77	1,86
Flatfish	177.505	13.345	139.555	852	67.982	342	249.078	13.855	262.933	0,49	0,03	0,51
Freshwater fish	15.113	115.661	77.987	287.056	11.454	8.947	81.646	393.769	475.416	0,16	0,77	0,93
Groundfish	761.285	0	2.794.031	355	418.558	0	3.136.758	355	3.137.113	6,13	0	6,13
Miscellaneous aquatic products	39.109	95	291.227	0	35.281	0	295.056	95	295.151	0,58	0	0,58
Other marine fish	308.857	185.840	380.925	96.114	117.120	17.645	572.662	264.309	836.971	1,12	0,52	1,64
Salmonids	4.192	410.181	986	1.129.293	1.668	174.664	3.509	1.364.810	1.368.319	0,01	2,67	2,68
Small pelagics	1.770.445	0	633.126	0	755.408	0	1.648.163	0	1.648.163	3,22	0	3,22
Tuna and tuna-like species	430.127	20.418	1.487.521	32	313.664	7.404	1.603.984	13.045	1.617.029	3,14	0,03	3,16
<b>Total</b>	<b>4.025.943</b>	<b>1.372.012</b>	<b>7.110.664</b>	<b>2.101.153</b>	<b>1.934.127</b>	<b>225.154</b>	<b>9.202.480</b>	<b>3.248.011</b>	<b>12.450.491</b>	<b>18,00</b>	<b>6,35</b>	<b>24,35</b>

Data as of June 2019. 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, cod, salmon, Alaska pollock and shrimps – the top-5 species consumed in the EU and for which EU self-sufficiency averaged at only 13% in 2017.

**TABLE 7**  
**SELF-SUFFICIENCY RATES OF MOST CONSUMED PRODUCTS IN THE EU (2017)**

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.

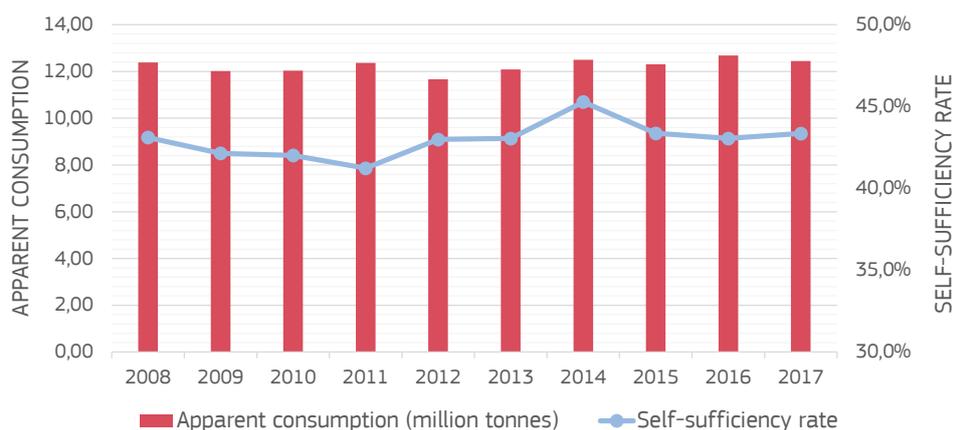
Products <sup>20</sup> and share of total apparent consumption	Per capita consumption (kg, live weight equivalent)	Self-sufficiency rate
Tuna (13%)	3,07	27%
Cod (9%)	2,31	11%
Salmon (9%)	2,24	18%
Alaska pollock (7%)	1,59	0%
Shrimps (6%)	1,51	9%
Mussel (5%)	1,28	80%
Herring (5%)	1,18	95%
Hake (4%)	0,94	37%
Squid (3%)	0,67	13%
Mackerel (3%)	0,65	121%
Sardine (2%)	0,58	75%
Surimi <sup>21</sup> (2%)	0,53	n/a
Trout (2%)	0,42	91%
Sprat (=Brisling) (2%)	0,37	112%
Freshwater catfish (1%)	0,36	6%

<sup>20</sup> 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).

<sup>21</sup> 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 5**  
**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 8**  
**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	Self-sufficiency rates									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Groundfish (25%)	23%	23%	23%	19%	20%	22%	24%	25%	23%	24%
Small pelagics (13%)	111%	109%	118%	113%	119%	116%	132%	119%	107%	107%
Tuna and tuna-like species (13%)	32%	20%	21%	23%	26%	29%	34%	27%	28%	28%
Salmonids (11%)	33%	33%	34%	32%	30%	30%	29%	27%	28%	30%
Bivalves and other molluscs and aquatic invertebrates (9%)	61%	63%	60%	59%	64%	61%	61%	64%	68%	76%
Crustaceans (8%)	23%	22%	22%	21%	21%	21%	22%	21%	22%	21%
Other marine fish <sup>22</sup> (7%)	49%	55%	55%	56%	68%	67%	65%	63%	61%	59%
Cephalopods (6%)	17%	17%	17%	18%	21%	21%	22%	20%	16%	13%
Freshwater fish (4%)	16%	16%	14%	15%	17%	18%	21%	23%	24%	28%
Miscellaneous aquatic products (2%)	13%	8%	7%	13%	13%	20%	17%	6%	16%	13%
Flatfish (2%)	94%	94%	97%	98%	77%	79%	75%	76%	70%	73%
<b>Total</b>	<b>43,1%</b>	<b>42,1%</b>	<b>42,0%</b>	<b>41,2%</b>	<b>43,0%</b>	<b>43,1%</b>	<b>45,3%</b>	<b>43,4%</b>	<b>43,1%</b>	<b>43,4%</b>

The EU market for fisheries and aquaculture products observed a decline in self-sufficiency from 2014 to 2015, mainly due to production shrinkage of small pelagics and more especially of sardine, mackerel and jack and horse mackerels (*Trachurus* spp.).

However, in the long term, self-sufficiency remained at almost the same level from 2008 to 2017.

<sup>22</sup> 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

Three groundfish species, namely cod, Alaska pollock and hake, totalled a combined amount of 4,84 kg of per capita consumption in 2017, representing one fifth of the total. For them, the EU held a low degree of self-sufficiency, averaging 16%.

#### COD, ALASKA POLLOCK, HAKE

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

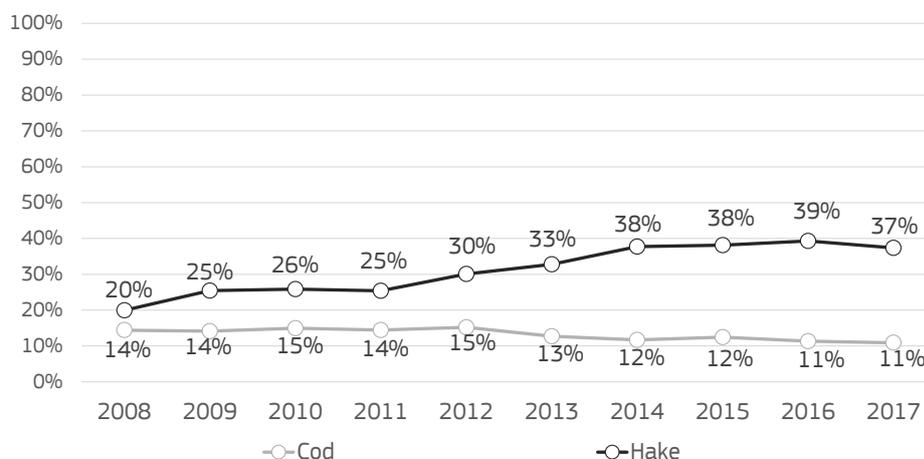
For cod, which is the most highly consumed species in the EU (the second if combining all tuna species), the EU self-sufficiency decreased from 2008 to 2017 due to increased imports, reaching 11% in 2017.

On the other hand, thanks to increased production, the EU self-sufficiency for hake followed an upward trend in the same period, and averaged 38% from 2014 to 2017.

#### CHART 6

##### 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 28% in 2017, recording no change compared with 2016.

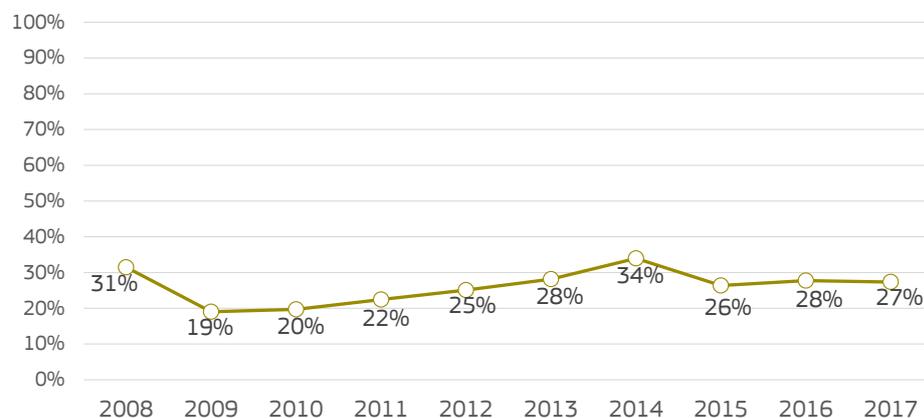
Specifically for tuna, the EU had a similar degree of self-sufficiency during 2015–2017, lower than in 2014 as a consequence of increased imports of yellowfin and skipjack tuna. In 2014, Autonomous Tax Quotas (ATQ) increased, following the establishment of Free Trade Agreements with major producers which contributed to the higher imports.

In 2009, EU catches of both yellowfin and skipjack tuna dropped, causing a significant worsening of the EU self-sufficiency.

#### CHART 7

##### 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. However, if considering total EU catches only, they account for 44%. This, combined with low imports, makes the EU fully capable of meeting the overall EU demand of these products.

As for herring, during the decade under analysis, the EU was not dependent on supplies from abroad in 2014 and 2015, as the self-sufficiency was 100% or higher. The lower self-sufficiency rates were registered from 2008 to 2011, because of lower production and higher imports.

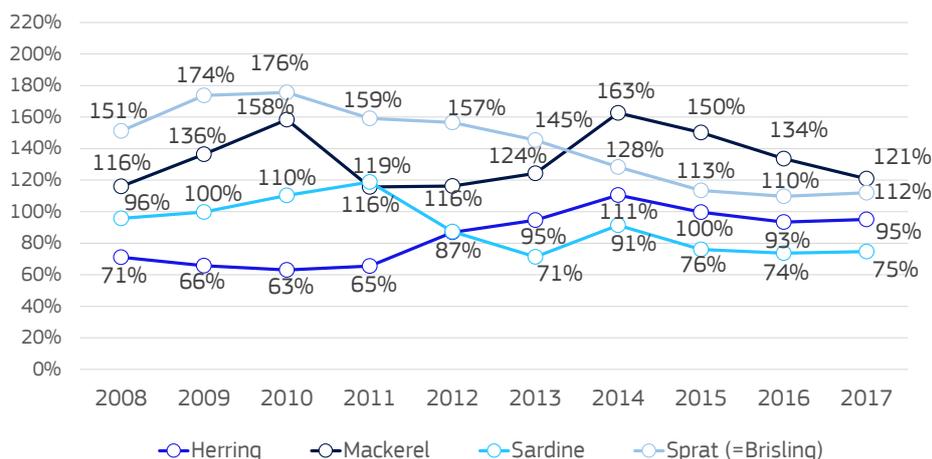
As concerns mackerel, its self-sufficiency declined from the 7-year peak achieved in 2014. In 2017, it was at 121%, sharply lower than in 2014 as a consequence of increased imports and reduced catches.

For sardine, the EU self-sufficiency declined compared to the peak achieved in 2011, due to halving production – with main reductions in Spain, the Netherlands, Portugal and Lithuania.

As for sprat, it should be underlined that EU imports are negligible compared with EU production. Therefore, the self-sufficiency is determined only by the balance between production and exports. Considering that production was stable at around 200.000 tonnes from 2010 to 2017, the drop 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.

**CHART 8**  
**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.



**SALMONIDS**

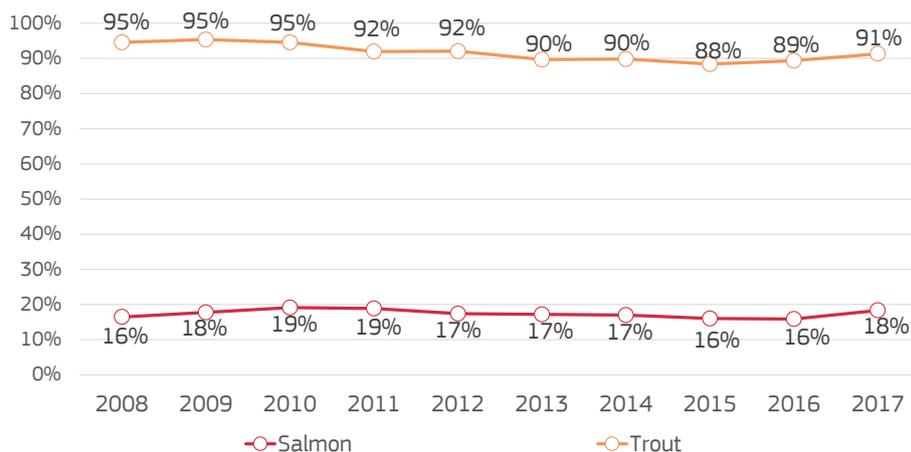
**SALMON, TROUT**

Over the 10-year period analysed, the EU self-sufficiency rate was almost stable for both salmon and trout.

In 2017, 18% of the salmon consumed in the EU was produced internally, slightly above the 2016 level, thanks to increased aquaculture production in the UK. In the same two-year period, self-sufficiency grew at the same rate for trout, but in this case, the growth was linked to a downward trend of imports.

**CHART 9**  
**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, MUSSEL,**  
**SQUID, SURIMI,**  
**FRESHWATER CATFISH<sup>23</sup>**

This section analyses self-sufficiency of other most consumed species, each belonging to different commodity groups.

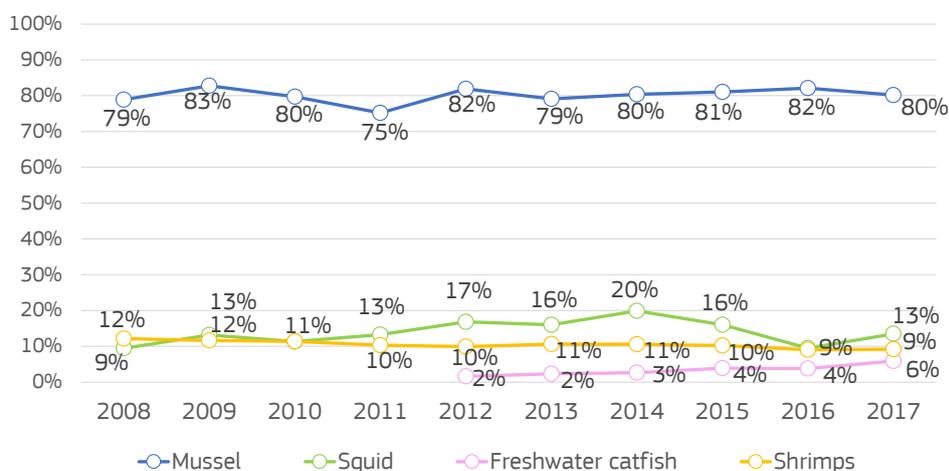
Of them, mussel is the only species for which the EU holds a high level of self-sufficiency. It averaged 80% from 2008 to 2017, without showing notable variations. In 2011, it dropped to 75%, its lowest level, due to the peak registered by imports. On the other hand, the EU is highly dependent on imports of freshwater catfish to meet internal demand, as the most consumed species of this category, namely pangasius, is not produced in the EU. Nevertheless, in 2017, the self-sufficiency for this product was the highest in six years, thanks to an import decrease that was due to a weakening demand in the two largest EU markets, Spain and the UK.

As for squid, the self-sufficiency dropped from 16% in 2015 to 9% in 2016, 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 and British fleets. In 2015 and 2016, the catches were significantly lower than in 2014, but in 2017, they rose again.

The self-sufficiency for shrimps averaged 11% from 2008 to 2017, following a downward trend. The most consumed shrimp species, supplied mainly through imports, were warmwater shrimps and Argentine red shrimp, frozen or prepared/preserved.

**CHART 10**  
**SELF-SUFFICIENCY RATE**  
**FOR OTHER MOST**  
**CONSUMED 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.



<sup>23</sup> The EU supply balance for freshwater catfish cannot be calculated for the years before 2012, as the CN-8 nomenclature up to 2011 did not include codes specifically referring to this species.

## 3/ CONSUMPTION

### 3.1 OVERVIEW FOR TOTAL FISH AND SEAFOOD

#### APPARENT CONSUMPTION

*From 2016 to 2017, on average, EU citizens consumed half a kilo less of fish and seafood.*

In 2017, apparent consumption<sup>24</sup> of fish and seafood in the EU amounted to 12,45 million tonnes in live weight equivalent. This was a 2% decrease from the 10-year peak of 12,69 million tonnes recorded in 2016.

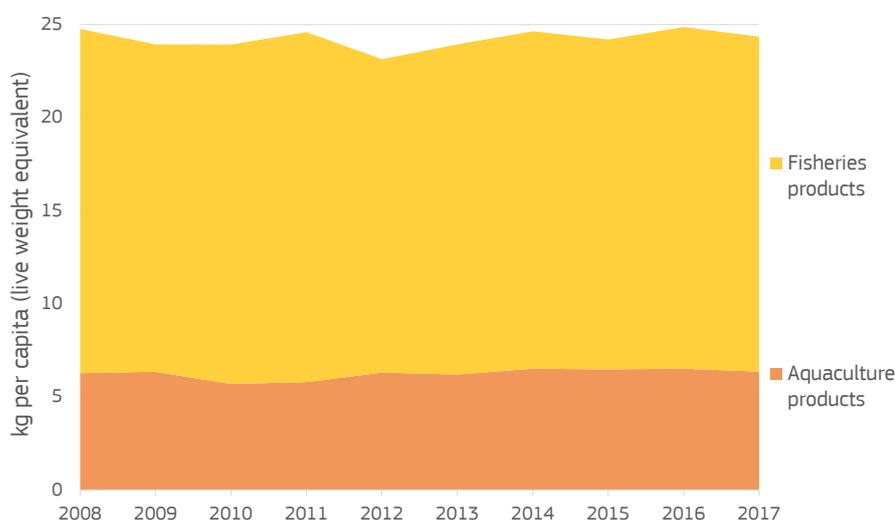
This meant that from 2016 to 2017, per capita consumption decreased from 24,87 kg to 24,35 kg and, on average, EU citizens consumed half a kilo less of fish and seafood.

Wild-caught products cover three-quarters of total apparent consumption of fish and seafood. In 2017, per capita consumption of wild-caught products amounted to 18 kg, 360 grams lower than in 2016, but in line with the average amount of the previous 10 years.

Although slightly decreasing with respect to 2016, the consumption of farmed products in the EU was at 6,35 kg per capita in 2017, 2% above its decade average.

**CHART 11**  
 PER CAPITA APPARENT CONSUMPTION OF 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.



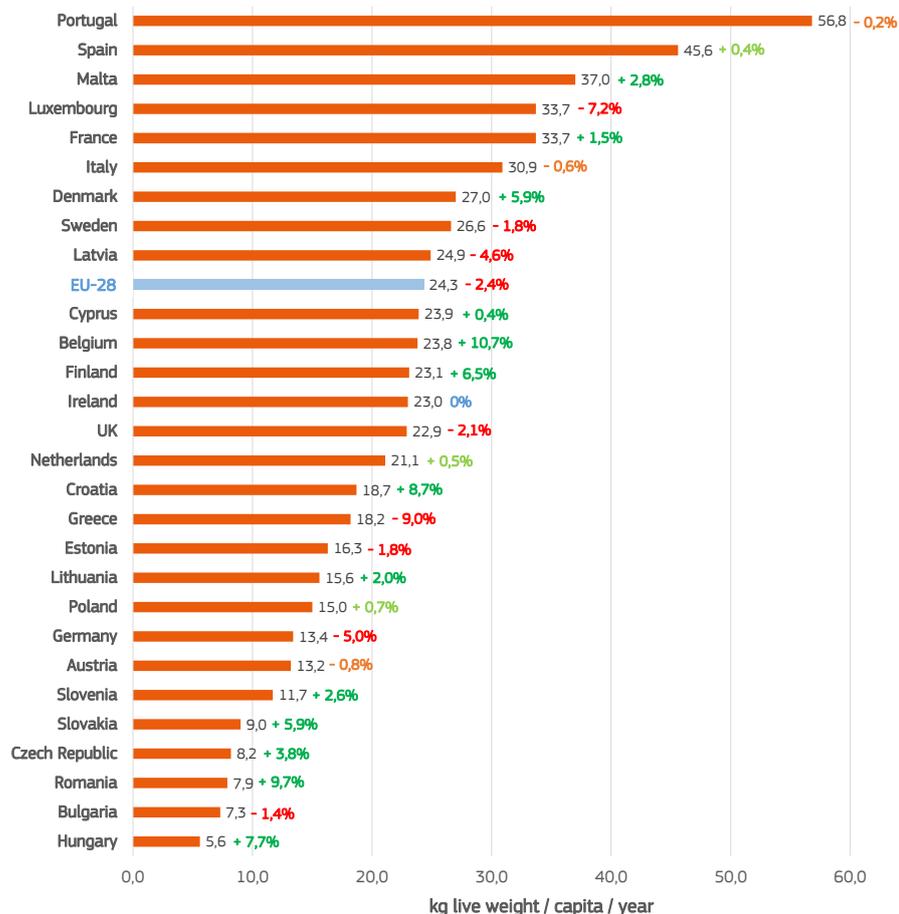
<sup>24</sup> The definition of "apparent consumption" is available in the "Supply balance sheet" section of the Methodological background.

**APPARENT CONSUMPTION  
 BY MEMBER STATE**

Portugal is by far the most relevant country in the EU in terms of per capita consumption. In 2017, its level of apparent consumption was more than twice the EU apparent consumption. Two Member States reached a 10-year high, namely Malta and Denmark. Compared with 2016, the most significant decrease in absolute terms concerned Luxembourg (-2,6 kg per capita) while the most notable growth was observed in Belgium (+2,3 kg per capita).

**CHART 12**  
 PER CAPITA APPARENT  
 CONSUMPTION  
 OF FISHERIES AND  
 AQUACULTURE  
 PRODUCTS BY MEMBER  
 STATE IN 2017 AND %  
 VARIATION 2017/2016

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.



**ANALYSIS  
 BY MAIN SPECIES**

The 15 products listed in Table 9 accounted for 73% of apparent consumption in 2017; almost all of them were consumed less than in the previous year. The only exceptions were tuna, mackerel and sprat, which achieved their highest levels of consumption since 2009. On the other hand, freshwater catfish and sardine showed the main decreases.

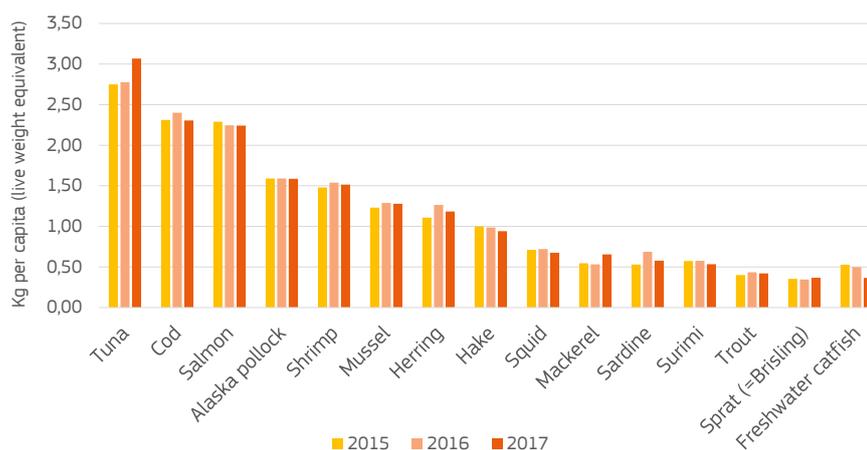
**TABLE 9**  
**APPARENT CONSUMPTION**  
**OF MOST CONSUMED**  
**PRODUCTS (2017)**

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	Per capita consumption (kg, live weight equivalent)	% wild	% farmed
Tuna	3,07	99,17%	0,83%
Cod	2,31	99,97%	0,03%
Salmon	2,24	0,05%	99,95%
Alaska pollock	1,59	100%	0%
Shrimps	1,51	50,87%	49,13%
Mussel	1,28	8,44%	91,56%
Herring	1,18	100%	0%
Hake	0,94	100%	0%
Squid	0,67	100%	0%
Mackerel	0,65	100%	0%
Sardine	0,58	100%	0%
Surimi <sup>25</sup>	0,53	100%	0%
Trout	0,42	0,21%	99,79%
Sprat (=Brisling)	0,37	100%	0%
Freshwater catfish	0,36	0,30%	99,70%
Others	6,65	79,09%	20,91%
<b>Total</b>	<b>24,35</b>	<b>73,9%</b>	<b>26,1%</b>

**CHART 13**  
**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.



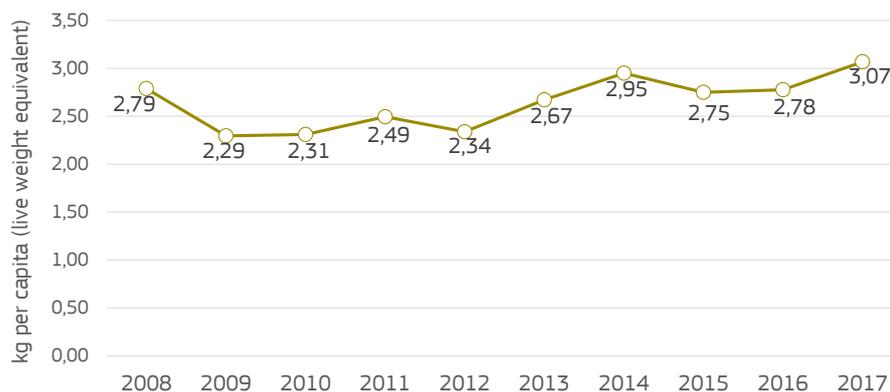
## TUNA

Since 2008, none of the fishery and aquaculture products consumed in the EU had ever reached a level of annual apparent consumption higher than 3,00 kg per capita until 2017, when tuna achieved the peak of 3,07 kg per capita. It is mostly consumed as canned products of skipjack and yellowfin tuna. After a decrease recorded from 2008 to 2009, caused by a drop in Spanish catches, EU consumption of tuna began following an upward trend supported by increased availability from both internal production and imports.

<sup>25</sup> Surimi is made from wild-caught species (mainly Alaska pollock, blue whiting, blue grenadier, 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 14**  
**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.



**GROUND FISH**

**COD, ALASKA POLLOCK,**  
**HAKE**

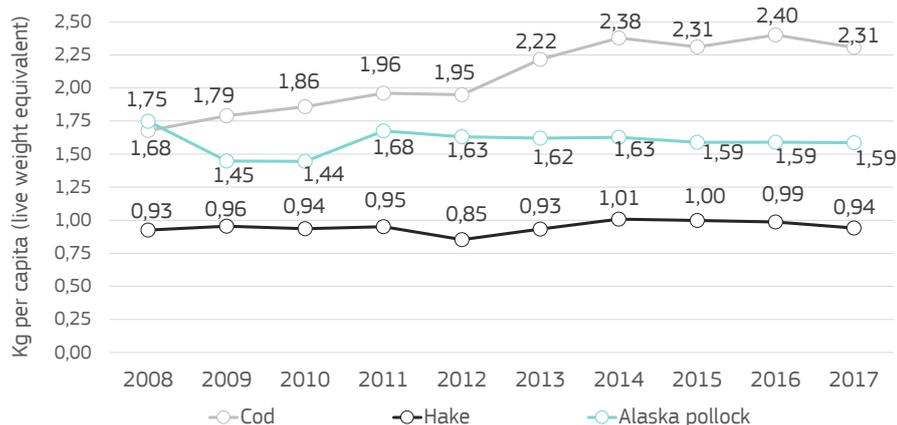
One fifth of EU consumption of fish and seafood is represented by three groundfish species: cod, Alaska pollock and hake.

Cod consumption followed an upward trend during 2008–2017. In the first half of the decade, it averaged 1,85 kg per capita, while in the second half it averaged 2,32 kg per capita, supported by increased imports from Norway, Iceland, Russia and China. However, Chinese exports of cod primarily include fillets made of whole/gutted cod from Norwegian and Russian origin.

As for Alaska pollock, the lower availability in the EU market in 2009 and 2010 was due to US fishing quotas reduced to around 950.000 tonnes on average (-35% from 2008). Since the US fishing quota recovered in 2011, amounting to 1.367.000 tonnes, apparent consumption in the EU returned to its 2008 level, averaging 1,62 kg per capita during 2011–2017, with a slight downward trend. Consumption of hake remained almost stable from 2008 to 2017, at around 950 grams per capita, in line with a flat trend of both imports and production.

**CHART 15**  
**APPARENT CONSUMPTION**  
**OF MOST CONSUMED**  
**GROUND FISH**

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**

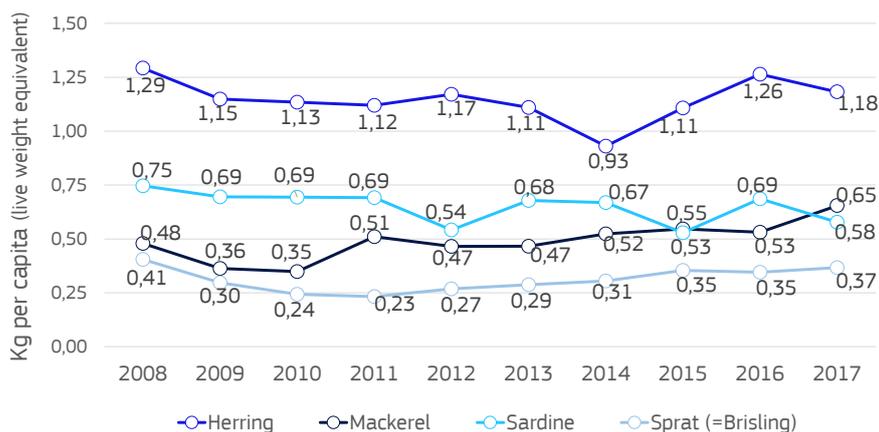
**HERRING, MACKEREL,**  
**SARDINE, SPRAT**

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 species of this commodity group. From 2008 to 2017, EU citizens ate an average of around 1,15 kg per capita of herring annually. As for mackerel, sardine and sprat, consumption per capita has always been lower than 1 kg during the same decade.

**CHART 16**  
**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

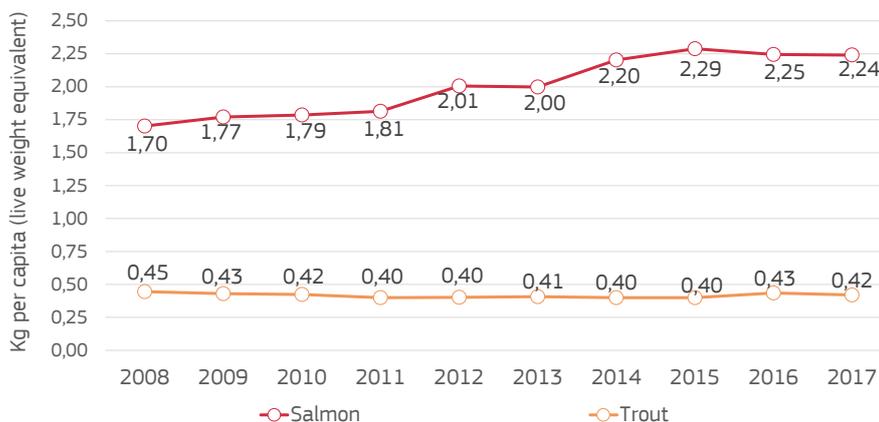
### SALMON, TROUT

Salmon is by far the most-consumed farmed species consumed in the EU. In 2017, it covered 35% of the total apparent consumption of aquaculture products. After the decade-high achieved in 2015, when it reached almost 2,30 kg per capita, its level of apparent consumption began slowly decreasing as did imports from Norway.

Apparent consumption of trout in the EU has remained around 400 grams per capita each year since 2008, in line with an almost flat trend of aquaculture in main producing Member States.

**CHART 17**  
**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, FRESHWATER CATFISH<sup>26</sup>

Apparent consumption of shrimps followed an upward trend from 2008 to 2011, but then dropped to a lower level in the 2012–2017 period, averaging 1,50 kg per capita. Its decrease from 2011 to 2012 was in line with declined imports from some of the main EU suppliers, namely Vietnam, Thailand, Indonesia, Argentina, Greenland.

After salmon, mussels, mostly supplied by Spanish production, are the main farmed products consumed in the EU. Indeed, the recovery of mussels consumption started in 2014 with Spain’s aquaculture recovering from a collapse caused by “red tide” or algae blooms in 2013.

As regards squid, apparent consumption in 2017, namely 674 grams per capita, was the lowest since 2008, reflecting the decrease of global production.

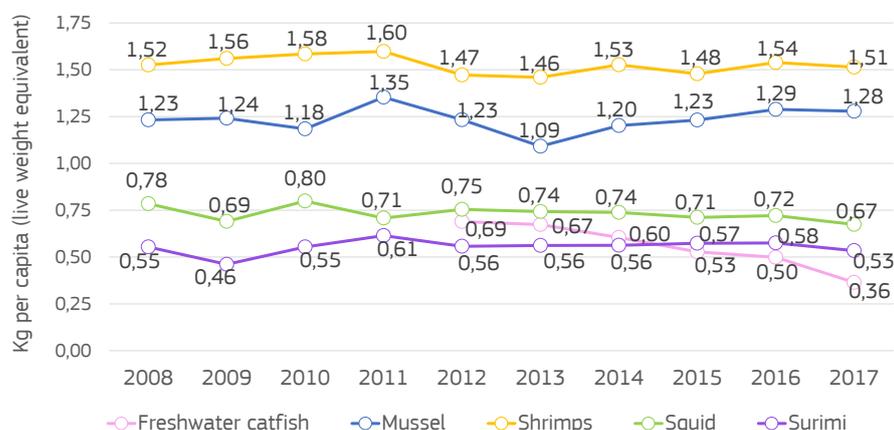
<sup>26</sup> As explained in chapter 2, the EU supply balance for freshwater catfish cannot be calculated for the years before 2012, as the CN-8 nomenclature up to 2011 did not include codes specifically referring to this species.

In 2017, apparent consumption of surimi in the EU achieved one of its lowest levels of the decade under analysis, at 534 grams per capita, following the downward trend of imports from Vietnam.

Declined imports from Vietnam also contributed to the downward trend of apparent consumption of freshwater catfish (mainly pangasius) that has been continuing since 2013. In 2017, it declined to 365 grams per capita, marking a 27% drop from the previous year.

**CHART 18**  
**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**

EU household expenditure on fish and seafood followed an upward trend from 2009 to 2018<sup>27</sup>, when it reached EUR 59,3 billion. This represented a 3% increase over 2017 and a 24% increase compared with 2009.

In 2018, households of all EU countries, with the exception of Sweden, spent more for buying fish and seafood than in 2017. In absolute terms, Spain recorded the highest increase of total expenditure, posting a growth of more than EUR 400 million (+4%).

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

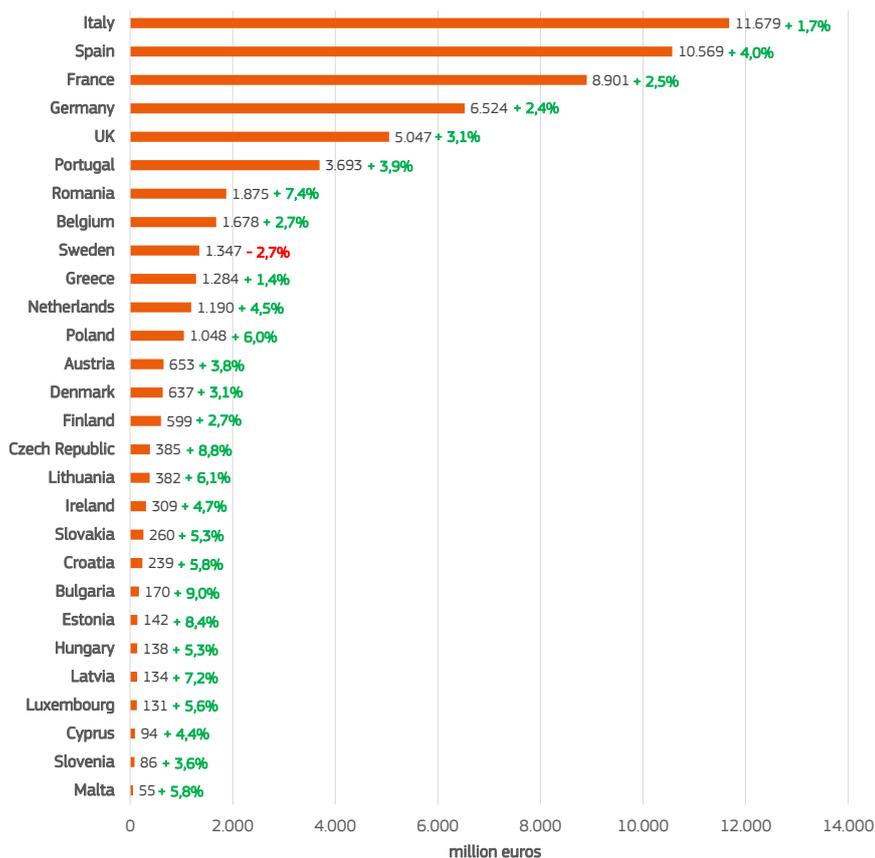
It is worth noting that the amount spent for buying fish and seafood by individuals in Portugal (EUR 359) was more than triple the EU average of EUR 115.

<sup>27</sup> Last available data on Eurostat.

**CHART 19**  
**HOUSEHOLD**  
**EXPENDITURE ON FISH**  
**AND SEAFOOD IN 2018**  
**AND % VARIATION**  
**2018/2017**  
 (out-of-home  
 consumption is excluded)

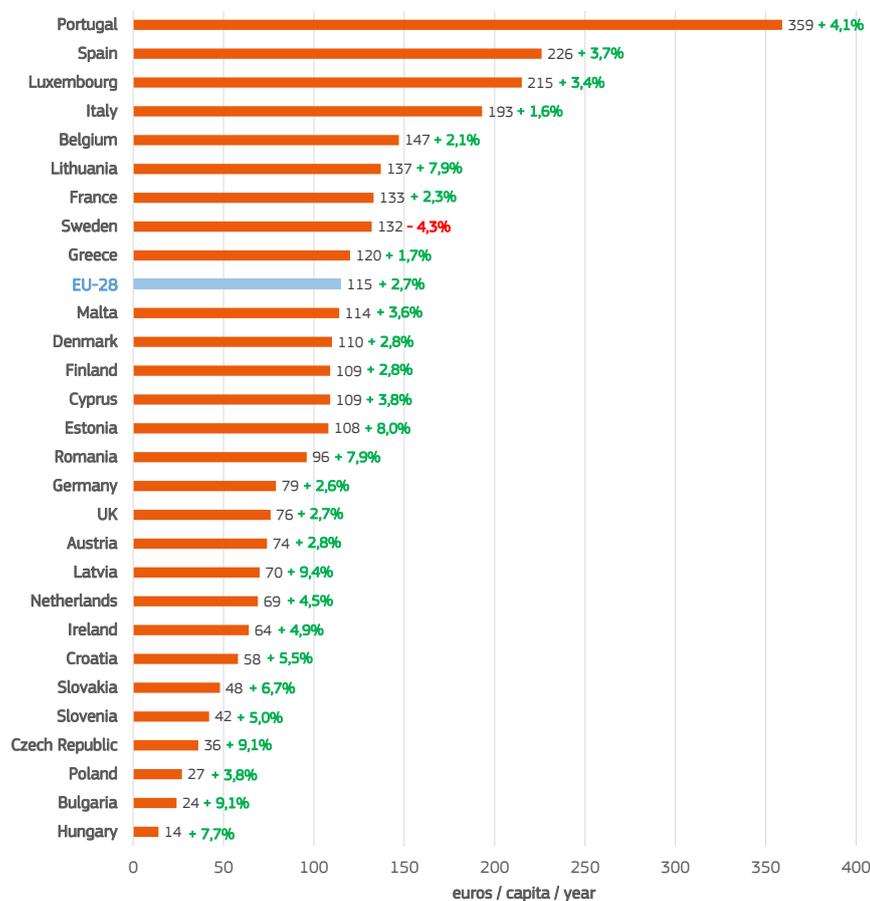
Source: Eurostat  
 (online data code: [prc\\_ppp\\_ind](#))  
 Purchasing Power Parities  
 PPPs – nominal expenditure

*In 2018, households  
 of all EU countries  
 spent more for buying  
 fish and seafood than  
 in 2017 (exception  
 made for Sweden).*



**CHART 20**  
**PER CAPITA HOUSEHOLD**  
**EXPENDITURE ON FISH**  
**AND SEAFOOD IN 2018**  
**AND % VARIATION**  
**2018/2017**  
 (out-of-home  
 consumption is excluded)

Source: Eurostat  
 (online data code: [prc\\_ppp\\_ind](#))  
 Purchasing Power Parities  
 PPPs – nominal expenditure per  
 inhabitant



## FISH AND SEAFOOD VS. MEAT AND FOOD IN GENERAL

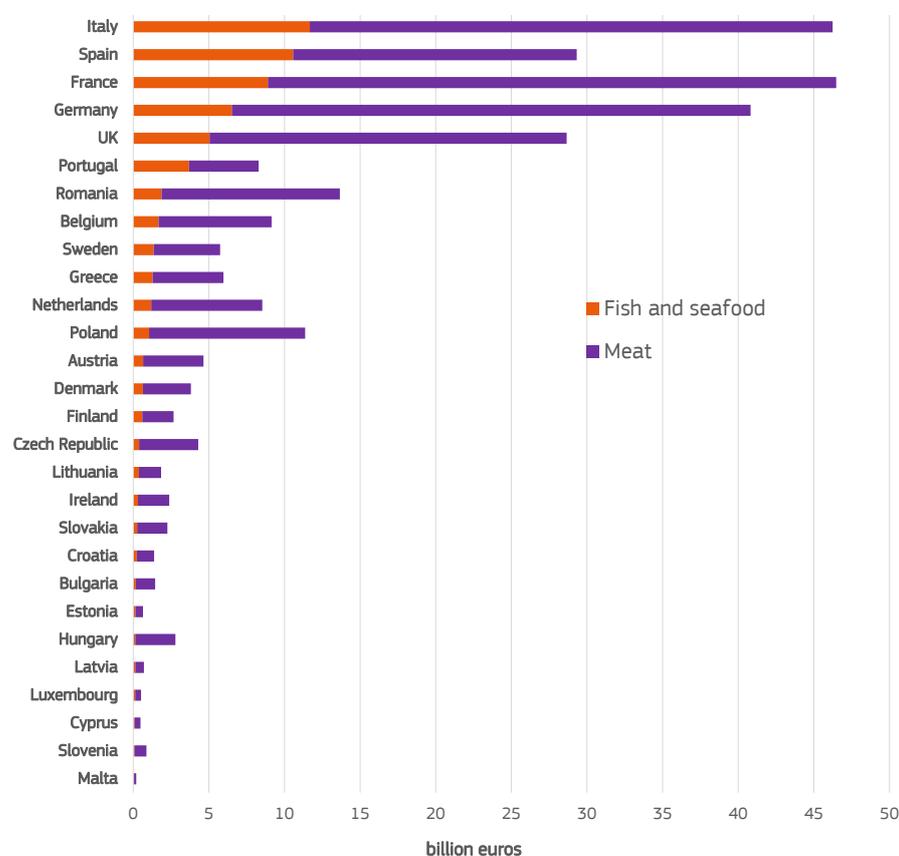
In none of the EU countries the expenditure on fish and seafood is higher than that for meat. Since 2009, at EU level, households have spent for purchasing fish and seafood around one-quarter of the amount spent on meat (EUR 226 billion in 2018).

Portugal is the Member State where the ratio between the two categories is most balanced. In 2018, Portugal's expenditure on fish and seafood represented 45% of the total amount spent on both fish and seafood and meat. The greatest imbalances in spending for fish and seafood and meat are seen in two landlocked countries: Hungary (5% spent for fish and seafood in 2018) and the Czech Republic (9% spent for fish and seafood in 2018).

In Italy, Spain and France, different patterns are observed. In Italy, in 2018, expenditure on fish and seafood was three times lower than for meat, in Spain, it was twice lower, in France, it was four times lower.

**CHART 21**  
**HOUSEHOLD**  
**EXPENDITURE ON FISH AND SEAFOOD VS. MEAT IN THE EU IN 2018**  
 (out-of-home consumption is excluded)

Source: Eurostat  
 (online data code: [prc\\_ppp\\_ind](#))  
 Purchasing Power Parities  
 PPPs – nominal expenditure



In the 2009–2018 period, consumer prices of fish and seafood increased by 3% per year on average, a higher growth rate than the 1% recorded for the price of meat and the 2% recorded for food in general .

It is worth noting that from 2011 to 2013, prices of fish and seafood, meat and food in general increased at similar rates, but, starting from 2014, they drifted apart. Indeed, those of fish and seafood began to grow significantly and, in 2018, they were 12% higher than in 2013. During the same period, the prices of meat and food grew as well, but at a much lower rate.

It is also interesting to note that in 2018, compared with the previous year, expenditure on fish and seafood grew 2,7%, which was faster than the 2,2% inflation for fish and seafood. This was not the case in 2017, when the 1,8%

growth of expenditure compared to 2016 was lower than the 3,6% inflation. This could suggest that EU households purchased more fish and seafood in 2018 than in 2017, while the 2016–2017 expenditure increase could be mainly linked to inflation effects. This is confirmed by the decrease of EU apparent consumption of fisheries and aquaculture products from 2016 to 2017, as estimated by EUMOFA.

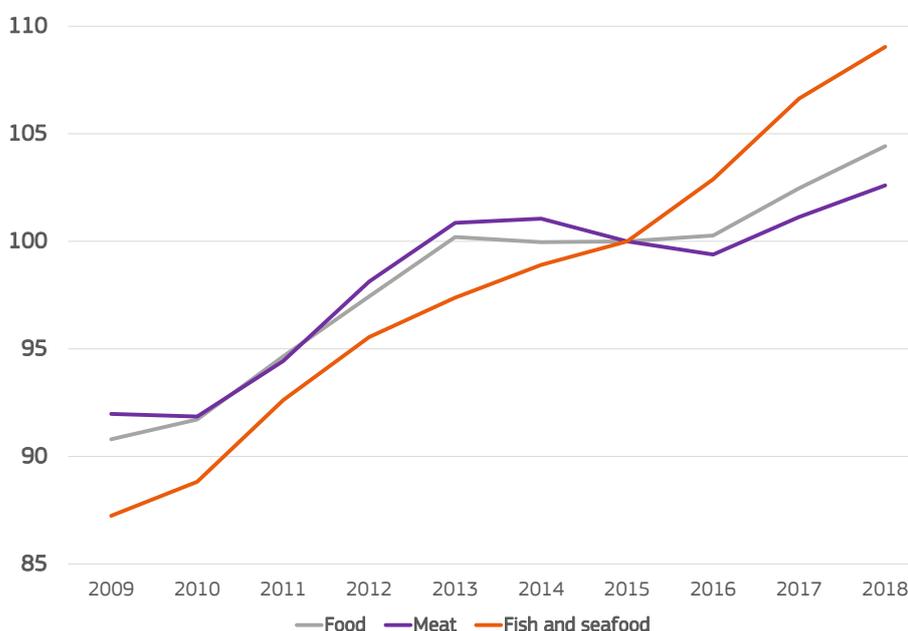
**TABLE 10**  
**EVOLUTION OF**  
**CONSUMER PRICES**

Source: Eurostat  
 (online data code: [prc\\_fsc\\_idx](#))  
 Harmonised index of  
 consumer prices  
 HICP

Sector	2013	2014	2015	2016	2017	2018	2018 / 2013
Food	2,8%	-0,2%	0,0%	0,3%	2,2%	1,9%	4,2%
Meat	2,8%	0,2%	-1,0%	-0,6%	1,8%	1,4%	1,7%
Fish and seafood	1,9%	1,6%	1,1%	2,9%	3,6%	2,2%	12,0%

**CHART 22**  
**CONSUMER PRICES**  
**INDICES**  
**(2015=100)**

Source: Eurostat  
 (online data code: [prc\\_fsc\\_idx](#))  
 Harmonised index of  
 consumer prices  
 HICP



**RELEVANCE BY**  
**PRESERVATION**  
**STATE**

As concerns fish and seafood statistics within households expenditure, Eurostat provides “*shares of the total household final monetary consumption expenditure*”<sup>28</sup> for four preservation states, which are listed in Table 11.

Of all goods and services purchased by EU households, fish and seafood covers less than 1%, which means it is four times lower than the relevance of meat. From 2017 to 2018, the share of expenditure on fish and seafood saw a very small decrease, as did the share of expenditure on meat. At the same time, the share of expenditure on food in general recorded a moderate increase, thanks to the increase observed for other food products.

As specifically regards fish and seafood, there was a slight reduction of the share specifically of fresh or chilled products, which mainly concerned four Baltic countries (Sweden, Finland, Latvia and Estonia), as well as Belgium and the UK. This resulted in a decline for the total fish and seafood category at EU level. Although in half of EU Member States, the share of expenditure on fresh or chilled

<sup>28</sup> Metadata are available at [https://ec.europa.eu/eurostat/cache/metadata/en/prc\\_hicp\\_esms.htm](https://ec.europa.eu/eurostat/cache/metadata/en/prc_hicp_esms.htm).

fish and seafood on total in 2018 was higher than in 2017, more significantly in Portugal, Malta and Greece, the overall trend for the year for this category was downwards.

For frozen fish and seafood, a slight increase of the share was observed, while for other preservation states the shares were stable.

**TABLE 11**  
**ITEM WEIGHTS OF EU**  
**HOUSEHOLD**  
**EXPENDITURE**

Source: Eurostat  
 (online data code: [prc\\_hicp\\_inw](#))  
 Harmonised index of  
 consumer prices  
 HICP

Category	2017	2018
TOTAL GOODS AND SERVICES	100%	100%
FOOD	14,051%	14,069%
Meat	3,397%	3,364%
Fish and seafood	0,862%	0,859%
<i>Fresh or chilled</i>	<i>0,411%</i>	<i>0,404%</i>
<i>Frozen</i>	<i>0,159%</i>	<i>0,162%</i>
<i>Dried, smoked or salted</i>	<i>0,085%</i>	<i>0,085%</i>
<i>Other preserved or processed and preparations</i>	<i>0,207%</i>	<i>0,208%</i>
Other food	9,792%	9,846%
OTHER GOODS AND SERVICES	85,949%	85,931%

## 3.2 HOUSEHOLD CONSUMPTION OF FRESH FISH AND SEAFOOD

### OVERVIEW

*Household consumption of fresh fish and seafood has been declining each year since 2016, despite increased consumption of fresh salmon registered in 2018 compared with 2017.*

The household consumption of fresh fish and seafood 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 86% of total EU expenditure on fishery and aquaculture products<sup>29</sup> in 2018.

In these countries, the total household consumption of fresh fish and seafood decreased by more than 56.000 tonnes and EUR 275 million in 2018 compared with 2017. This evolution confirms the downward volume trend of previous years, which saw decreases of 2% in 2016 and 3% in 2017.

Among the food products most affected by fluctuations in the purchasing power of families, fish products suffered a significant drop in 2018. However, there were exceptions which demonstrate the orientation of consumption towards products which guarantee the consumer year-round availability and convenience. Among fresh products, the few species, mostly farmed, that meet these criteria experienced an increase in demand in 2018: seabream and salmon are the best examples. Indeed, consumption of salmon increased in all Member States monitored, and that of gilthead seabream increased in three main Member States out of the four monitored.

The decreases in volume and value recorded in 2018 were mainly linked to negative trends recorded by Spain, Italy and France. As the top three consumers,

<sup>29</sup> 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.

they accounted for 80% of the total volume of fresh fish and seafood consumed by households in the 12 countries under review. Hake, the main contributor to this decline, dropped by 13% in Spain and 5% in France and Italy, which was in line with the 7% decrease of the EU TAC in the Atlantic and North Sea in 2018. Cod also experienced a decrease in four out of the eight countries where it is monitored, dropping 9% in Germany, 7% in Sweden, 7% in France and 1% in Netherlands. Among most consumed species, sardine declined in two of the three countries where it is monitored – by 11% in Portugal and 1% in Spain.

**TABLE 12**  
**HOUSEHOLD CONSUMPTION OF FRESH FISH AND SEAFOOD, IN VOLUME (TONNES) AND IN VALUE (1.000 EUR) AND % VARIATION 2018/2017**

Source: EUMOFA, based on Europanel data  
 \* 2014 data for Germany and Hungary were not monitored.

Member State	2014		2015		2016		2017		2018		2018 / 2017	
	Value	Volume	Value	Volume								
Denmark	139.084	9.572	162.598	11.068	158.014	10.579	159.026	10.094	169.685	10.586	↑ +7%	↑ +5%
Germany	n/a*	n/a*	748.852	57.850	791.714	58.740	819.307	60.474	812.955	58.396	↓ -1%	↓ -3%
Ireland	165.940	12.356	182.568	13.595	192.502	13.667	177.548	12.319	187.605	12.799	↑ +6%	↑ +4%
Spain	4.946.814	704.050	4.951.108	686.097	4.913.212	666.055	4.826.921	629.317	4.644.167	601.267	↓ -4%	↓ -4%
France	2.310.371	226.464	2.290.295	222.761	2.394.845	221.808	2.407.543	217.641	2.320.901	208.444	↓ -4%	↓ -4%
Italy	2.690.607	322.160	3.059.067	330.920	3.192.276	321.257	3.398.032	336.799	3.370.638	325.465	↓ -1%	↓ -3%
Hungary	n/a*	n/a*	14.857	3.079	29.015	5.931	26.154	4.839	29.440	5.326	↑ +13%	↑ +10%
Netherlands	324.549	24.084	446.709	32.995	457.029	32.448	456.112	31.642	458.290	30.007	↑ +0,5%	↓ -5%
Poland	313.242	61.873	335.542	66.009	317.639	62.839	308.378	57.399	305.938	53.469	↓ -1%	↓ -7%
Portugal	333.727	57.349	365.568	62.435	373.204	60.401	362.287	54.548	334.358	50.035	↓ -8%	↓ -8%
Sweden	125.982	9.882	139.942	11.187	130.002	9.400	130.997	9.025	122.872	9.217	↓ -6%	↑ +2%
United Kingdom	733.844	50.720	764.080	48.061	706.121	48.075	695.409	44.573	735.422	47.073	↑ +6%	↑ +6%
<b>Total</b>	<b>12.084.159</b>	<b>1.478.509</b>	<b>13.461.185</b>	<b>1.546.057</b>	<b>13.655.574</b>	<b>1.511.202</b>	<b>13.767.715</b>	<b>1.468.670</b>	<b>13.492.271</b>	<b>1.412.083</b>	<b>↓ -2%</b>	<b>↓ -4%</b>

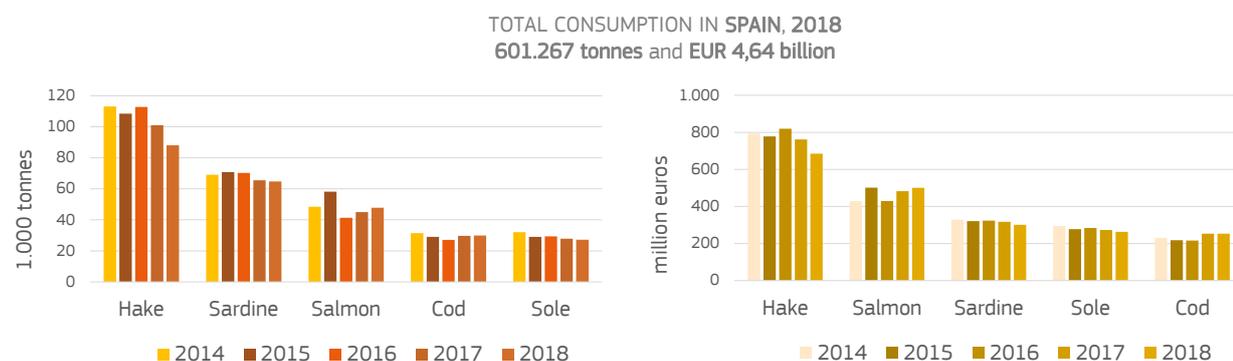
## FOCUS ON THE TOP THREE CONSUMING COUNTRIES

### SPAIN

Household consumption of fresh fish and seafood in Spain is by far the largest in the EU. In 2018, Spain's consumption was almost 70.000 tonnes higher than in Italy and France combined. Nonetheless, it has declined each year since 2014. Between 2017 and 2018, it dropped by 28.050 tonnes and EUR 183 million, mainly driven by a decrease in consumption of hake, which dropped to 88.091 tonnes and EUR 685 million – its lowest amounts of the last five years. Among the most consumed species, only salmon showed a positive trend, increasing by 6% in volume and 4% in value compared with 2017, and reaching 47.747 tonnes and EUR 501 million.

**CHART 23**  
**MAIN FRESH SPECIES CONSUMED BY HOUSEHOLDS IN SPAIN**

Source: EUMOFA, based on Europanel data



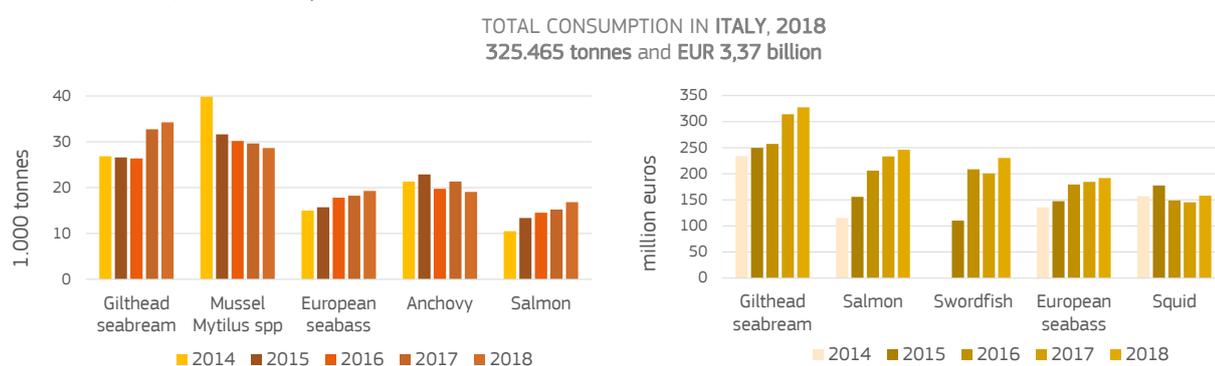
**ITALY** In Italy, consumption of fresh fish and seafood followed a volatile volume trend from 2014 to 2018, including a decrease of 11.334 tonnes between 2017 and 2018 (-3%). In value terms, a four-year growth stopped in 2018, dropping by EUR 27 million from 2017 (-1%), mainly due to decreased value of octopus and less important species.

Among the most consumed species, anchovy had the strongest decline between 2017 and 2018, with its consumption volume of 19.084 tonnes representing an 11% drop, to its lowest level of the last five years. In value terms, it declined by 6% to EUR 118 million. On the other hand, in line with the global increase of aquaculture products, consumption increased for seabass, seabream and salmon, all reaching their five-year peak in both volume and value.

**CHART 24**

**MAIN FRESH SPECIES CONSUMED BY HOUSEHOLDS IN ITALY**

Source: EUMOFA, based on Europanel data



**FRANCE** In 2018, consumption of fresh fish and seafood in France reached its lowest level of the last five years, 9.197 tonnes lower than in 2017 (-4%) and 18.021 tonnes lower than in 2014 (-8%). In value terms, the 2018 level was EUR 87 million lower than 2017 (-4%). Cod and monk were the main species responsible for the negative trend between 2017 and 2018, especially in terms of value, as their combined, fall amounted to EUR 33 million (-8%).

On the other hand, salmon and saithe, two of the most consumed species, reported increased consumption between 2017 and 2018. For salmon, volume totalled 22.641 tonnes, which was an increase of 1.632 tonnes or 8%. Its value reached EUR 414 million, marking an increase of EUR 18 million or 4%, its highest value of the last five years. Saithe consumption reached a peak in both volume and value, amounting to 10.188 tonnes and EUR 97 million, for a 1.685 tonnes or 20% increase in volume and a EUR 13 million or 15% increase in value.

In 2016 and 2017, French households consumed more fresh cod than fresh salmon, probably also due to its lower price. In 2018, the price of cod grew by 3% while salmon decreased in price, which could have caused the switch in consumers' preferences. Further, due to the increase of its price, not only did cod lose purchasers in France in 2018, the remaining purchasers bought less and less often<sup>30</sup>. Low-income households have been the most affected<sup>31</sup>. By contrast, the number of fresh salmon consumers increased from a penetration rate of 41,9% in 2017 to 43,2% in 2018, and the quantities purchased rose from 1,8 kg per capita in 2017 to 1,9 kg per capita in 2018<sup>32</sup>.

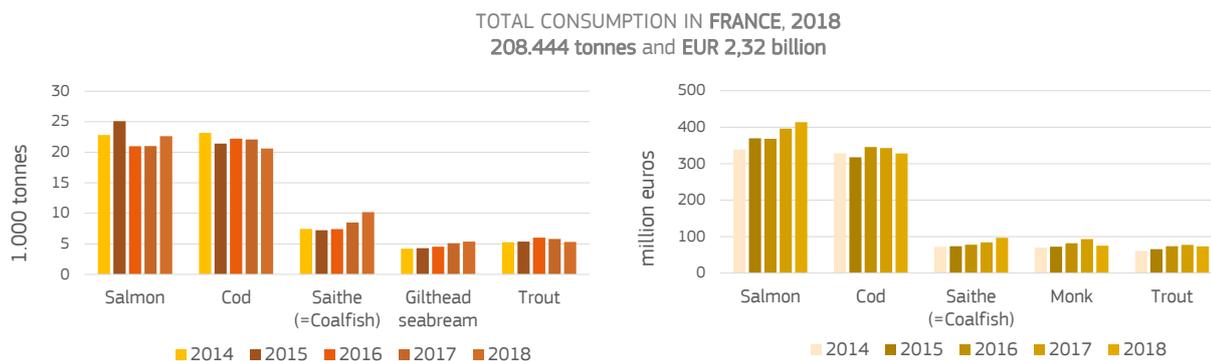
<sup>30</sup> Source: [FranceAgriMer/Kantar Worldpanel](#).

<sup>31</sup> *Ibidem*.

<sup>32</sup> *Ibidem*.

**CHART 25**  
**MAIN FRESH SPECIES CONSUMED BY HOUSEHOLDS IN FRANCE**

Source: EUMOFA, based on Europanel data



**MAIN TRENDS IN OTHER COUNTRIES**

**GERMANY**

Households in Germany consumed less fresh fish and seafood in 2018 than in 2017. The overall decrease of 2.078 tonnes (-3%) and EUR 6 million (-1%) was mainly due to reduced consumption of cod and pollack. On the other hand, increased consumption was recorded for salmon, the main species consumed, which reached its highest amount since 2015, at 13.232 tonnes and EUR 244 million, an increase of 969 tonnes (+8%) and EUR 18 million (+8%) from 2017.

**UNITED KINGDOM**

In 2018, UK households consumed 2.500 tonnes or 6% more fresh fish and seafood than in 2017, accompanied by a 6% or EUR 40.013 value increase. As specifically regards salmon, it represents 61% of total fresh fish and seafood, making it by far the most consumed species in the country. Its 2018 consumption reached 28.518 tonnes and EUR 452 million, for its highest level of the last five years.

**NETHERLANDS**

The value of fresh fish and seafood consumed by Dutch households reached a five-year peak in 2018, rising by more than EUR 2 million or 0,5% over 2017, against a 5% volume reduction of 1.635 tonnes. The value growth was determined by the increase in salmon, the most consumed species at 7.195 tonnes in 2018. Salmon's total value reached EUR 168 million, which was EUR 15 million or 10% higher than in 2017 and the highest since 2014. This rise offset the negative trend observed for the values of several other species: herring and mussel (-8% and -22% respectively, both decreasing by EUR 4 million); trout (-17% or EUR 2 million less) and cod and plaice (-4% and -19% respectively, both decreasing by EUR 1,4 million).

**PORTUGAL**

In 2018, household consumption of fresh fish and seafood fell to its lowest amount of the last five years, decreasing by 4.513 tonnes and EUR 28 million between 2017 and 2018, which corresponded to an 8% decrease in both volume and value. This was mainly due to a declining trend registered for mackerel, which decreased by almost 1.000 tonnes or 16%, and by EUR 3 million or 17%, lowering to a total of 5.181 tonnes and EUR 16 million. Consumption also decreased for

gilthead seabream, another main species. It reached 6.389 tonnes and EUR 41 million, which were 162 tonnes (-2%) and EUR 3 million (-8%) less than in 2017.

#### **POLAND**

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In 2018, Polish households consumed the lowest amount of fresh fish and seafood of the last five years. Compared with 2017, the decline amounted to 3.931 tonnes or 7% lower volume and EUR 2 million or 1% less value. This was mainly driven by decreased consumption of mackerel and carp, although a slight increase of salmon consumption was recorded.

#### **IRELAND**

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With respect to 2017, household consumption in Ireland increased 4% in 2018, rising by 480 tonnes and EUR 10 million, a 6% increase in value. This was mainly thanks to increased consumption of the main species, salmon. In fact, salmon consumption reached one of its highest levels of the last five years at 5.692 tonnes and EUR 101 million.

#### **SWEDEN**

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In 2018, Swedish households consumed 192 tonnes of fresh fish and seafood, a slightly higher or 2% increase from 2017. However, its value declined by EUR 8 million, or 6%, to its lowest level of the last five years. This trend was driven by increased consumption of salmon and decreased value of salmon and flounder.

#### **DENMARK**

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In 2018, household consumption of fresh fish and seafood registered an increase compared with 2017 by 492 tonnes (+5%). In value, it reached its highest amount of the last five years thanks to an increase by EUR 11 million (+7%). The upward trend was mainly caused by augmented consumption of salmon.

#### **HUNGARY**

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The value of household consumption of fresh fish and seafood reached a four-year peak in 2018, registering a 13% or EUR 3 million increase from 2017, and a 10% volume increase of 487 tonnes.

### **3.3 OUT-OF-HOME CONSUMPTION**

The fishery and aquaculture industry supplies fish and seafood through different sale channels: retail, which includes fishmongers and large-scale retail (LSR); foodservice, which includes catering and restaurants; and institutional, which includes schools, canteens, hospitals and prisons. This section analyses the foodservice and institutional channels of out-of-home consumption<sup>33</sup>, looking at unprocessed and processed fish and seafood products.

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<sup>33</sup> Out-of-home consumption data are collected from Euromonitor international (<https://www.euromonitor.com/>). For more details, see the Methodological background.

## UNPROCESSED FISH AND SEAFOOD

Out-of-home consumption of unprocessed fish and seafood<sup>34</sup> is analysed for Germany, Spain, France, Italy and the UK. In 2018, these countries together accounted for 72% of total EU expenditure for fishery and aquaculture products<sup>35</sup>.

Out-of-home consumption of unprocessed fish and seafood products has a different relevance in each of the surveyed countries. The highest percentage of the total consumption (37%) is in the UK, where “fish & chips” shops have a specific importance, while the lowest (20%) is in France and Italy. These trends have been confirmed through the report “EU consumer habits regarding fisheries and aquaculture products” carried out by Eurobarometer in 2018<sup>36</sup>. It found that 45% of UK consumers eat fisheries and aquaculture products out-of-home once a week or at least one a month, while in Italy and France, for instance, this percentage reaches 35% and 37%, respectively.

Foodservice channels play a major role in out-of-home consumption all surveyed countries. Their shares of total volumes range between 80% in Germany and 91% in the UK.

**TABLE 13**  
 OUT-OF-HOME CONSUMPTION OF UNPROCESSED FISH AND SEAFOOD, IN VOLUME (1.000 TONNES) AND % VARIATION 2018/2017  
 Source: EUMOFA, based on Euromonitor data

Member State	2014	2015	2016	2017	2018	2018/2017
United Kingdom	289,6	294,2	288,3	279,6	272,5	↓ - 3%
Spain	264,8	266,7	272,9	258,3	245,4	↓ - 5%
Germany	208,1	195,2	204,1	197,4	195,9	↘ - 1%
Italy	105,5	102,6	101,2	104,2	107,1	↑ +3%
France	56,5	55,7	57,2	59,6	61,2	↑ +3%

## PROCESSED FISH AND SEAFOOD

Out-of-home consumption of processed fish and seafood<sup>37</sup> is analysed for foodservice channels in all EU-28 countries. In 2018, it totalled 727.200 tonnes in the EU, which was the highest level since 2014.

<sup>34</sup>Unprocessed fish and seafood are defined as the aggregation of fresh, chilled and frozen fish, crustaceans, molluscs and cephalopods, packaged and unpackaged. For more details, see the Methodological background.

<sup>35</sup> EU expenditure for fishery and aquaculture products is provided by Eurostat.

<sup>36</sup> [http://data.europa.eu/euodp/exn/data/dataset/S2206\\_89\\_3\\_475\\_ENG](http://data.europa.eu/euodp/exn/data/dataset/S2206_89_3_475_ENG).

<sup>37</sup> Processed fish and seafood are defined as the aggregation of shelf-stable, chilled processed and frozen seafood. For more details, see the Methodological background.

**TABLE 14**  
**OUT-OF-HOME**  
**CONSUMPTION OF**  
**PROCESSED FISH AND**  
**SEAFOOD, IN VOLUME**  
**(1.000 TONNES) AND %**  
**VARIATION 2018/2017**

Source: EUMOFA, based on  
 Euromonitor data

Member State	2014	2015	2016	2017	2018	2018/2017
Germany	243,5	246,0	245,4	245,0	244,6	👇 - 0,2%
United Kingdom	176,3	175,3	173,6	172,0	170,5	👇 - 1%
Spain	115,2	116,8	120,2	124,8	129,5	👆 + 4%
France	39,0	38,8	38,9	39,2	39,1	👇 - 0,3%
Italy	26,1	26,3	26,6	26,8	27,1	👆 + 1%
Sweden	16,5	16,9	17,2	17,4	17,7	👆 + 2%
Portugal	9,6	9,9	10,2	10,6	10,9	👆 + 3%
Austria	8,4	9,0	9,5	10,1	10,8	👆 + 7%
Belgium	10,6	10,5	10,5	10,6	10,6	👉 0,0%
Greece	11,9	11,0	10,6	10,4	10,2	👇 - 2%
Denmark	9,5	9,6	9,7	9,9	10,0	👆 + 1%
Poland	8,0	8,3	8,5	8,8	9,0	👆 + 2%
Czech Republic	5,2	5,3	5,4	5,5	5,6	👆 + 2%
Finland	4,7	4,8	5,0	5,1	5,2	👆 + 2%
Netherlands	4,6	4,6	4,7	4,8	4,9	👆 + 2%
Ireland	3,5	3,5	3,5	3,5	3,4	👇 - 3%
Croatia	2,7	2,7	2,8	2,8	2,8	👉 0,0%
Slovakia	2,5	2,5	2,5	2,5	2,5	👉 0,0%
Bulgaria	2,2	2,2	2,2	2,3	2,3	👉 0,0%
Lithuania	2,0	2,1	2,2	2,3	2,3	👉 0,0%
Romania	1,7	1,9	1,9	2,0	2,1	👆 + 5%
Latvia	1,4	1,4	1,4	1,5	1,5	👉 0,0%
Hungary	1,1	1,2	1,2	1,3	1,3	👉 0,0%
Estonia	0,7	0,7	0,8	0,8	0,8	👉 0,0%
Cyprus	0,7	0,7	0,7	0,7	0,7	👉 0,0%
Slovenia	0,6	0,7	0,7	0,7	0,7	👉 0,0%
Malta	0,5	0,5	0,6	0,6	0,6	👉 0,0%
Luxembourg	0,5	0,5	0,5	0,5	0,5	👉 0,0%
<b>Total</b>	<b>709,2</b>	<b>713,7</b>	<b>717,0</b>	<b>722,5</b>	<b>727,2</b>	<b>👆 + 1%</b>

*In Spain, the out-of-home consumption of unprocessed fish and seafood is declining, while that of processed products is increasing.*

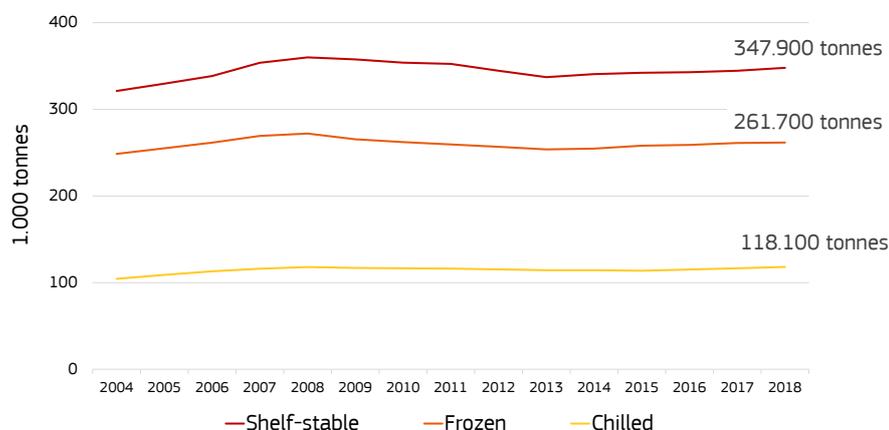
*In 2018, shelf-stable products covered 48% of total EU out-of-home consumption of processed products, followed by frozen (36%) and chilled (16%) products.*

The 10 countries recording the highest sales of processed fish and seafood accounted for 92% of total EU out-of-home consumption. Among them, Italy, Sweden, Portugal and Austria reached their 15-year peaks in 2018, while the UK and Greece touched their lowest amounts since 2004.

In terms of product category, among the processed fish and seafood consumed out-of-home, shelf-stable products<sup>38</sup> are the most consumed at EU level, followed by the frozen and chilled ones. Nonetheless, shelf-stable products' relative share of total processed seafood varies a lot among countries, ranging from 7% in Sweden, where frozen products are preferred, to 80% in Spain.

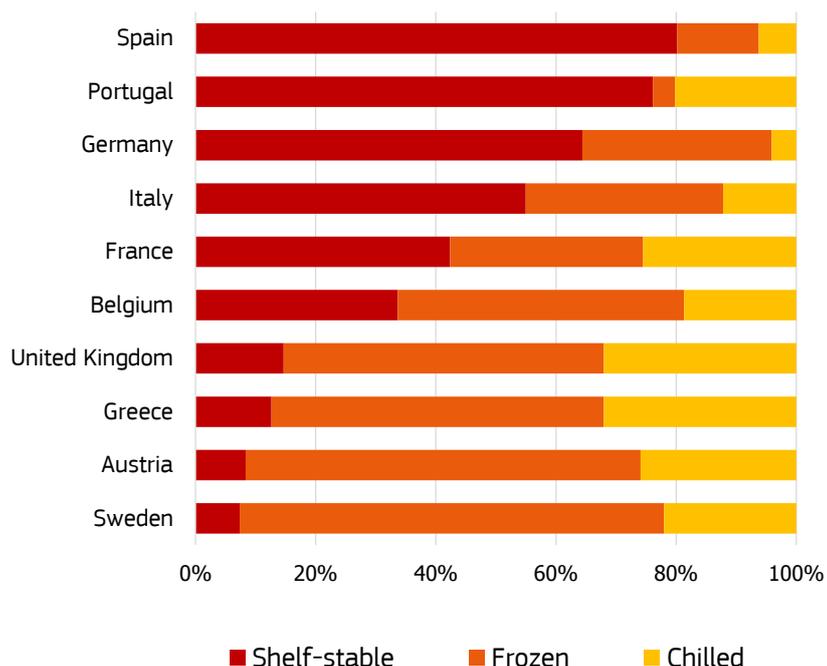
**CHART 26**  
**OUT-OF-HOME**  
**CONSUMPTION OF**  
**PROCESSED FISH AND**  
**SEAFOOD IN THE EU BY**  
**CATEGORY, IN VOLUME**

Source: EUMOFA, based on  
 Euromonitor data



<sup>38</sup> Shelf-stable fish and seafood includes products typically sold in cans, glass jars or aluminium/retort packaging and usually preserved in oil, brine, salt water or with a sauce. Pickled fish/seafood sold ambient is also included.

**CHART 27**  
**OUT-OF-HOME**  
**CONSUMPTION OF**  
**PROCESSED FISH AND**  
**SEAFOOD IN MAIN**  
**COUNTRIES BY CATEGORY**  
**IN 2018, SHARES IN**  
**VOLUME (% OF TOTAL)**  
 Source: EUMOFA, based on  
 Euromonitor data

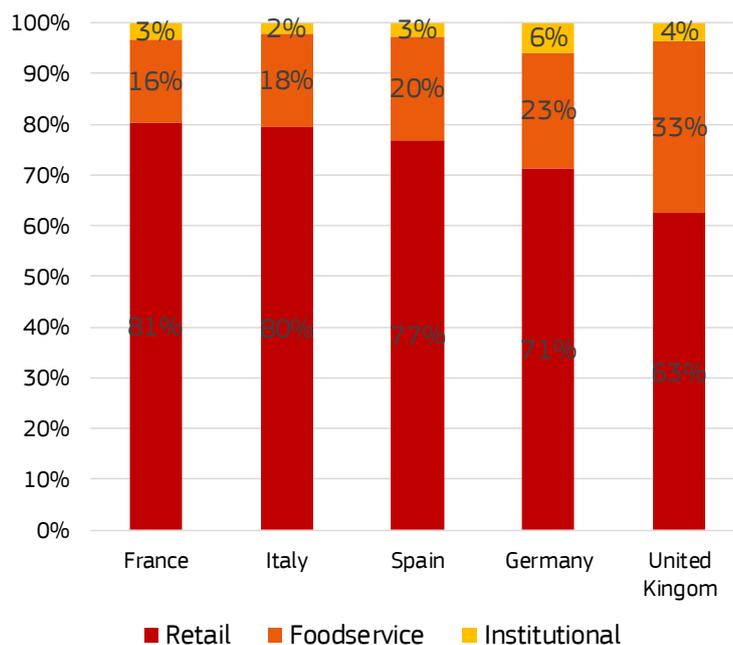


The out-of-home consumption of shelf-stable products in 2018 was highest in Germany and Spain. In Germany, it totalled 157.500 tonnes, which was a 1% drop from 2017, while in Spain it reached 103.800 tonnes, a 15-year peak. Frozen processed products were mainly sold in the UK and Germany, which had out-of-home consumption of 90.900 and 77.100 tonnes, respectively. It is worth noting that, while UK's out-of-home consumption of frozen processed products registered the lowest amount since 2004, Germany's reached a 15-year peak. Finally, the out-of-home consumption of chilled processed seafood was relatively low in all EU countries. In absolute terms, the only exception was registered in the UK, which reported 54.600 tonnes in 2018.

### 3.4 RETAIL SALES

Retail is the main sale channel for unprocessed fish and seafood in the countries surveyed, namely Germany, Spain, France, Italy and the UK.

**CHART 28**  
 UNPROCESSED FISH AND SEAFOOD BY SALE CHANNEL IN 2018, IN VOLUME (% OF TOTAL)  
 Source: EUMOFA, based on Euromonitor data



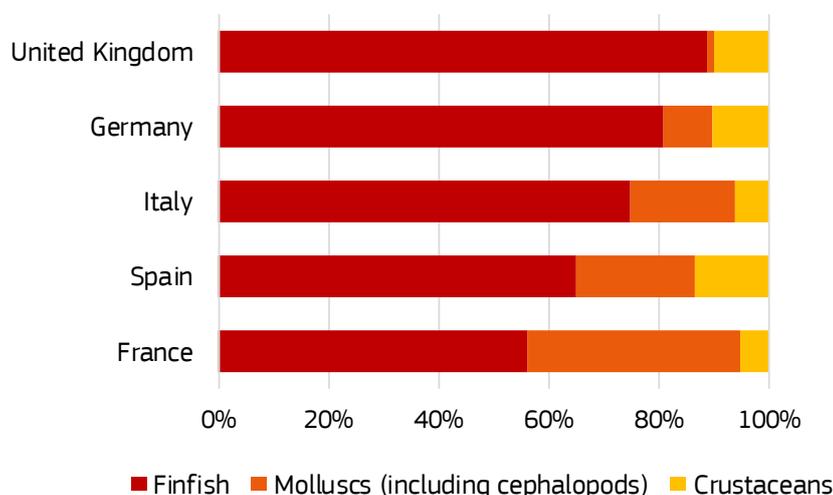
The highest amount of unprocessed fish and seafood sales through the retail channel in 2018 was recorded in Spain, with 817.000 tonnes. Nonetheless, this quantity represented a 4% decrease from 2017, as well as the lowest level registered in the country in the last 15 years, due to a 27% drop in finfish retail sales since 2004.

Sales of unprocessed fish and seafood through the retail channel in 2018 also showed a slightly declining trend in Germany and France, which both registered a 1% drop from 2017.

On the other hand, UK sales remained steady, while Italy was the only country where retail sales of unprocessed fish and seafood increased, growing by 2% compared with 2017 and by 6% compared with 2016.

Finfish have a pivotal role in the retail channel of 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 (cephalopods and mussels), France (oysters and mussels), and Italy (clams, mussels and cephalopods).

**CHART 29**  
 UNPROCESSED FISH AND SEAFOOD SOLD THROUGH THE RETAIL CHANNEL IN 2018, SHARES IN VOLUME (% OF TOTAL)  
 Source: EUMOFA, based on Euromonitor data



*In the UK finfish covers 89% of total retail sales of unprocessed seafood.*

In absolute terms, the highest sales of unprocessed finfish through retail in 2018 were recorded in Spain, which reached 530.900 tonnes. However, its retail sales of finfish have followed a downward trend for ten years, and in 2018 they were 25% less than in 2009. This reduction was mainly due to lower retail sales of unprocessed hake<sup>39</sup>.

In the UK and Germany, retail sales of unprocessed finfish reached 403.700 and 396.400 tonnes, respectively, in 2018. While the UK showed a steadiness in retail sales with respect to 2017, Germany presented a 2% decrease.

The lowest sales of unprocessed finfish in 2018 were recorded in Italy and France, with 311.900 and 141.100 tonnes sold, respectively. In Italy, these sales increased by 3% with respect to 2017, while in France, they were 2% lower than 2017 with an 11% decrease from the peak registered in 2012.

Retail sales of cephalopods and other molluscs have been very high in Spain. Nevertheless, they have followed a downward trend, and the 177.200 tonnes registered in 2018 was Spain's lowest since 2004. On the contrary, the lowest retail sales of this category were registered in the UK, where its sales of 6.500 tonnes represented a certain steadiness with respect to the last two years.

Crustaceans covered relatively low shares of total retail sales in all five countries surveyed. Their retail sales always reach significant amounts in Spain, even if the 109.000 tonnes it registered in 2018 represented its lowest level since 2004.

### 3.5 THE ORGANIC SEGMENT

*In 2018, the upward trend of the organic fish and seafood consumption in the UK and Germany led these countries to their 5-year peaks.*

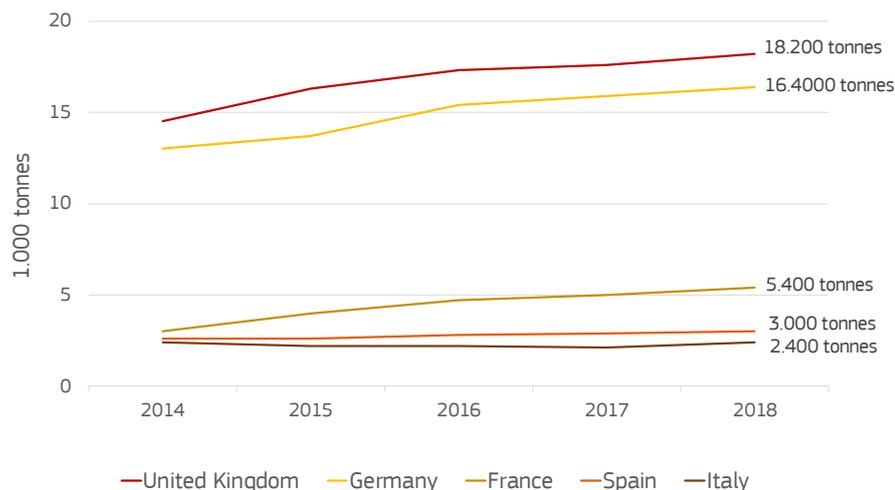
Organic fish and seafood represent a niche market in the EU. In the main EU countries surveyed (Germany, Spain, France, Italy and the UK), 45.500 tonnes of unprocessed fish and seafood consumed in 2018 originated from organic production. This was a 4% increase from 2017, but it represented a 28% growth from 2014, thus indicating an increase of the share of organic products within overall unprocessed seafood consumption.

In absolute terms, the UK and Germany lead EU consumption of organic fish and seafood. Apart from Italy, which showed an almost flat trend since 2014, all countries surveyed reached their 5-year peaks in 2018. The highest increase was recorded by France, which increased by 80% from 2014 to 2018, followed by the UK and Germany, each with 26% increases, and Spain, which increased by 15%.

<sup>39</sup> Data on household consumption in Spain are provided by MAPA, available at <https://www.mapa.gob.es/app/consumo-en-hogares/consulta11.asp>.

**CHART 30**  
**CONSUMPTION OF**  
**ORGANIC FISH,**  
**IN VOLUME**

Source: EUMOFA, based on  
 Euromonitor data



The most important organic fish species consumed in the EU is salmon. Supported by increasing consumption demand, organic salmon production has recently reached remarkable levels in the EU.

The main producers of organic salmon are Ireland and the UK (Scotland and, to a lesser extent, Northern Ireland). According to estimates made for 2017, Irish organic salmon production reached 19.300 tonnes, while Scottish supply was 3.000 tonnes. Furthermore, all salmon production in Ireland was at organic standard<sup>40</sup>.

More than half of Irish exports of organic salmon are destined for France, while Germany and the UK, together, import another 20%.

Since Irish and the UK production is not sufficient to satisfy the EU market demand, internal supplies of organic salmon are fed with products imported from Norway, which had a 2017 production estimated at 17.000 tonnes, compared with around 23.000 tonnes produced in the EU. With an estimated 80% of the Norwegian production entering the EU<sup>41</sup>, in 2017 imported organic salmon represented close to 40% of the total EU market.

### 3.6 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), namely Protected Designations of Origin (PDOs) and Protected Geographical Indications (PGIs), and to traditional aspects, namely the Traditional Specialities Guaranteed (TSG). Two-thirds of the products (36) are PGIs, more than one-quarter (14) are PDOs and 6% (3) are TSGs<sup>42</sup>.

The number of GIs and TSGs increased greatly during the last decade, growing from 21 products in 2010 to 53 in 2019. Among the 34 new products registered

<sup>40</sup> Source: BIM, 2018, Annual Aquaculture Survey, <http://www.bim.ie/media/bim/content/publications/aquaculture/BIM-Annual-Aquaculture-Survey-2018.pdf>.

<sup>41</sup> Source: Kontali Analyse.

<sup>42</sup> PDOs and PGIs also refer to non-EU products.

since 2009, 21 are PGIs, 10 are PDOs and 3 are TSGs. The largest share of these new products comes from the UK (10 products), followed at a distance by Germany (4), France (3) and Italy (3).

Among the 53 registered denominations, 77% cover finfish (41), 21% molluscs (11) and 2% crustaceans (1). Moreover, 59% cover marine species (26), 36% cover freshwater (19) and 15% are related to migratory species with life cycles that alternate between the marine environment and fresh water (8). The main species covered by GIs and TSGs include carp with 9 products, notably in Germany, Czech Republic 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 account for 3 products each.

In a 10-year period, the wild caught products registered with EU quality schemes grew more than those originating from aquaculture, with wild caught products increasing from 9 in 2010 to 31 in 2019, while farmed products increased from 12 to 22.

The two PGI products registered since August 2018 – *Scrumbie de Dunăre afumată* (December 2018, Romania) and *Bulot de la Baie de Granville* (February 2019, France) – are both based on wild caught products. *Scrumbie de Dunăre afumată* is based on smoked Pontic shad and *Bulot de la Baie de Granville* is based on whelk, which may be sold live, frozen or cooked.

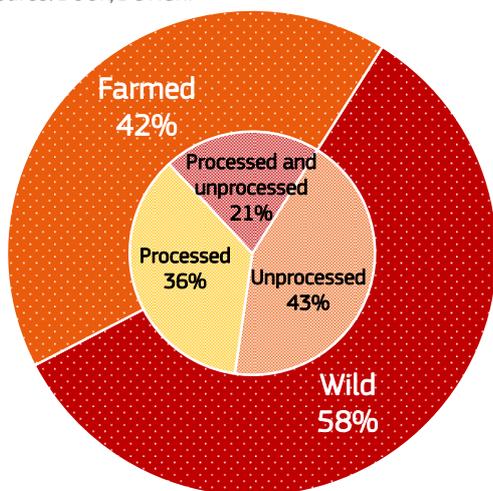
**TABLE 15**  
**QUALITY SCHEMES**  
**REGARDING FISHERIES**  
**AND AQUACULTURE**  
**PRODUCTS REGISTERED**  
**UP TO JULY 2019**  
 Source: DOOR, DG AGRI

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
United Kingdom	4	Pollan, Mussel, Oyster, Scallop	10	Salmon (4 PGIs), Sea trout, Eel, Sardine, Cod/Haddock, Haddock,			14
China			1	Freshwater crayfish			1
Norway			1	Cod			1
Vietnam	1	Anchovy (sauce)					1
<b>TOTAL</b>	<b>14</b>		<b>36</b>		<b>3</b>		<b>53</b>

**CHART 31**

**TYPES OF PRODUCTS UNDER EU QUALITY SCHEMES IN THE SEAFOOD SECTOR (JULY 2019)**

Source: DOOR, DG AGRI



	Unprocessed	Processed	Processed and unprocessed	Total
Wild	8	17	6	<b>31</b>
Farmed	15	2*	5	<b>22</b>
<b>Total</b>	<b>23</b>	<b>19</b>	<b>11</b>	<b>53</b>

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

## 4/ IMPORT - EXPORT<sup>43</sup>

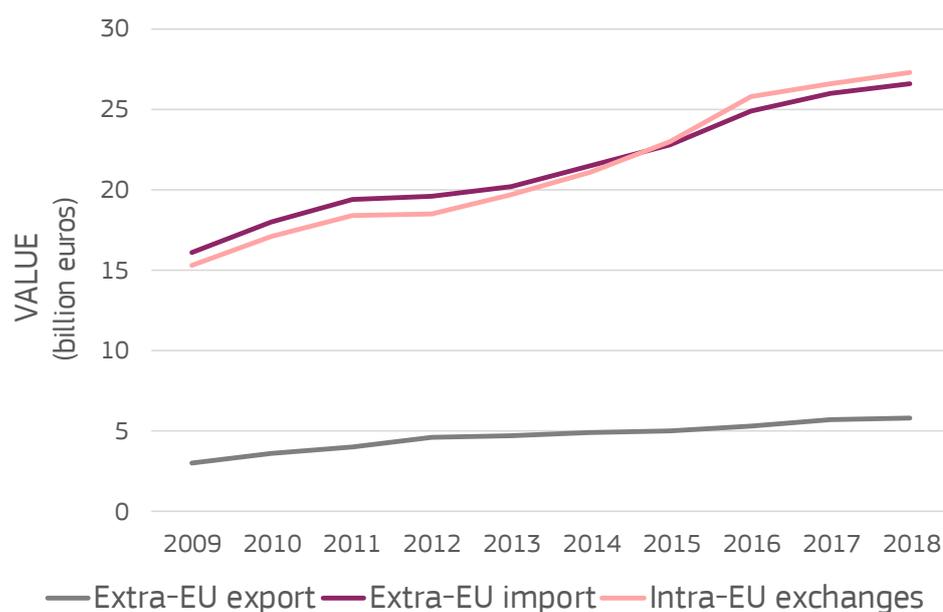
*EU trade of fish and seafood has increased in value in the last 10 years, at an average annual growth rate of 6%.*

EU trade of fish and seafood, which encompasses trade flows with extra-EU countries and exchanges between Member States<sup>44</sup>, has been increasing in value in the last 10 years, with an average annual growth rate of 6%.<sup>45</sup> In 2018, EU trade amounted to EUR 59,53 billion, which represented a 2% increase with respect to 2017, and a 74% growth from 2009.

Intra-EU exports, the main contributor to the overall growth, increased by EUR 647,93 million, with a gain of 2% from 2017. The value of fish and seafood exchanged with non-EU countries increased as well, with imports and exports growing by 2% each. This corresponded to an import value increase of EUR 549,43 million, from EUR 25,98 billion to EUR 26,53 billion, and to exports increasing EUR 116,07 million, from EUR 5,63 billion to EUR 5,75 billion.

**CHART 32**  
**EU TRADE FLOWS**  
**OF FISH AND SEAFOOD**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#)).



<sup>43</sup> 2013-2018 data are at EU-28 level, as they include Croatia among reporting countries.

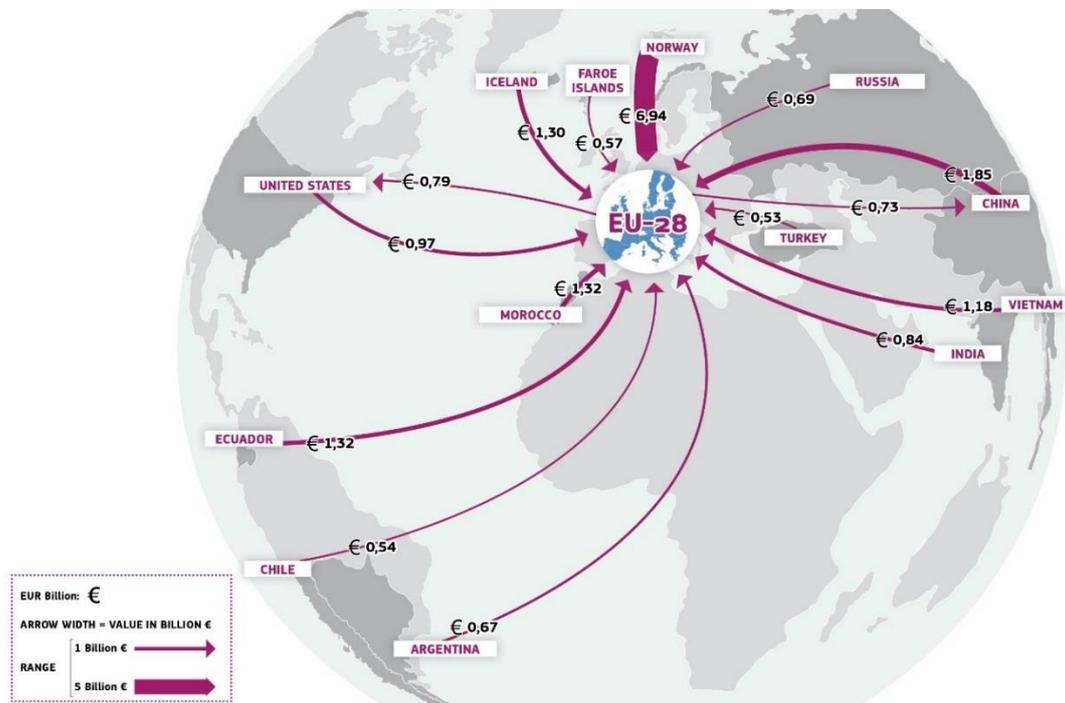
<sup>44</sup> Extra-EU imports, extra-EU exports and intra-EU exports.

<sup>45</sup> It is worth underlying that nominal values are analysed in this report, so the increase could also be partially explained by inflation which is not taken into account in these data.

**CHART 33**

**MOST RELEVANT EXTRA-EU TRADE FLOWS IN 2018, IN VALUE (EUR BILLION)**

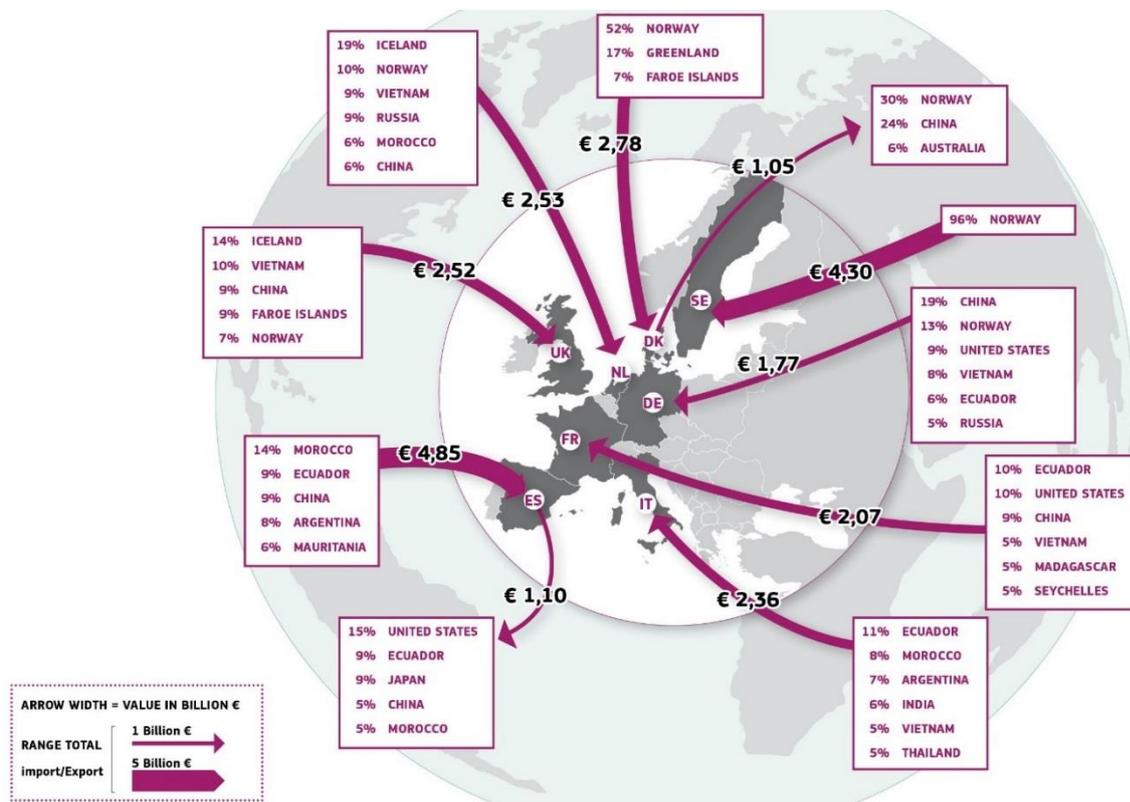
Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#)).



**CHART 34**

**MOST RELEVANT EXTRA-EU TRADE FLOWS BY MEMBER STATES IN 2018, IN VALUE (EUR BILLION)**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#)).



## 4.1 EXTRA-EU TRADE BALANCE

The extra-EU trade balance deficit for fish and seafood has been rising since 2013 and it reached its negative peak of EUR 20,78 billion in 2018. Compared with 2017, the deficit increased by 2%, or EUR 433,36 million.

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

**TABLE 16**  
**TRADE BALANCE FOR FISH AND SEAFOOD PRODUCTS OF MAIN EU NET IMPORTERS, IN VALUE (EUR BILLION)**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#)).

EU Member State	Trade balance 2017	Trade balance 2018	Variation 2018/2017
Sweden	- 3,88	- 4,22	- 0,34
Spain	- 6,64	- 3,75	+ 2,89
Italy	- 2,16	- 2,21	- 0,05
United Kingdom	- 1,79	- 1,88	- 0,09
Denmark	- 1,71	- 1,73	- 0,02
Netherlands	- 1,71	- 1,70	+ 0,01
France	- 1,74	- 1,69	+ 0,05

The United States and Japan, the two main importers of fish and seafood after the EU, showed opposite trends from the EU, as in 2018 both reduced their trade balance deficits compared with the negative peaks recorded in 2017.

**TABLE 17**  
**EU TRADE BALANCE FOR FISH AND SEAFOOD PRODUCTS COMPARED TO OTHER MAJOR NET IMPORTERS, IN VALUE (EUR BILLION)**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#)) and IHS Markit

Country	Trade balance 2017	Trade balance 2018	Variation 2018/2017
European Union	- 20,34	- 20,78	- 0,44
United States	- 13,76	- 12,54	1,22
Japan	- 11,70	- 11,14	0,56

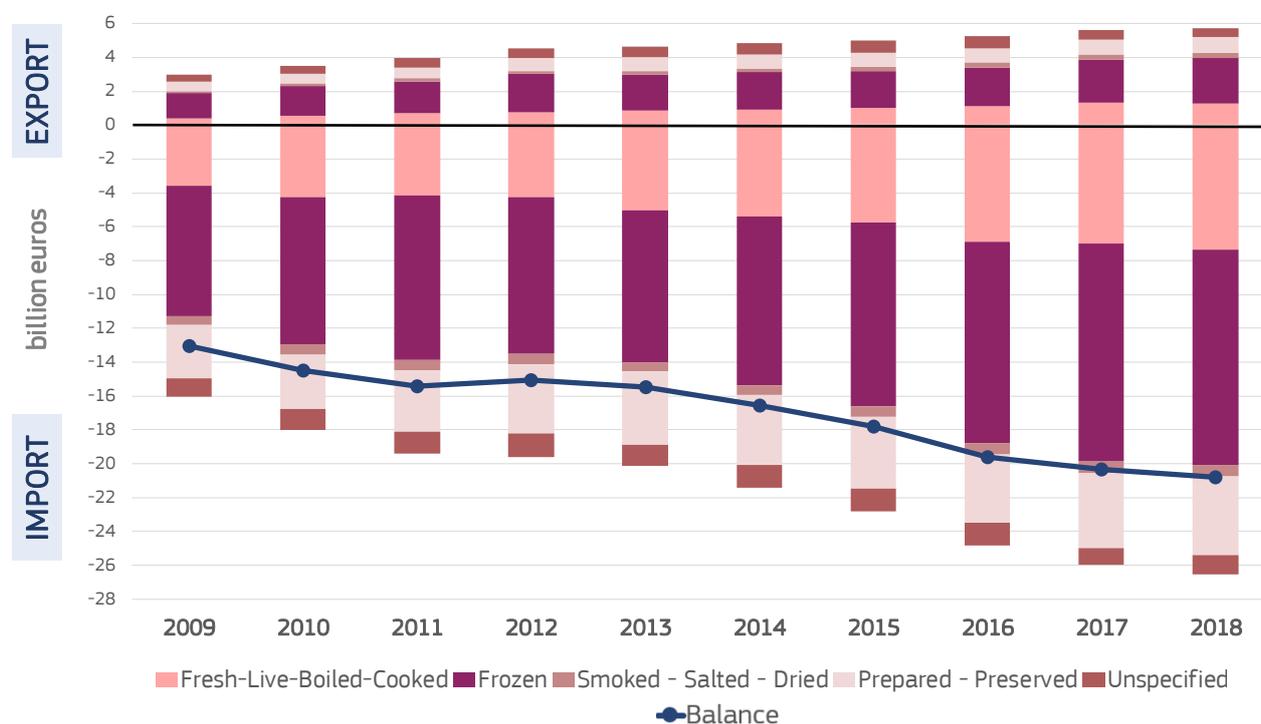
Almost half of the EU deficit (48%) is due to frozen products; fresh products and prepared/preserved products account for 28% and 18%, respectively.

In 2018, the deficit for frozen products amounted to EUR 10,03 billion, which was a 3% decrease from 2017. For fresh and prepared/preserved products, the deficit was EUR 6,04 billion and EUR 3,73 billion, respectively, which represented increases from 2017 of 6% for fresh and 4% for prepared/preserved.

**CHART 35**

**STRUCTURE OF EXTRA-EU TRADE BALANCE OF FISH AND SEAFOOD PRODUCTS BY PRESERVATION STATE, IN VALUE**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&plugin=1&code=ds-016890)).



## 4.2 COMPARISON BETWEEN IMPORTS OF FISH AND SEAFOOD AND MEAT

In 2018, the EU total imports of agri-food and fish and seafood products had a combined value of EUR 142,84 billion. Of this, fish accounted for 19%<sup>46</sup> and meat for 5%<sup>47</sup>.

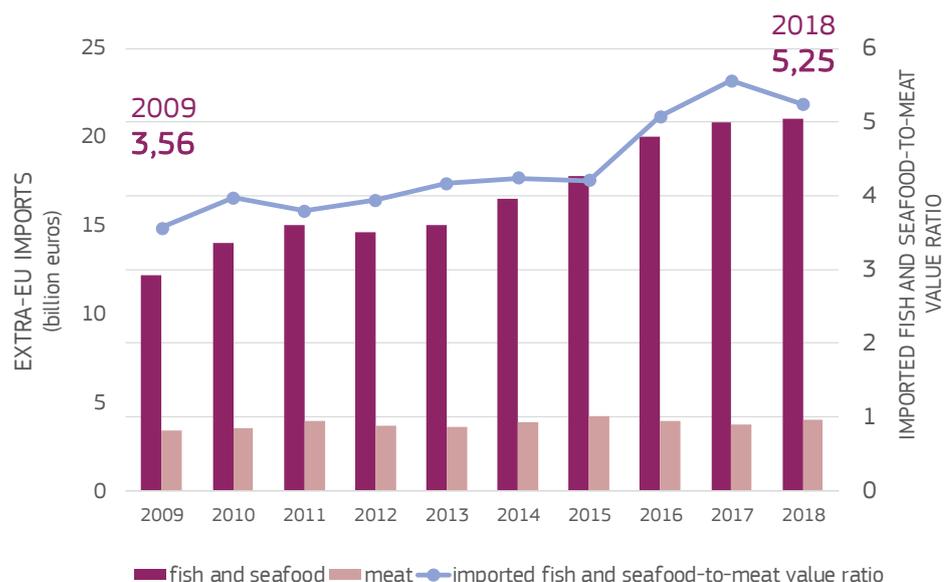
The EU is a net importer of fish and seafood, while it is a net exporter of meat. Chart 36 compares the values of imported fish and meat from 2009 to 2018, excluding prepared and non-edible products. The light blue line represents the evolution of the ratio between imported fish value and meat. In 2018, the ratio rose to 5,25, meaning that the imported fish was over five times higher than the value of imported meat. This was due to the increasing value of fish and seafood imports, since the value of imports of meat was quite stable during the 10-year period.

Although it was a 6% decline from 2017, the ratio was the second highest of the decade, and a 47% increase from 2009.

<sup>46</sup> The comparison takes into account extra-EU trade 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> and EU agri-food imports from extra-EU countries, source: "AGRI-FOOD TRADE STATISTICAL FACTSHEET" of the European Commission – DG Agri, available at [https://ec.europa.eu/agriculture/sites/agriculture/files/trade-analysis/statistics/outside-eu/regions/agrifood-extra-eu-28\\_en.pdf](https://ec.europa.eu/agriculture/sites/agriculture/files/trade-analysis/statistics/outside-eu/regions/agrifood-extra-eu-28_en.pdf). For the sake of clarity, "Fish" includes all items reported under chapter "03 - Fish and crustaceans, molluscs and other aquatic invertebrates" of the Combined Nomenclature commodities.

<sup>47</sup> "Meat" includes all items reported under chapter "02 - Meat and edible meat offal" of Section I "Live animals; animal products" of the Combined Nomenclature commodities.

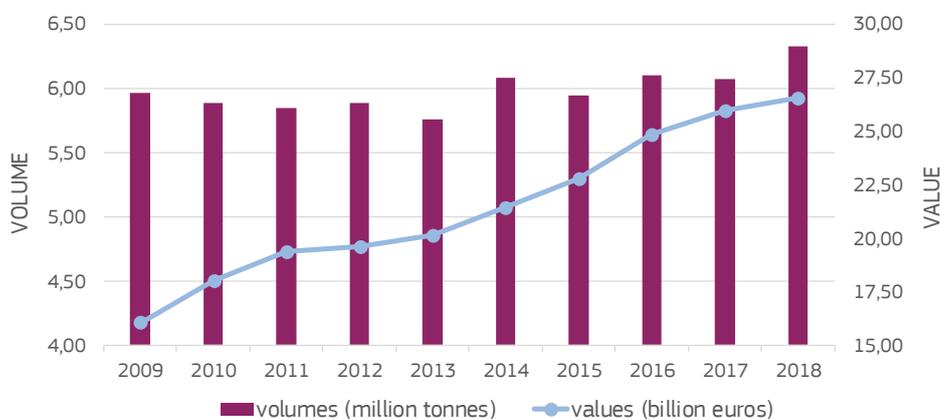
**CHART 36**  
 EXTRA-EU IMPORTS  
 TREND AND RATIO OF  
 IMPORTED FISH AND  
 SEAFOOD VS. MEAT, IN  
 VALUE (EUR BILLION)  
 Source: EUMOFA, based on  
 Eurostat (online data code:  
[DS-016890](#))



### 4.3 EXTRA-EU IMPORTS

Compared with 2017, extra-EU imports of fish and seafood products increased by 4% in volume and by 2% in value in 2018, thus reaching a 10-year peak of 6,32 million tonnes and EUR 26,53 billion<sup>48</sup>.

**CHART 37**  
 EXTRA-EU IMPORTS OF  
 FISH AND SEAFOOD  
 Source: EUMOFA, based on  
 Eurostat (online data code:  
[DS-016890](#))



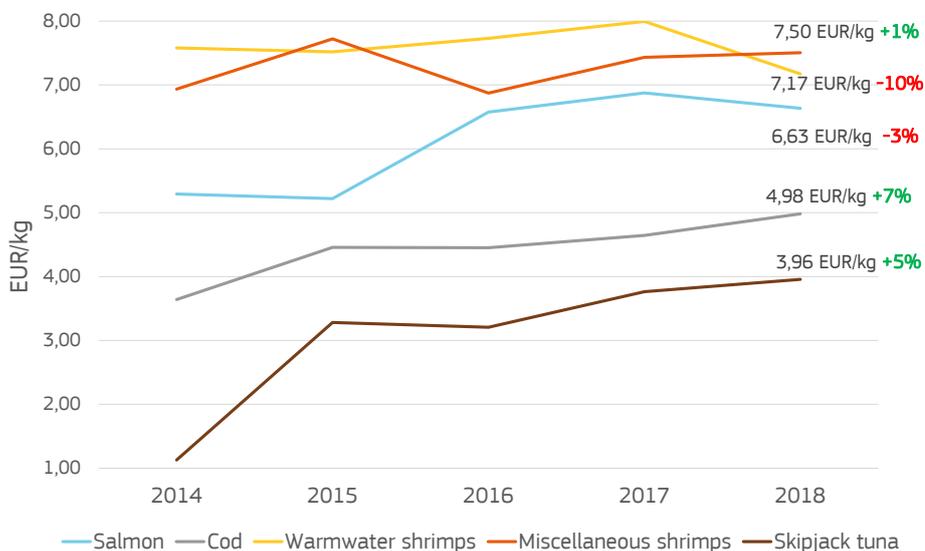
*From 2009 to 2018, extra-EU imports of fish and seafood increased by 65% in value and 6% in volume.*

The most significant import increases in terms of volume were recorded for fishmeal from Norway, fish oil from Peru, and frozen hake from Namibia and South Africa. The five top-valued imported main commercial species in 2018 were salmon, cod, warmwater shrimps, miscellaneous shrimps and skipjack tuna. While salmon and cod mainly originated from Norway, the other species mainly came from Latin American countries. This included warmwater shrimps and skipjack tuna from Ecuador and miscellaneous shrimps from Argentina.

<sup>48</sup> It is worth underlying that nominal values are analysed in this report, so the increase could also be partially explained by inflation which is not taken into account in these data.

Chart 38 illustrates the trend of average import prices for these products from 2014 to 2018. It shows how, in 2018, imported prices of all species were above their average of the period, excluding warmwater shrimps which had a 10% decrease in the import price compared with 2017, reaching the lowest price since 2015.

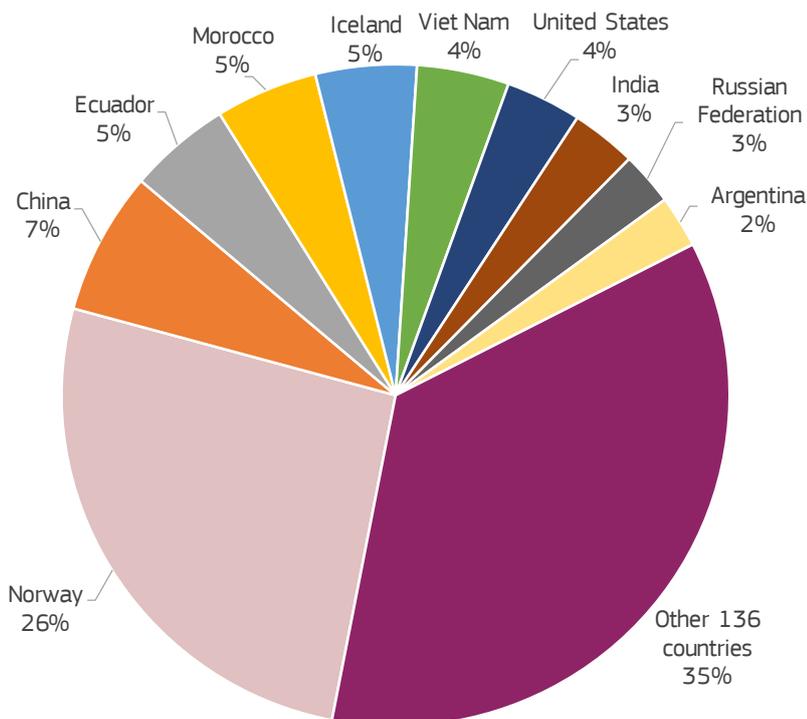
**CHART 38**  
**PRICES OF TOP 5 VALUED IMPORTED MAIN COMMERCIAL SPECIES AND % VARIATIONS 2018/2017**  
 Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))



*Norway is by far the main supplier of fish and seafood to the EU.*

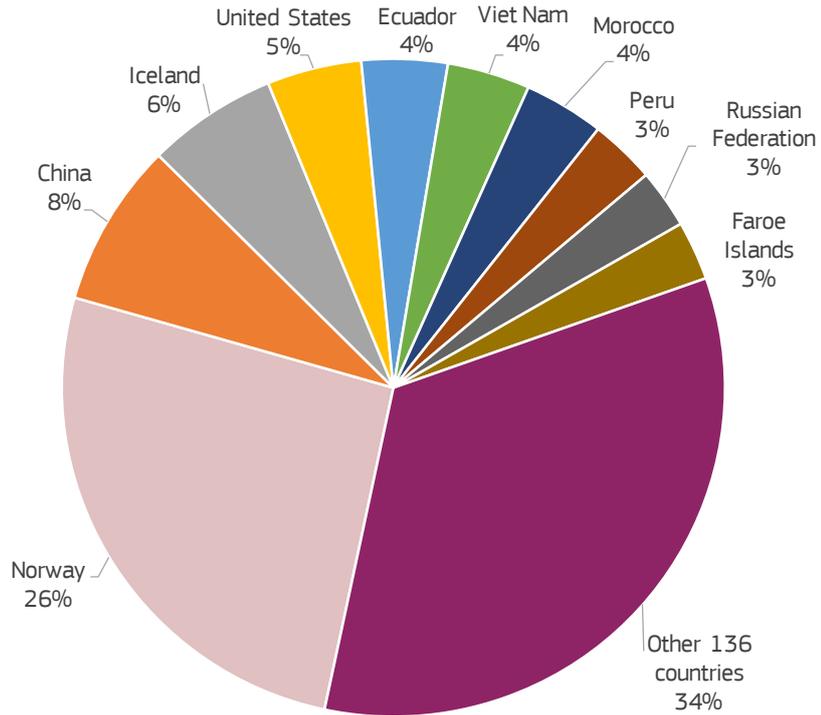
More than one-quarter of fish and seafood products imported in the EU originates from Norway. Sweden and Denmark, the main entry points for Norwegian products into the internal market, allow the imports to reach other Member States' markets. In 2018, both countries recorded higher entries from Norway. The most significant growth involved Norwegian salmon imports in Sweden, which increased by 11% in value and 15% in volume with respect to 2017.

**CHART 39**  
**TOP EXTRA-EU COUNTRIES OF ORIGIN IN 2018 (IN VALUE)**  
 Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))



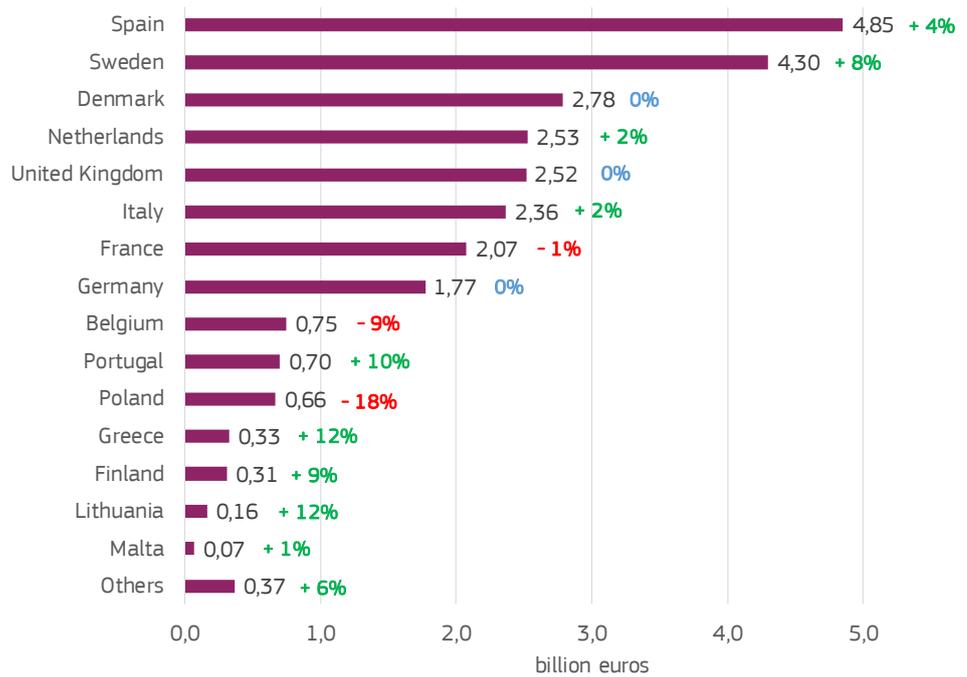
**CHART 40**  
**TOP EXTRA-EU**  
**COUNTRIES OF ORIGIN IN**  
**2018 (IN VOLUME)**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))



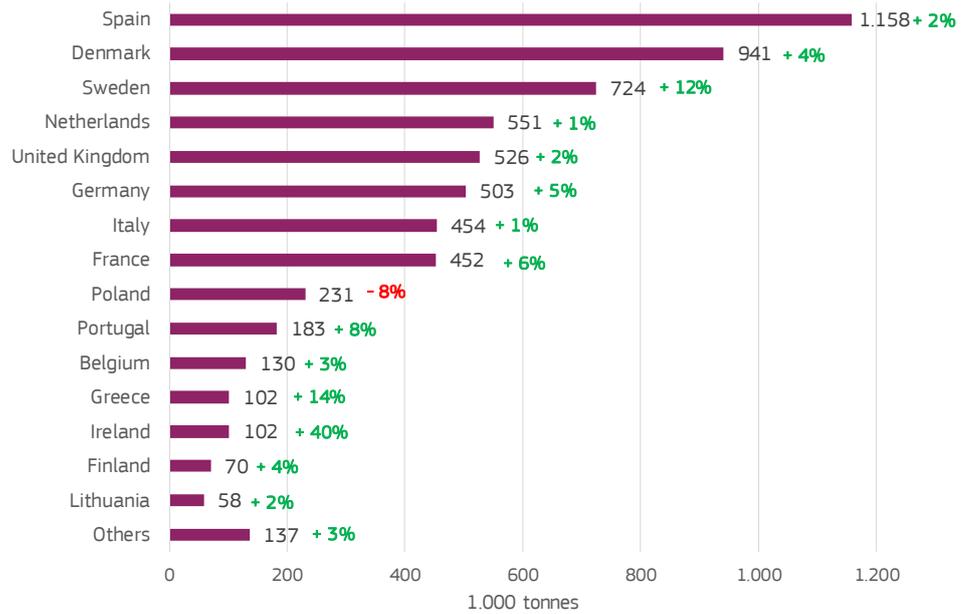
**CHART 41**  
**VALUE OF EXTRA-EU**  
**IMPORTS BY MEMBER**  
**STATE IN 2018 AND %**  
**VARIATION 2018/2017**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))



**CHART 42**  
**VOLUME OF EXTRA-EU**  
**IMPORTS BY MEMBER**  
**STATE IN 2018 AND %**  
**VARIATION 2018/2017**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))

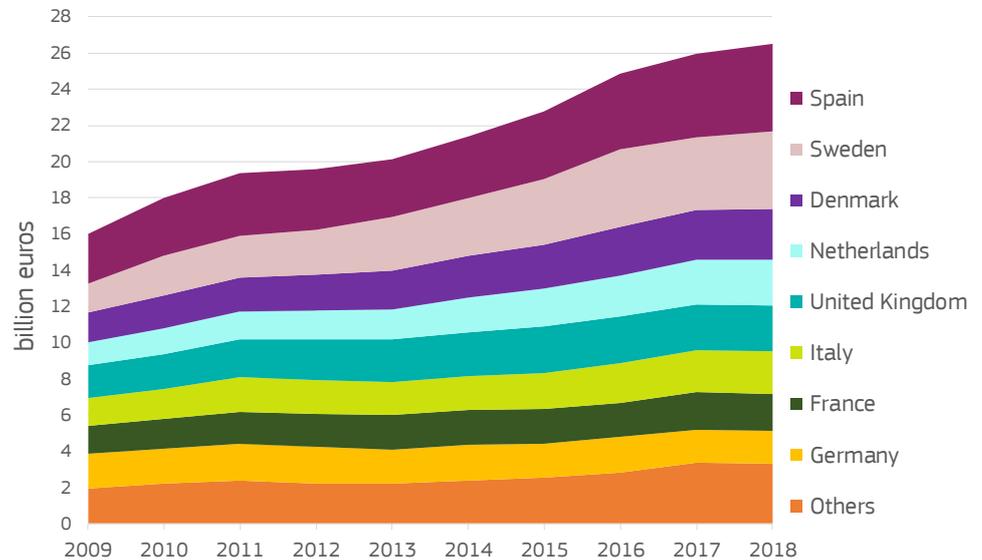


Spain is the top-valued EU importer, mainly supplied by Morocco, Ecuador, China and Argentina. Among these countries, in 2018 only imports from China recorded an increase compared with 2017, due to prepared/preserved skipjack tuna entries showing a significant growth of 94% in value and 73% in volume.

**CHART 43**  
**VALUE OF EXTRA-EU**  
**IMPORTS**  
**PER MEMBER STATE**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))

*From 2009 to 2018, the value of extra-EU imports increased by 77% in Spain and by 164% in Sweden.*



### 4.3.1 ANALYSIS BY MAIN SPECIES

#### SALMONIDS

In 2018, extra-EU imports of salmon and trout, the main commercial species of this group, showed opposite trends compared with 2017. Salmon imports reached a 10-year peak of 920.158 tonnes worth EUR 6,10 billion, marking a 4% increase in volume and 1% in value from 2017. Entries of trout totalled 27.106 tonnes and EUR 139,39 million, which were decreases of 4% in volume and 6% in value.

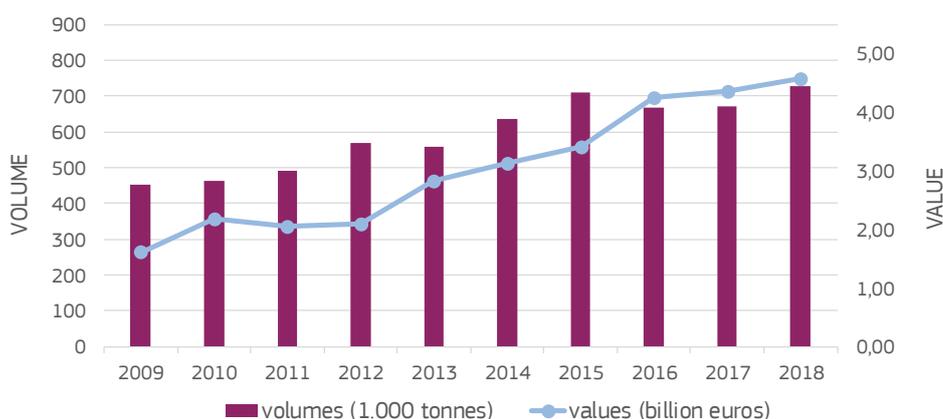
#### SALMON

Salmon is the main species imported in the EU. It covers 23% of the value and 15% of the volume of all fish and seafood products imported.

Imports of salmon mainly consist of fresh whole products originating from Norway. The evolution of such imports in the EU Member States over the last ten years is shown in Chart 44. While values grew by a yearly average of 13%, imported volumes tended to fluctuate. Compared with 2009, in 2018 both ended with increases of 185% and 61%, respectively.

From 2015 to 2016, imported volumes of fresh salmon from Norway were 6% lower: this was linked to decreased production in Norway, due to treatments against sea lice which led to higher mortalities, poorer growth, lower harvest weights of specimens, and lower harvest volumes. Further, the EU import price of fresh products increased by 32%, from 4,80 to 6,37 EUR/kg. In the following years, the price of imported salmon kept this level, significantly above the 10-year average (5,01 EUR/kg), while volumes increased in 2018 after two years of steadiness.

**CHART 44**  
**FRESH SALMON**  
**IMPORTED IN THE EU**  
**FROM NORWAY**  
 Source: EUMOFA, based on  
 Eurostat (online data code:  
[DS-016890](#))



#### CRUSTACEANS

In 2018, EU imports of crustaceans totalled 645.795 tonnes, worth EUR 4,79 billion. Compared with 2017, the value had decreased by EUR 151,25 million, or 3%, while the volume increased 12.308 tonnes, or 2%.

#### WARMWATER SHRIMPS

In terms of volume, 44% of crustaceans imported in the EU (286.932 tonnes) are warmwater shrimps, more specifically frozen shrimps of the genus *Penaeus*. In 2018, their import value decreased by 10% compared with 2017, from EUR 2,29 to 2,06 billion, while the import volume remained stable (+0,2%).

One-third of EU imports of warmwater shrimps originated from Ecuador, which constantly increased its supply to the EU during the period 2009–2018. In 2018, Ecuador’s EU exports totalled 102.064 tonnes and EUR 609,94 million.

Vietnam and India are also relevant providers of warmwater shrimps, with Vietnam providing farmed species and India providing both wild and farmed species. In 2018,

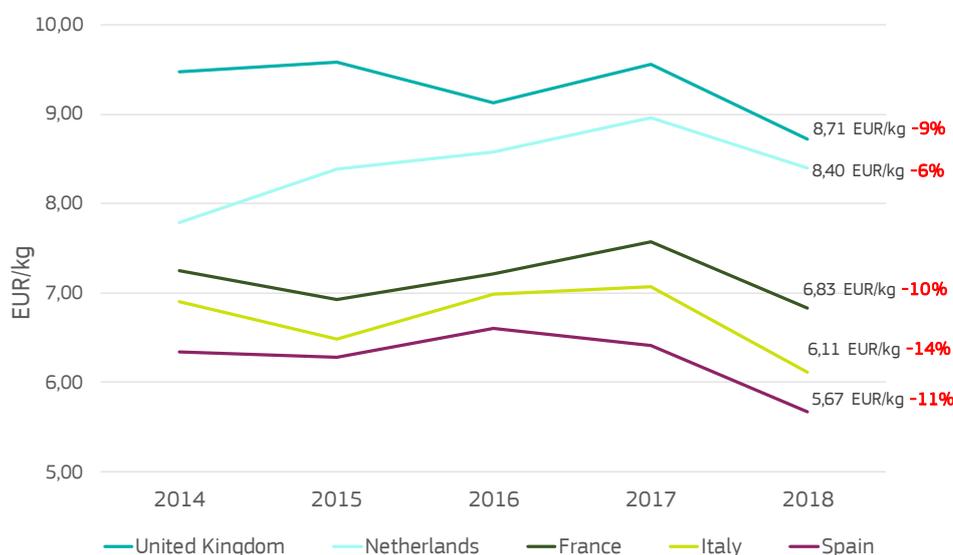
each country accounted for 15% of the total volume of this species' imports in the EU. In terms of value, Vietnam supplied warmwater shrimps worth EUR 362,70 million, while India's supplies were worth EUR 313,65 million.

Spain, France and Italy are the main EU markets for Ecuadorian warmwater shrimps. In 2018, the three countries accounted for 87% of the warmwater shrimps volume imported in the EU. Entries from Vietnam and India are mostly destined to the UK and the Netherlands, which in 2018 imported together around 45% of the total volume originating from the two countries. It is worth noting that shrimps from Vietnam and India are imported at higher prices than the Ecuadorian ones. This is due to the fact that, while Ecuador only produces the white leg shrimp (*Penaeus vannamei*), India and Vietnam also include the higher-valued giant tiger shrimp (*Penaeus monodon*).

In 2018, warmwater shrimps were imported in the EU at an average price of 7,17 EUR/kg, which was 10% below the price level recorded in 2017. Ecuadorian prices decreased 12% below 2017, while Vietnamese prices dropped 7% and India's dropped 6%. The import price of the top-five EU importers recorded declines ranging from 6% to 14% in 2018 compared to 2017.

**CHART 45**  
**IMPORT PRICES OF**  
**WARMWATER SHRIMPS IN**  
**THE TOP FIVE EU**  
**IMPORTERS AND %**  
**VARIATIONS 2018/2017**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))



**MISCELLANEOUS SHRIMPS**

"Miscellaneous shrimps" include all shrimps and prawns not related to "*Pandalidae*", "*Crangon*", deep-water rose shrimps "*Parapenaeus longirostris*" and "*Penaeus*". This group of product – imported as frozen or as prepared/preserved – accounts for 40% of the total crustaceans imported in the EU. Indeed, in 2018, the EU imported 256.415 tonnes of miscellaneous shrimps, for a total value of EUR 1,92 billion. Compared to 2017, this corresponded to an increase of 12.249 tonnes and, with a slight 1% price increase, presented an overall value growth of EUR 109,41 million. The value growth was mainly due to prepared/preserved shrimps imported from Morocco and frozen shrimps that originated in Argentina, India and China.

**CHART 46**  
**MISCELLANEOUS SHRIMPS IMPORTED IN THE EU FROM EXTRA-EU COUNTRIES**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))



Miscellaneous shrimps were imported mainly frozen, for an average price of 6,37 EUR/kg, and prepared/preserved, for an average price of 8,90 EUR/kg.

Argentina, covering about one-third of EU imports, is the main country of origin of miscellaneous shrimps, all consisting of frozen products of wild-caught Argentine red shrimp (*Pleoticus muelleri*). In 2018, entries from Argentina reached a 10-year peak of 81.169 tonnes worth EUR 503,34 million.

Vietnam is another relevant supplier, mainly of prepared/preserved products. In 2018, its exports to the EU reached 32.735 tonnes and EUR 290,26 million, the highest amounts of the last 10 years.

Among the EU Member States, Spain is the major importer of miscellaneous shrimps. In 2018, it imported 71.436 tonnes for a value of EUR 470,17 million, thus accounting for 28% of the total imported volume and 24% of the total value. Spain's imports consist almost entirely of frozen products originating from Argentina and China.

The other main importers, namely the Netherlands, the UK, Denmark and Italy, together accounted for 51% of the total volume in 2018. While the three northern countries mainly imported prepared/preserved products, miscellaneous shrimps sold to Italy were mainly frozen.

## GROUND FISH

In 2018, groundfish accounted for 21% of total volume and 17% of total value imported in the EU from third countries. It totalled 1,35 million tonnes, 115.571 tonnes more than 2017 (+9%), with a value of EUR 4,60 billion, which was a EUR 222,81 million increase from 2017 (+5%). Both volume and value represented 10-year peaks.

### COD

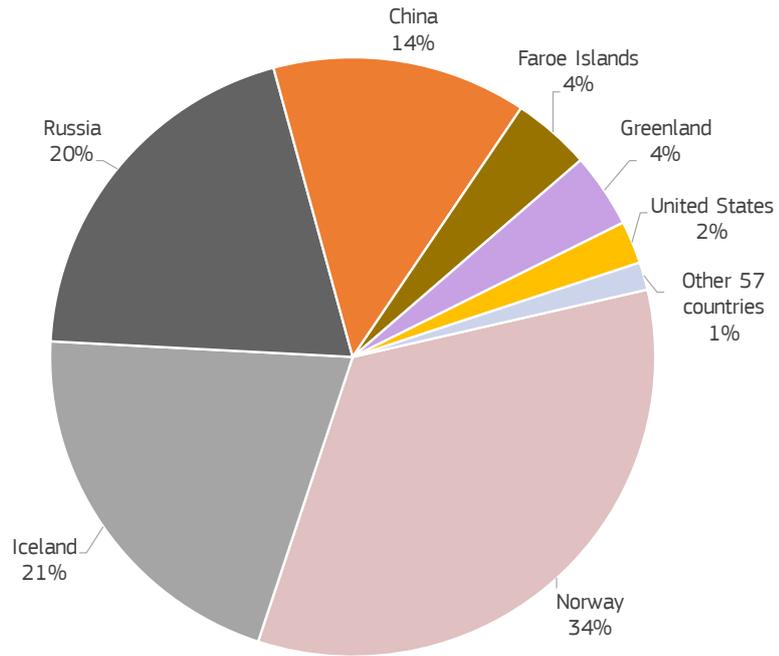
In 2018, extra-EU imports of cod amounted to 503.755 tonnes worth EUR 2,51 billion. While volumes decreased by 5% compared with 2017, the import prices increased 7%, reaching 4,98 EUR/kg and leading values to a 10-year peak.

Of all cod originating from extra-EU countries in 2018, the Netherlands received 26% in volume, the largest share, followed by Denmark and the United Kingdom with 16% each, and Sweden with 15%. While the Netherlands and the United Kingdom mostly imported frozen products, Denmark and Sweden mainly brought in fresh cod.

Although extra-EU cod suppliers are quite diversified, Norway, Iceland, Russia and China provided 89% of total imported volumes in 2018. Among these countries, Norway supplied 169.624 tonnes of cod, with a total value of EUR 866,90 million. In volume terms, this represented an 8% reduction from 2017, accompanied by an 8% price increase, from 4,74 to 5,11 EUR/kg, which made the value steady. Imports included fresh (37% of total), frozen (32%), dried (17%) and salted products (13%).

**CHART 47**  
**EXTRA-EU COUNTRIES OF**  
**ORIGIN OF COD IN 2018**  
**(IN VOLUME)**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))



**TUNA AND TUNA-LIKE SPECIES**

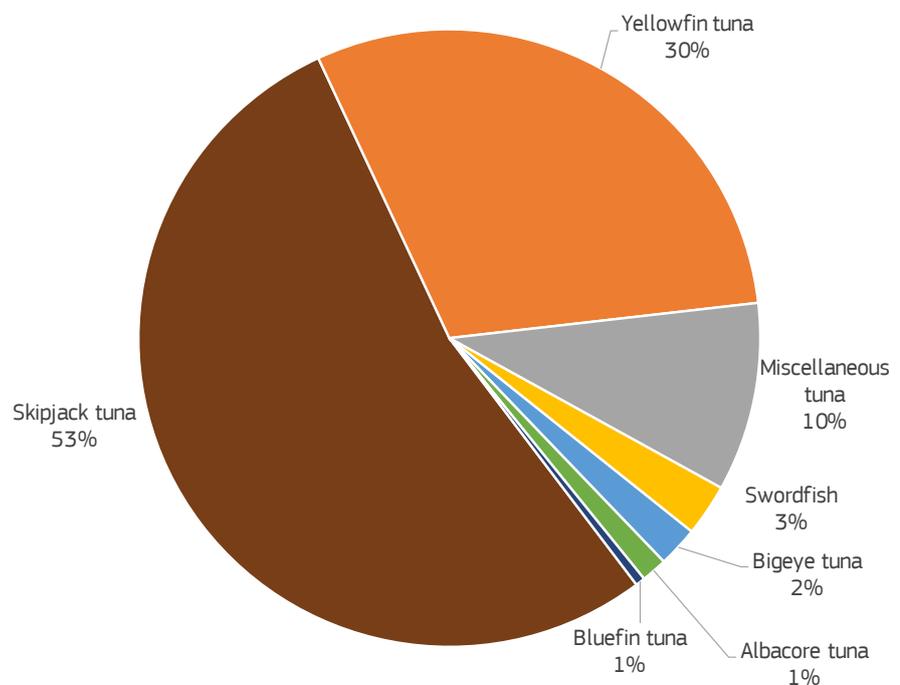
Tunas imported in the EU in 2018 amounted to 774.043 tonnes worth EUR 3,23 billion. Compared with 2017, this was a decrease of 2%, or 16.189 tonnes in volume, but a 3%, or EUR 91,57 million increase in value.

A large share, 74% of this commodity group, consists of processed products of which 70% was canned and 29% was frozen in 2018.

In terms of species, skipjack tuna represents more than 50% of the total tuna imported in the EU, followed by yellowfin and miscellaneous tuna species.

**CHART 48**  
**TUNA AND TUNA-LIKE SPECIES IMPORTED FROM**  
**EXTRA-EU COUNTRIES IN**  
**2018 (IN VOLUME)**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))



**SKIPJACK TUNA** In 2018, EU imports of skipjack tuna touched the 10-year peak of 412.988 tonnes and EUR 1,63 billion. While volumes increased by 1% from 2017, the import price grew by 5%, from 3,76 to 3,96 EUR/kg, thus making the value 7% higher than the previous year. The price increase mainly regarded prepared/preserved products imported from the Philippines.

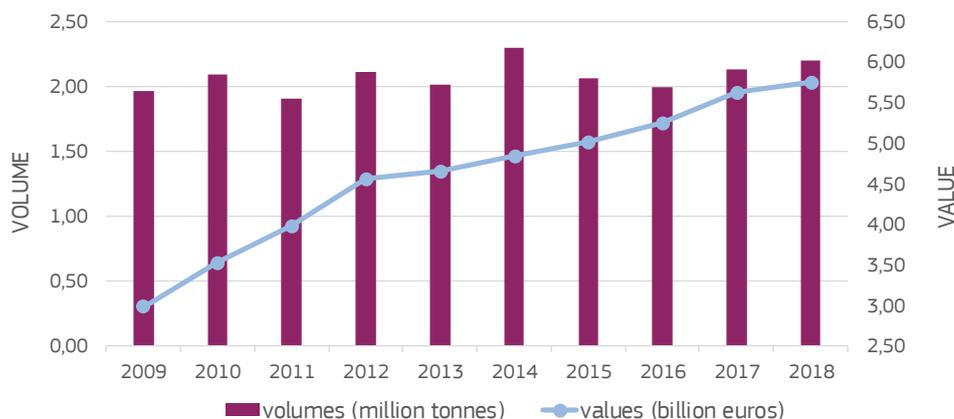
Entries of skipjack tuna are mainly absorbed by Spain, the United Kingdom and Germany, which covered 29%, 21% and 14% of the total, respectively, in 2018. Ecuador provided one-quarter of total imported skipjack tuna in the EU in 2018, at an average price of 4,30 EUR/kg. Imports from Philippines and Mauritius, the other relevant suppliers, recorded slightly lower prices, of 4,02 EUR/kg and 3,93 EUR/kg, respectively. The exports of these three countries to the EU mostly included prepared/preserved products. It should be noted that most EU imports of tuna from Latin America and Western Indian Ocean countries are products caught by the EU fleet, landed in these places for processing purposes and then re-imported in the EU.

## 4.4 EXTRA-EU EXPORTS

The total value of fish and seafood exported by the EU to third countries reached a 10-year peak of EUR 5,75 billion in 2018, which was 2%, or EUR 116,07 million, more than 2017<sup>49</sup>.

In volume terms, it grew by 3%, or 70.122 tonnes, compared with 2017, thus reaching 2,20 million tonnes, which was the amount closest to the 10-year peak set in 2014.

**CHART 49**  
**EXTRA-EU EXPORTS OF FISH AND SEAFOOD**  
 Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))



*From 2009 to 2018, the total value of extra-EU exports increased by 93%.*

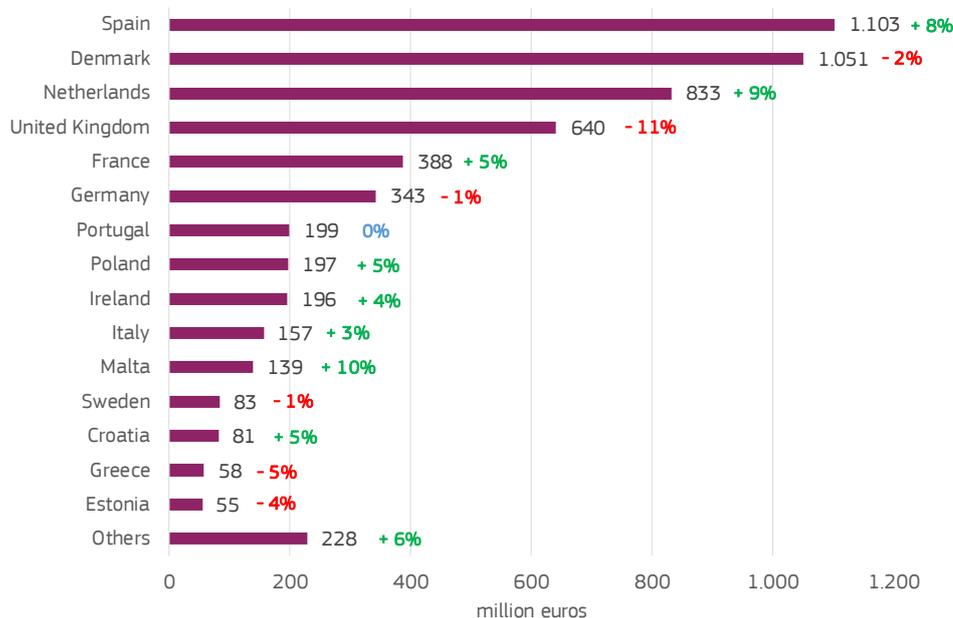
Despite the overall trend, the two most valued of the main commercial species exported by the EU – fresh salmon and frozen skipjack tuna – recorded opposite variations from 2017. While salmon exports (especially to the US) decreased, skipjack tuna dispatches increased, especially to Ecuador and Mauritius, which imported tunas caught by the EU fleet.

Four Member States accounted for around 70% of extra-EU exports of fish and seafood products in volume: the Netherlands with 24% of the total, mainly frozen herring, Spain with 21%, mainly frozen skipjack tuna, Denmark with 18%, mainly fishmeal and fish oil, and Ireland with 7%, mainly seaweeds and other algae unfit for human consumption. For Denmark, this marked a 10% decrease in volume due to lower dispatches of fishmeal, while the Netherlands, Spain and Ireland all reported increased

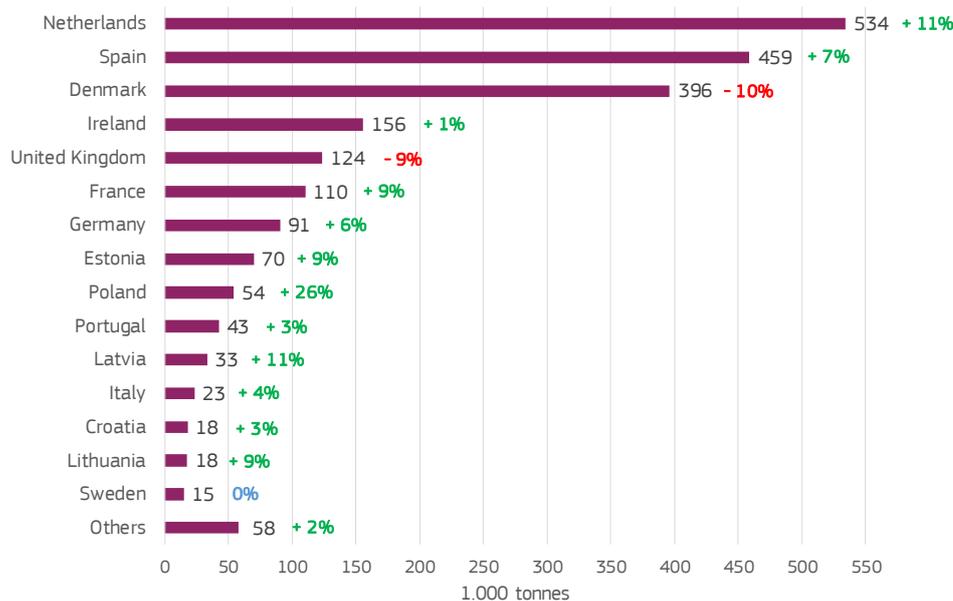
<sup>49</sup> It is worth underlying that nominal values are analysed in this report, so the increase could also be partially explained by inflation which is not taken into account in these data.

exports with respect to 2017. In value terms, the UK is among the top-four instead of Ireland, even if its export value decreased by 11% from 2017. It mainly sold fresh salmon.

**CHART 50**  
**VALUE OF EXTRA-EU**  
**EXPORTS BY MEMBER**  
**STATE IN 2018 AND %**  
**VARIATION 2018/2017**  
 Source: EUMOFA, based on  
 Eurostat (online data code:  
[DS-016890](#))



**CHART 51**  
**VOLUME OF EXTRA-EU**  
**EXPORTS BY MEMBER**  
**STATE IN 2018 AND %**  
**VARIATION 2018/2017**  
 Source: EUMOFA, based on  
 Eurostat (online data code:  
[DS-016890](#))

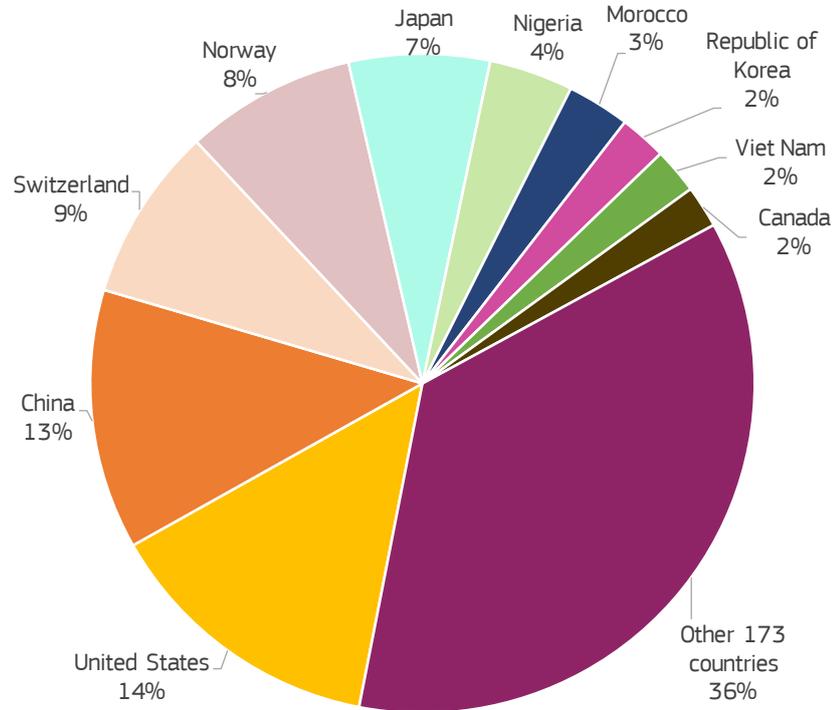


The US and China are the main markets in value terms for EU exports, but the highest volumes are actually destined for Nigeria and Norway. This is due to the different values of the products involved in such flows. For example, while the US and China mainly import higher valued EU products such as salmon and Greenland halibut, respectively, Nigeria mainly imports lower valued small pelagics such as herring and blue whiting, and Norway imports fish oil.

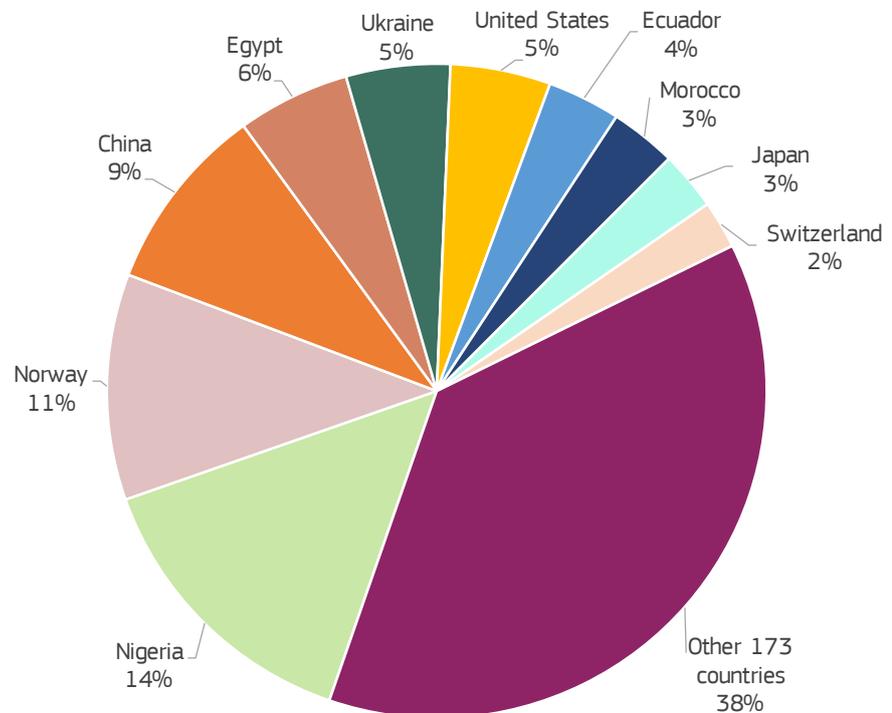
Among these markets, China recorded the most remarkable variations from 2017. Indeed, in 2018 its total imports from the EU increased by 25% in value and by 5% in volume. This was due to a change in the destination country of Greenland halibut

exports from the EU, which until 2017 had mainly been exported to Vietnam, but moved to China in 2018. With this shift, Chinese imports of this species increased from 9.630 tonnes and EUR 48,12 million in 2017 to 31.244 tonnes and EUR 157,30 million in 2018, which accounted for increases of 227% in volume and 224% in value.

**CHART 52**  
**TOP EXTRA-EU**  
**COUNTRIES OF**  
**DESTINATION IN 2018**  
**(IN VALUE)**  
 Source: EUMOFA, based on  
 Eurostat (online data code:  
[DS-016890](#))



**CHART 53**  
**TOP EXTRA-EU**  
**COUNTRIES OF**  
**DESTINATION IN 2018**  
**(IN VOLUME)**  
 Source: EUMOFA, based on  
 Eurostat (online data code:  
[DS-016890](#))



## 4.4.1 ANALYSIS BY MAIN SPECIES

### SALMONIDS

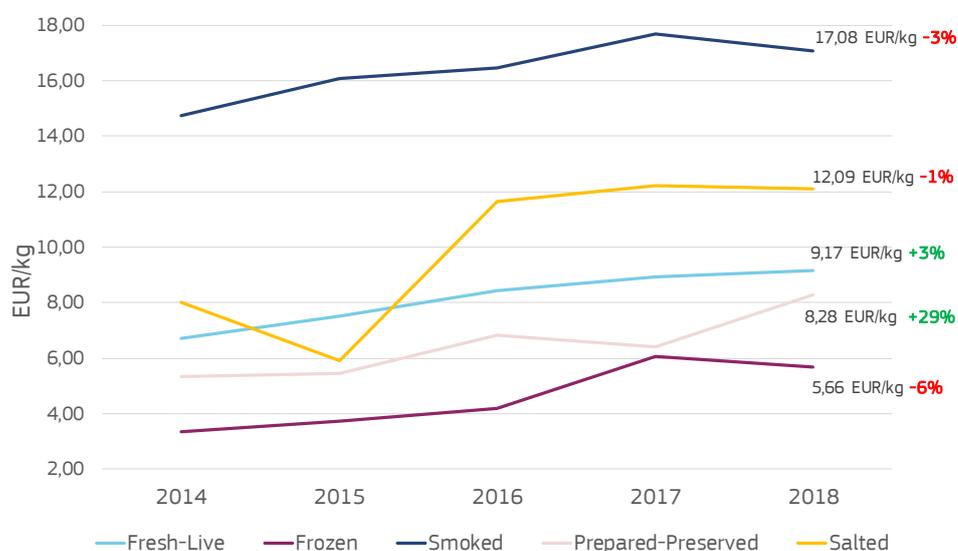
In 2018, EU exports of salmonids to third countries amounted to 118.264 tonnes worth EUR 1,03 billion. This represented a decrease of 6% in volume and 7% in value from 2017.

### SALMON

Salmon is by far the most valued species exported by the EU. Indeed, in 2018, EU salmon exports to third countries reached EUR 920,53 million, which accounted for 16% of the total value of fish and seafood products exported by the EU.

EU exports of salmon mainly consist of fresh products, which represented 53% of total volumes in 2018, followed by frozen at 31%, and smoked fish at 12%. The remaining 4% was covered by salted and prepared/preserved salmon.

**CHART 54**  
**EXPORT PRICES OF SALMON BY PRESERVATION AND % VARIATIONS 2018/2017**  
 Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))



The United Kingdom is the largest EU exporter of salmon, although in 2018, its volumes decreased 17% from 2017, dropping to 4.391 tonnes below the 10-year average. Around 80% of the total extra-EU exports of salmon from the UK consists of fresh products, which were sold at 8,13 EUR/kg in 2018, the highest average annual export price of the last 10 years.

Germany, Denmark and Poland are also important EU exporters of this species. In 2018, they accounted together for more than 30% of the volume of EU salmon dispatches to third countries. While Germany mostly exports fresh salmon, Denmark and Poland mainly dispatch frozen products.

For all EU Member States, the main destination countries are the US and China, which, in 2018, received almost 50% of EU salmon exports volumes.

### TUNA AND TUNA-LIKE SPECIES

EU exports of tunas to third countries totalled 310.073 tonnes and EUR 807,36 million in 2018. By increasing 22% in volume and 14% in value from 2017, they reached a 10-year peak.

More than 90% of the total exported volumes originated in Spain and France. Actually, tuna caught by the Spanish fleet in remote places are landed in Ecuador, Mauritius, Seychelles and Mexico, while tuna caught by the French fleet are landed in Seychelles, Côte d'Ivoire, Mauritius and Ghana. In both cases, these landings are recorded as

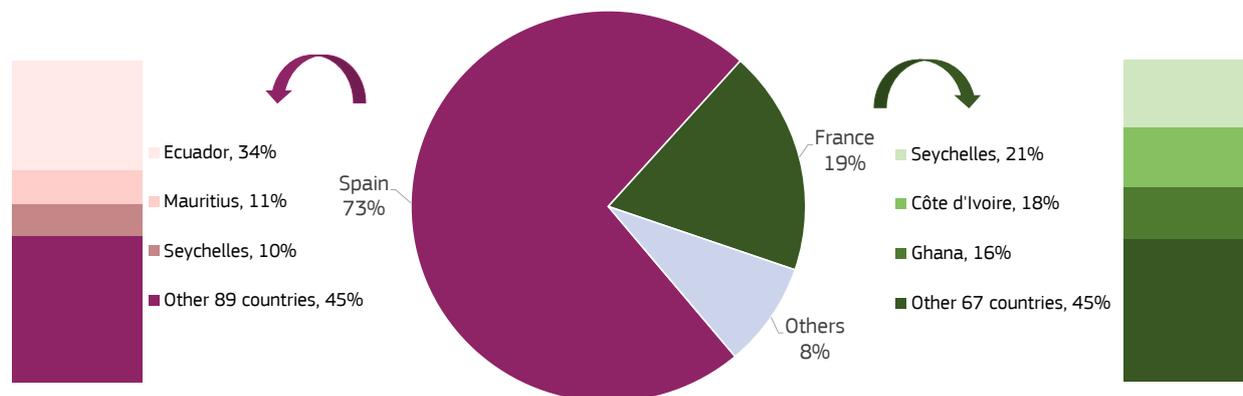
Spanish and French exports to these countries, for being processed and then imported in the EU as prepared/preserved or frozen loins.

In 2018, exporting to third countries, Spain sold 225.662 tonnes with a value of EUR 465,16 million, while France sold 57.611 tonnes with a value EUR 95,13 million.

**CHART 55**

**COMPOSITION OF EXTRA-EU EXPORTS OF TUNA BY COUNTRIES INVOLVED IN 2018 (IN VOLUME)**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))



Almost all extra-EU exports of this commodity group are frozen products, which account for 87% of total volume and 61% of total value. The rest is represented by prepared/preserved and fresh fish.

In 2018, the main tuna species exported by the EU in volume were skipjack, representing 61% of the total, and yellowfin, which accounted for one-quarter. In value terms, other species covered relevant shares: skipjack tuna accounted for 37% of the total, the grouping “miscellaneous tuna” represented 27%, and yellowfin and bluefin tuna accounted for 16% each. The bluefin tuna was the only species mainly exported fresh.

**SKIPJACK TUNA**

In 2018, EU exports to third countries of skipjack tuna were 189.210 tonnes worth EUR 299,29 million. Compared with the previous year, they grew by 33% in volume and 9% in value terms, thus touching a 10-year peak.

Both Spain and France sold mostly frozen products, at average prices of 1,20 and 1,30 EUR/kg, respectively, which, compared with 2017, marked decreases of 19% for Spain and 2% for France.

**YELLOWFIN TUNA**

Extra-EU exports of yellowfin tuna totalled 61.724 tonnes and EUR 128,54 million in 2018, which marked a decrease of 1.415 tonnes and EUR 1,81 million from 2017. While values touched the lowest amount since 2012, total volumes reached the negative peak of the last 10 years.

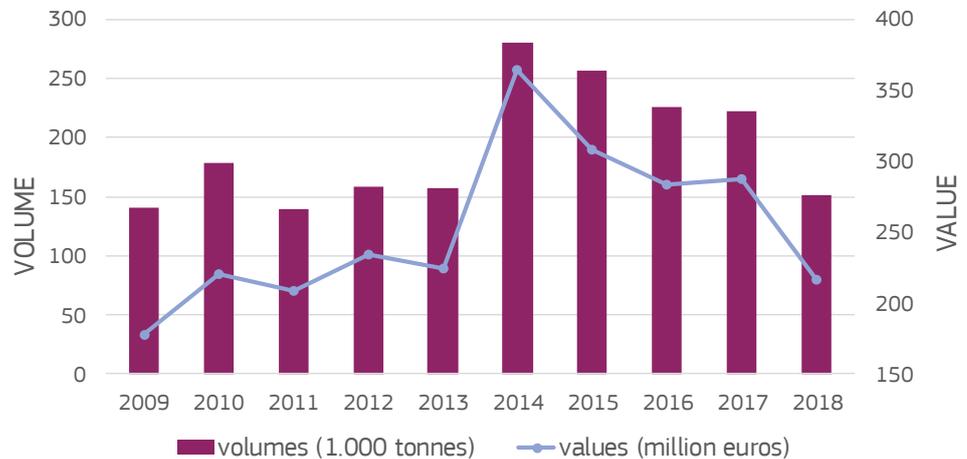
Spain and France, the main EU exporters, sold frozen products at 1,64 and 2,12 EUR/kg, respectively. For Spain, this was an 8% export price decrease from 2017, while for France, it was a 6% increase.

**SMALL PELAGICS**

In 2018, EU Member States’ exports of small pelagics to third countries reached 658.585 tonnes and EUR 727,49 million. Two main commercial species of this group, namely mackerel and herring, accounted for almost 20% in volume of all fish and seafood products exported by the EU.

**MACKEREL** After the 2014 peak of nearly 592.000 tonnes, EU catches of Atlantic mackerel started to decline, in line with global catches. During the same period, and linked to the declining landings in the EU, extra-EU exports of mackerel also registered a decreasing trend, which in 2018 dropped to 151.065 tonnes and EUR 216,58 million. Compared with 2017, this was a drop of 32% in volume and 25% in value terms; yet, at the same time, the average export price increased from 1,29 to 1,43 EUR/kg.

**CHART 56**  
**MACKEREL EXPORTED**  
**FROM THE EU TO THIRD**  
**COUNTRIES**  
 Source: EUMOFA, based on  
 Eurostat (online data code:  
[DS-016890](#))

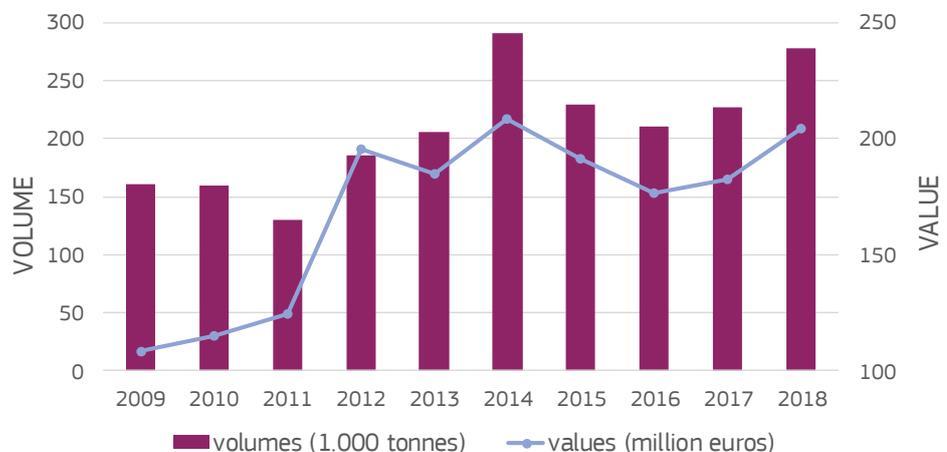


The Netherlands, Ireland and Denmark are the main EU exporters of mackerel. In 2018, these countries accounted for almost 70% of the total volumes exported by the EU. While the Netherlands and Ireland mainly dispatched frozen products, Denmark exported both fresh and frozen mackerel.

As for destination countries, the most relevant countries are Nigeria, Egypt and Norway. Together, in 2018, they accounted for 40% of total mackerel volumes exported by the EU.

**HERRING** In 2018, EU Member States exported 277.966 tonnes of herring to third countries, with a value of EUR 204,03 million. This represented a 22% volume increase and a 12% value growth over 2017, as well as a four-year peak. On the other hand, the average price dropped from 0,80 EUR/kg in 2017 to 0,73 EUR/kg in 2018.

**CHART 57**  
**HERRING EXPORTED**  
**FROM THE EU TO THIRD**  
**COUNTRIES**  
 Source: EUMOFA, based on  
 Eurostat (online data code:  
[DS-016890](#))



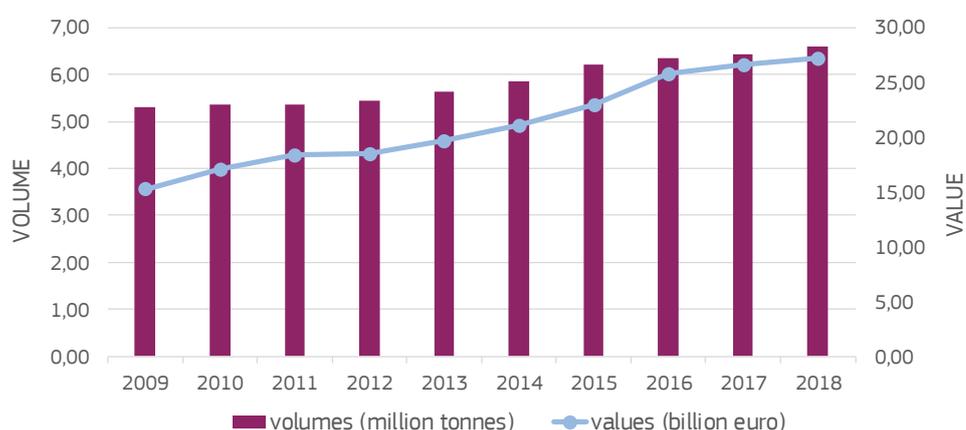
Of these trade flows, 70% of both value and volume originated in the Netherlands, and mostly consisted of frozen products. The Dutch extra-EU exports of herring are mainly destined to Nigeria and Egypt. In 2018, Nigeria imported 118.908 tonnes of herring with a value of EUR 87,30 million from the Netherlands, which represented increases of 81% and 102%, respectively from 2017. Egypt, however, recorded decreased imports of EU herring, dropping from 57.041 tonnes and EUR 41,15 million in 2017 to 54.688 tonnes and EUR 36,90 million in 2018.

## 4.5 INTRA-EU TRADE

Intra-EU trade<sup>50</sup> has been growing at average annual growth rates of 2% in volume and 7% in value since 2009. In 2018, it reached a 10-year peak of 6,60 million tonnes with a value of EUR 26,27 billion, which marked an increase of 177.918 tonnes and EUR 647,93 billion from 2017<sup>51</sup>.

**CHART 58**  
**INTRA-EU TRADE OF FISH AND SEAFOOD**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))



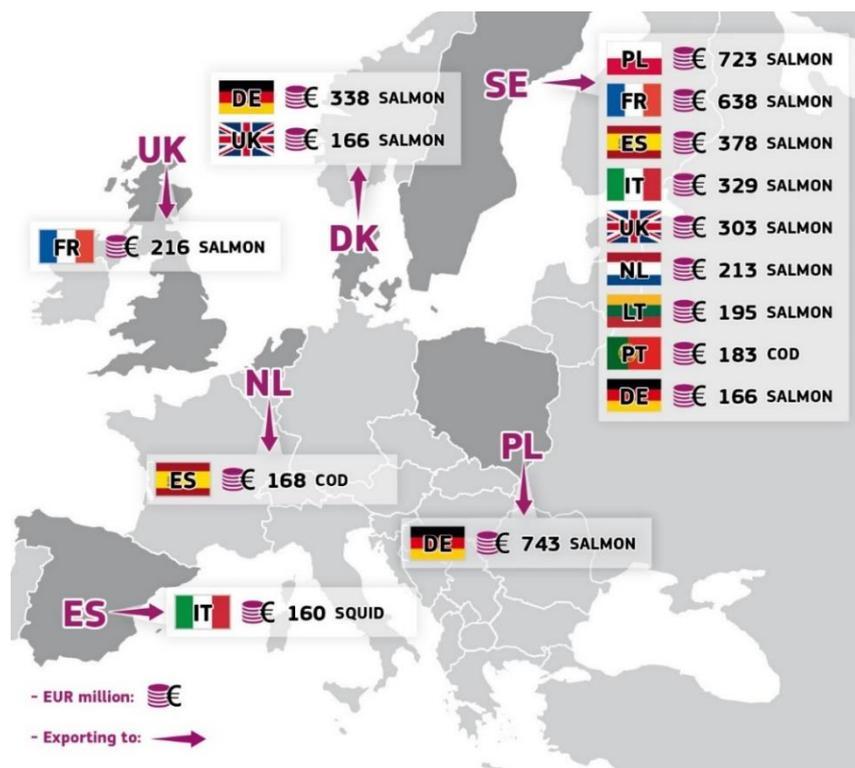
The 15 flows with the highest value at country and main commercial species level in 2018 are shown in Chart 59. Such flows almost exclusively concern salmon and cod exported by northern Member States to other EU countries. The only exception is Spain’s export of squid to Italy.

<sup>50</sup> Due to the fact that intra-EU imports and intra-EU exports should coincide, only intra-EU exports have been taken into account.

<sup>51</sup> It is worth underlying that nominal values are analysed in this report, so the increase could also be partially explained by inflation which is not taken into account in these data.

**CHART 59**  
 15 TOP FLOWS OF FISH  
 AND SEAFOOD WITHIN  
 THE EU IN 2018 (IN  
 VALUE)

Source: EUMOFA, based on  
 Eurostat (online data code:  
[DS-016890](#))

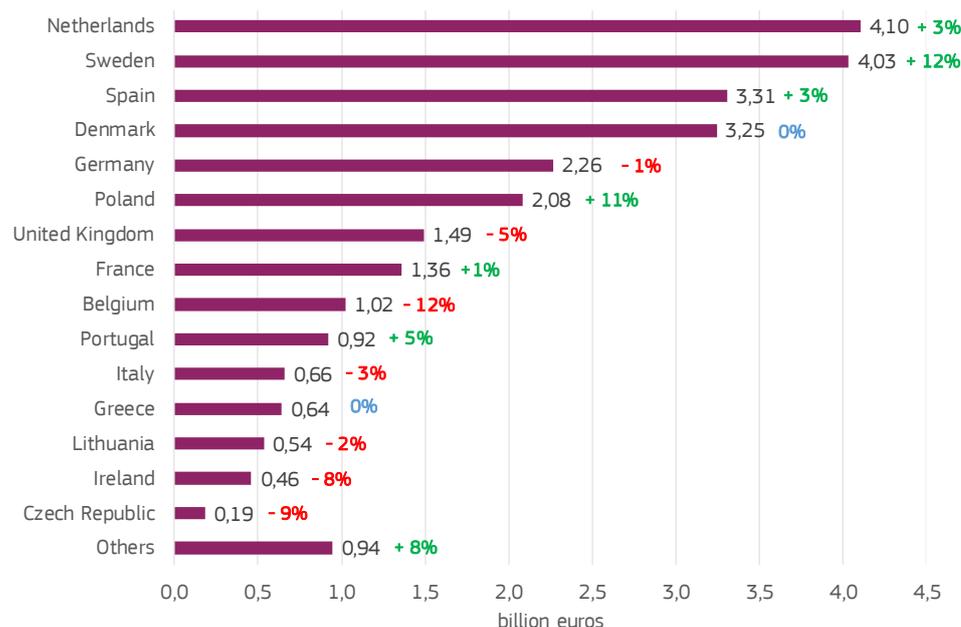


Exchanges occurring within the EU cover all main commercial species. In 2018, salmonids, the most traded in terms of value, were mainly exported by Sweden and Denmark, the main entry points for Norwegian products. Northern countries were also the main responsible of small pelagics trade flows, which accounted for the largest share in volume. Indeed, such flows mainly consisted of herring traded by Denmark and Sweden, and mackerel traded by the Netherlands and the United Kingdom.

As for main players of intra-EU trade, five Member States, namely the Netherlands, Sweden, Spain, Denmark and Germany, accounted for over 60% of total flows in 2018, both in value and volume terms.

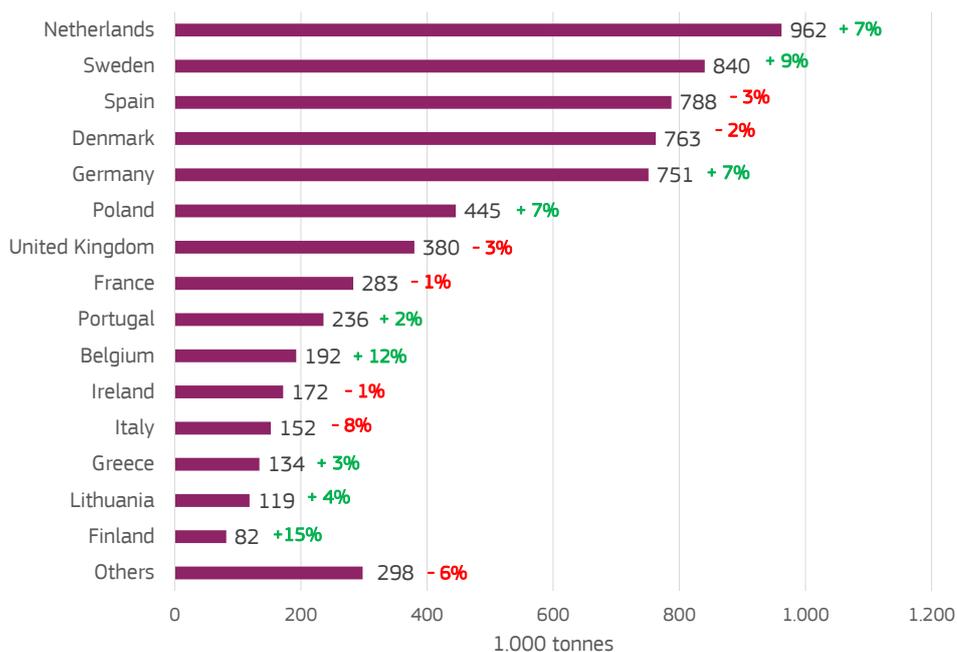
**CHART 60**  
 VALUE OF INTRA-EU  
 TRADE BY MEMBER STATE  
 IN 2018 AND %  
 VARIATION 2018/2017

Source: EUMOFA, based on  
 Eurostat (online data code:  
[DS-016890](#))



**CHART 61**  
**VOLUME OF INTRA-EU**  
**TRADE BY MEMBER STATE**  
**IN 2018 AND %**  
**VARIATION 2018/2017**  
 Source: EUMOFA, based on  
 Eurostat (online data code:  
[DS-016890](#))

*Denmark, Spain and the Netherlands are the main traders in both extra-EU and intra-EU flows.*



## 4.5.1 ANALYSIS BY MAIN SPECIES

### SALMONIDS

In 2018, intra-EU exchanges of salmonids reached a 10-year peak of 1,07 million tonnes and EUR 8,36 billion. More than 90% of both volume and value was salmon, while trout and other species of salmonids made up the rest.

### SALMON

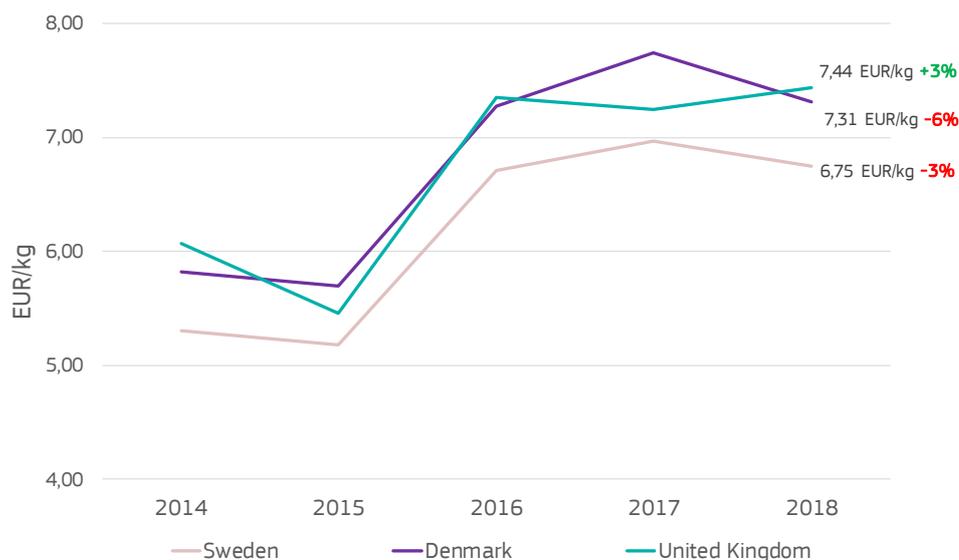
Salmon alone represents 15% of the total intra-EU trade of fish and seafood products in terms of volume. Indeed, in 2018, its volume totalled 973.342 tonnes, which was a 10% increase from 2017. In value terms, its 29% share reached EUR 7,81 billion in 2018. The average price was 8,02 EUR/kg, a 3% reduction from 2017.

Swedish exports of fresh salmon to other Member States are the most relevant, since they totalled 493.472 tonnes for a value of EUR 3,33 billion in 2018. Sweden's exports basically consist of salmon imported from Norway that are mainly destined for Poland and France. Both countries reserve a major share of the imported salmon for the smoking industry.

In terms of value of salmon exports, Sweden is followed by Denmark, Poland, Germany and the United Kingdom. While Denmark and the United Kingdom mostly export fresh salmon, sales from Poland and Germany include a significant share of smoked products.

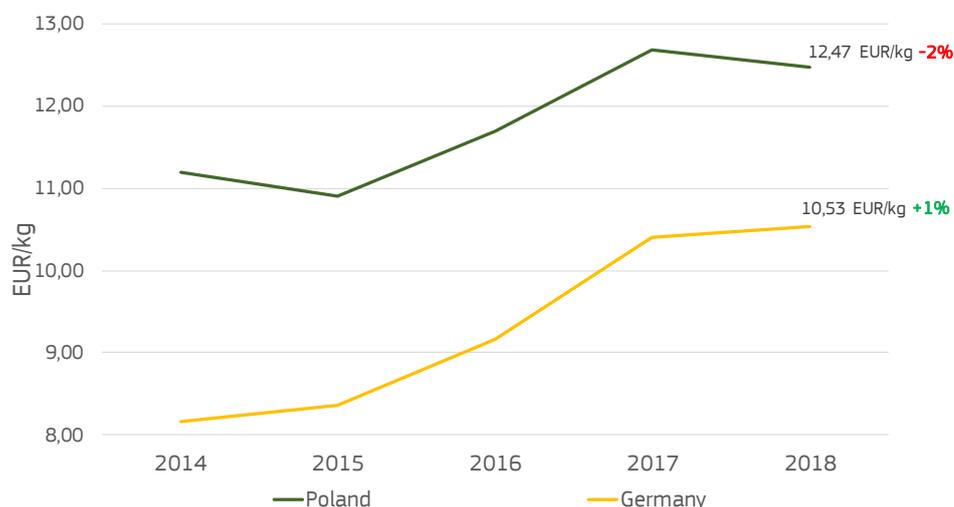
**CHART 62**  
**PRICE OF FRESH SALMON**  
**IN THE INTRA-EU TRADE**  
**BY THE TOP 3 VALUED**  
**EXPORTERS AND**  
**VARIATIONS 2018/2017**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))



**CHART 63**  
**PRICE OF SMOKED**  
**SALMON IN THE INTRA-EU**  
**TRADE BY THE TOP 2**  
**VALUED EXPORTERS AND**  
**VARIATIONS 2018/2017**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))



## GROUND FISH

In 2018, groundfish traded in the EU reached a 10-year peak of 994.765 tonnes and EUR 3,64 billion. Compared with 2017, this was an increase of 82.122 tonnes and EUR 154,84 million, representing increases of 9% in volume and 4% in value.

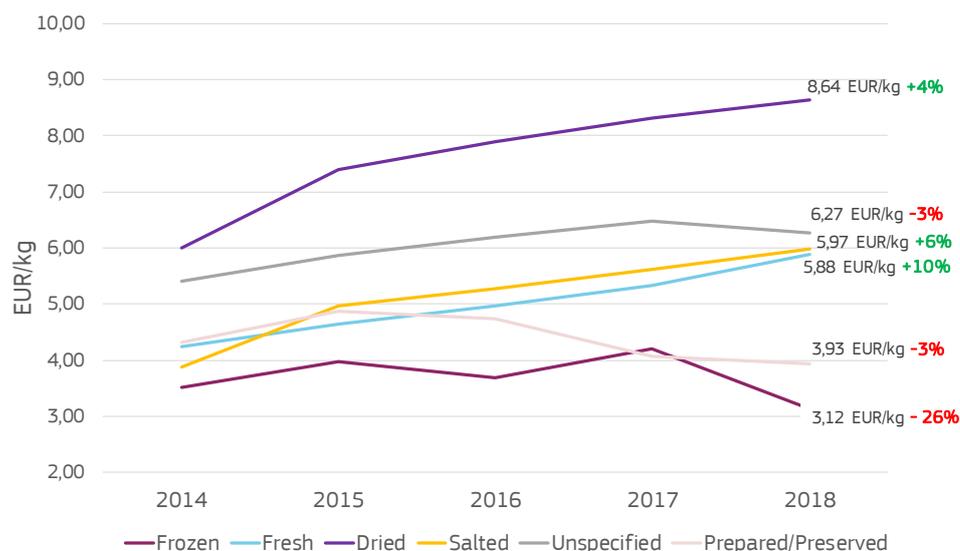
### COD

Cod is by far the main groundfish species and the second most valued species traded within the EU. In 2018, 478.110 tonnes of cod were exchanged for a total value of EUR 2,22 billion.

Most of these flows – 73% of total volume and 67% of total value – originated from the Netherlands, Denmark and Sweden. In 2018, the Netherlands mainly exported frozen products, while Denmark and Sweden mainly sold fresh cod. France was the main destination of the Dutch and Danish exports, while Portugal accounted for 41% of cod volumes exported by Sweden, mainly consisting of dried-salted cod that had originated in Norway.

**CHART 64**  
**PRICE OF COD IN THE**  
**INTRA-EU TRADE BY**  
**PRESERVATION AND**  
**VARIATIONS 2018/2017**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))



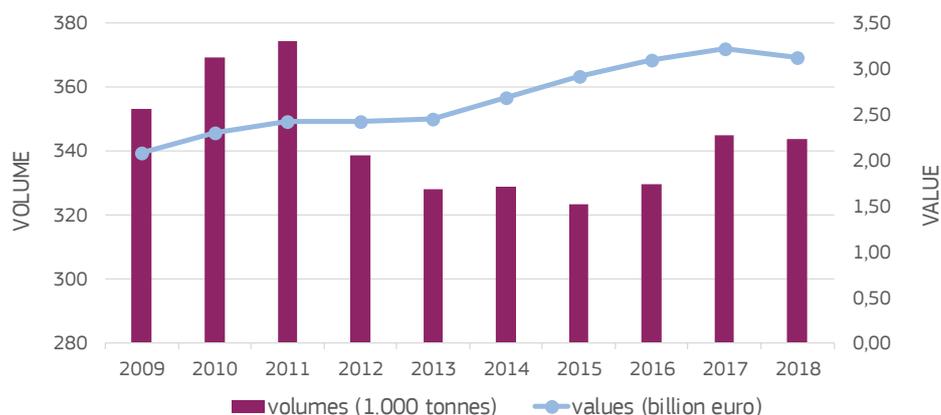
## CRUSTACEANS

Crustaceans traded within the EU in 2018 amounted to 343.752 tonnes and EUR 3,12 billion. Compared with 2017, this marked a slight decrease of 1.165 tonnes in volume, or 0,34%, and EUR 87,26 million or 3% decline in value.

Warmwater and miscellaneous shrimps accounted for 61% of the total flows, both in volume and value terms.

**CHART 65**  
**INTRA-EU TRADE OF**  
**CRUSTACEANS**

Source: EUMOFA, based on Eurostat (online data code: [DS-016890](#))



## WARMWATER SHRIMPS

Warmwater shrimps account for almost one-quarter of intra-EU trade of crustaceans in value, almost entirely consisting of frozen shrimps imported from non-EU countries and exchanged within the EU market. After reaching a peak in 2017, the 2018 exchanges of warmwater shrimps decreased by 3% in volume and 8% in value.

The main EU traders of warmwater shrimps – the Netherlands, Belgium and Spain – together exported 70% of the total intra-EU exports in 2018. Among these three countries, Belgium recorded the most relevant decline of export flows in 2018, with its warmwater shrimps' flows moving from 21.545 tonnes valued at EUR 211,28 billion in 2017 to 18.440 tonnes valued at EUR 163,58 million in 2018. This represented a reduction of 14% in volume and 23% in value, and mainly included exchanges with the Netherlands and Germany.

## MISCELLANEOUS SHRIMPS

Miscellaneous shrimps account for 38% of the value of crustaceans traded within the EU, mostly comprising prepared/preserved and frozen products. In 2018, both categories recorded a decline from 2017: prepared/preserved miscellaneous shrimps totalled 75.158 tonnes and EUR 772,05 million, which were decreases of 3% in volume and 2% in value terms, while frozen products amounted at 45.040 tonnes and EUR 352,72 million, declining by 8% and 9% in volume and values, respectively. In 2018, the Netherlands, Spain, Denmark and Belgium, the main miscellaneous shrimps traders, together covered 73% of the total intra-EU exchanges of the product, both in value and volume terms. Among these countries, Spain mostly exports frozen products, while the others mainly trade prepared/preserved ones.

# 5/ LANDINGS IN THE EU

## 5.1 OVERVIEW

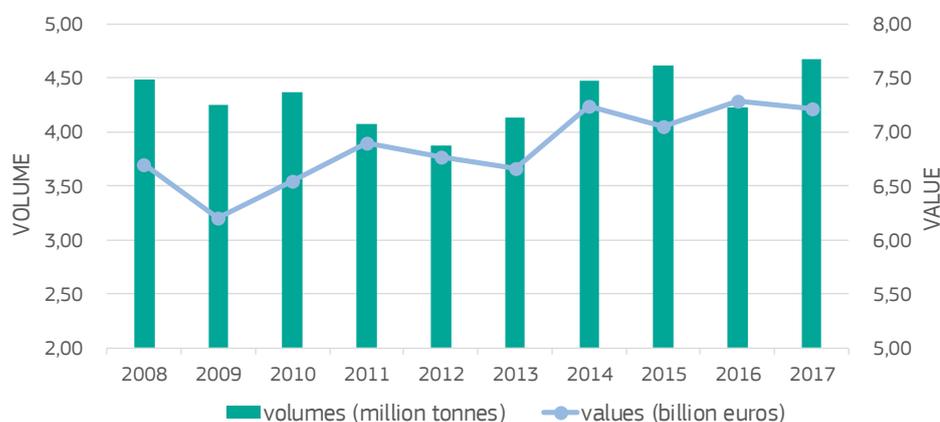
### TOTAL EU

Data regarding landings in the EU comprise the initial unloading of any fisheries products from on board a fishing vessel in a given EU Member State. They concern landings made by vessels from EU Member States and from Iceland and Norway<sup>52</sup>. In 2017, the volume of landings in the EU, including species not destined for human consumption and seaweed, reached a 10-year peak of 4,68 million tonnes. This represented a 11% increase of 452.448 tonnes from 2016. In value terms, the EU recorded a 1% decrease of EUR 63 million, as total value dropped from EUR 7,28 billion in 2016 to EUR 7,22 billion in 2017.

**CHART 66**

### 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.



*In 2017, the volume of products landed in the EU reached the 10-year peak of 4,68 million tonnes, mainly thanks to a significant growth of sandeel landings in Denmark.*

Landings of the different main commercial species showed a significant variation in 2017 compared with 2016.

A 40% increase of blue whiting volumes made it the second to herring among most landed species in the EU, while, due to a 8% growth in landing price, shrimps became the top-ranked species in value terms. Moreover, a 30% price drop recorded by herring moved its value position from fourth to sixth.

It is worth noting that, although sandeel is not included among the most landed main commercial species at EU level, it recorded significant increases in 2017. Its landings volume increased 797%, growing from 45.955 to 412.034 tonnes, and its value increased 299%, from EUR 16,32 million to EUR 65,03 million. This growth was mainly due to landings in Denmark, where quotas recorded a boost compared with the previous year. In addition, an increase of the reproductive biomass of this species in recent years has contributed to the full reproductive capacity of its stock in the North Sea, and a decrease of fishing mortality contributed to the growth of catches<sup>53</sup>.

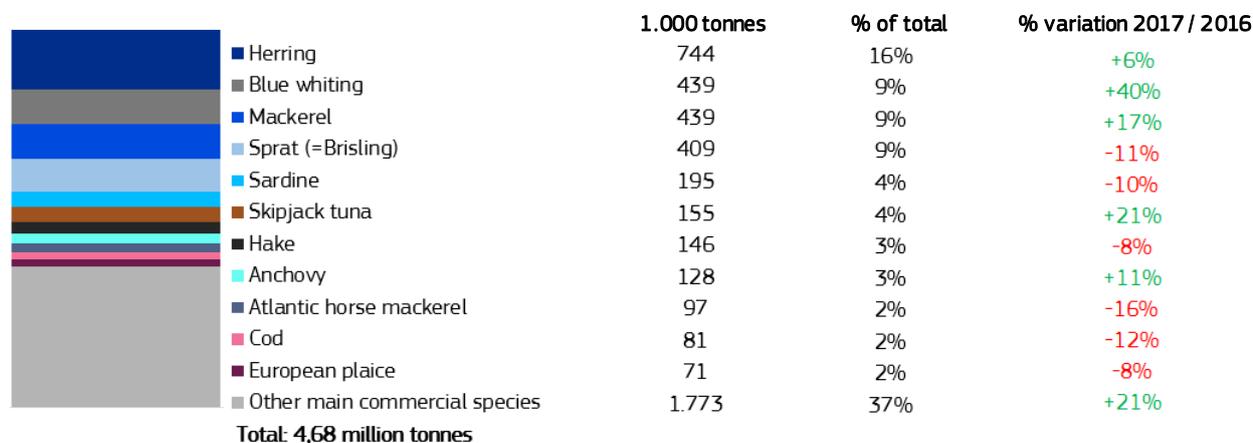
<sup>52</sup> Data regarding landings do not refer to landlocked EU Member States, namely the Czech Republic, Luxembourg, Hungary, Austria and Slovakia. As for Denmark the analyses in this chapter are not detailed by vessel nationality, as this information is confidential within Eurostat.

<sup>53</sup> Source: [https://www.fishsource.org/stock\\_page/1972](https://www.fishsource.org/stock_page/1972).

### CHART 67

#### MOST IMPORTANT COMMERCIAL SPECIES LANDED IN THE EU VOLUME IN 2017, % OF TOTAL AND % VARIATIONS 2017 / 2016

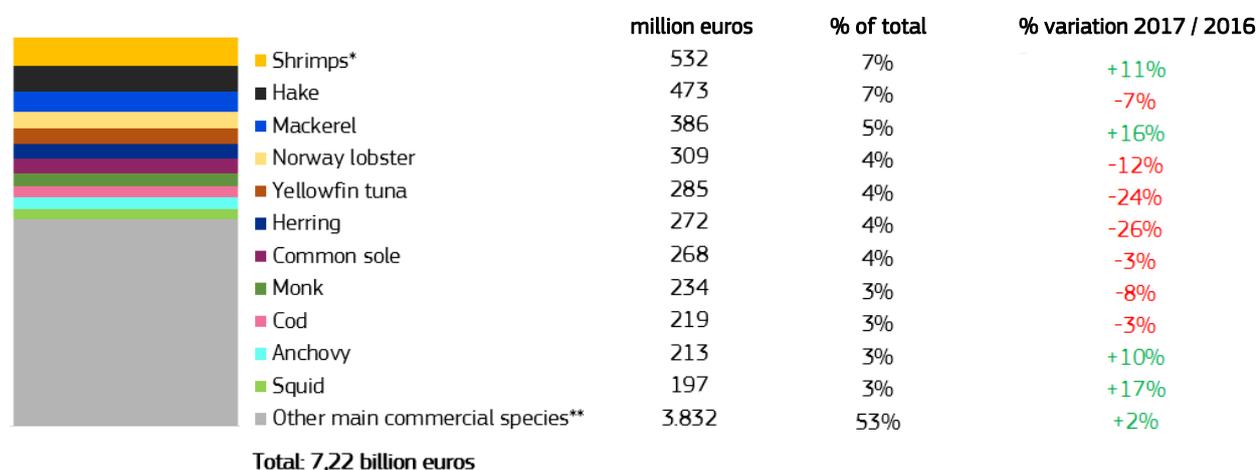
Source: EUMOFA, based on Eurostat (online data code: [fish\\_ld\\_main](#)) and national sources' data.  
 More details on the sources used can be found in the Methodological background.



### CHART 68

#### MOST IMPORTANT COMMERCIAL SPECIES LANDED IN THE EU VALUE IN 2017, % OF TOTAL AND % VARIATIONS 2017 / 2016

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.



\*The grouping "Shrimps" includes shrimp *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 are clam and scallop (each one covering 3% of the total value).

**TABLE 18**  
YEARLY AVERAGE PRICES  
AT LANDING STAGE OF  
MOST IMPORTANT  
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	2008	2016	2017	2017/2016	2017/2008
Anchovy	1,93	1,68	1,67	-1%	-13%
Blue whiting	0,36	0,34	0,23	-32%	-36%
Clam	2,39	2,96	3,18	+7%	+33%
Cod	2,54	2,47	2,69	+9%	+6%
Cuttlefish	3,94	5,30	5,93	+12%	+51%
Hake	3,98	3,22	3,23	0%	-19%
Herring	0,37	0,53	0,37	-30%	0%
Norway lobster	7,54	8,35	7,72	-8%	+2%
Mackerel	0,83	0,89	0,88	-1%	+6%
Monk	5,48	4,91	4,62	-6%	-16%
Sardine	0,74	0,82	0,81	-1%	+9%
Scallop	2,34	2,66	2,71	+2%	+16%
Shrimp <i>Crangon</i> spp.	3,87	7,28	7,69	+6%	+99%
Common sole	10,46	11,60	11,31	-3%	+8%
Squid	4,28	5,33	4,42	-17%	+3%
Bigeye tuna	2,24	3,64	3,91	+7%	+75%
Skipjack tuna	1,09	1,02	1,11	+9%	+2%
Yellowfin tuna	2,09	4,11	4,09	0%	+96%

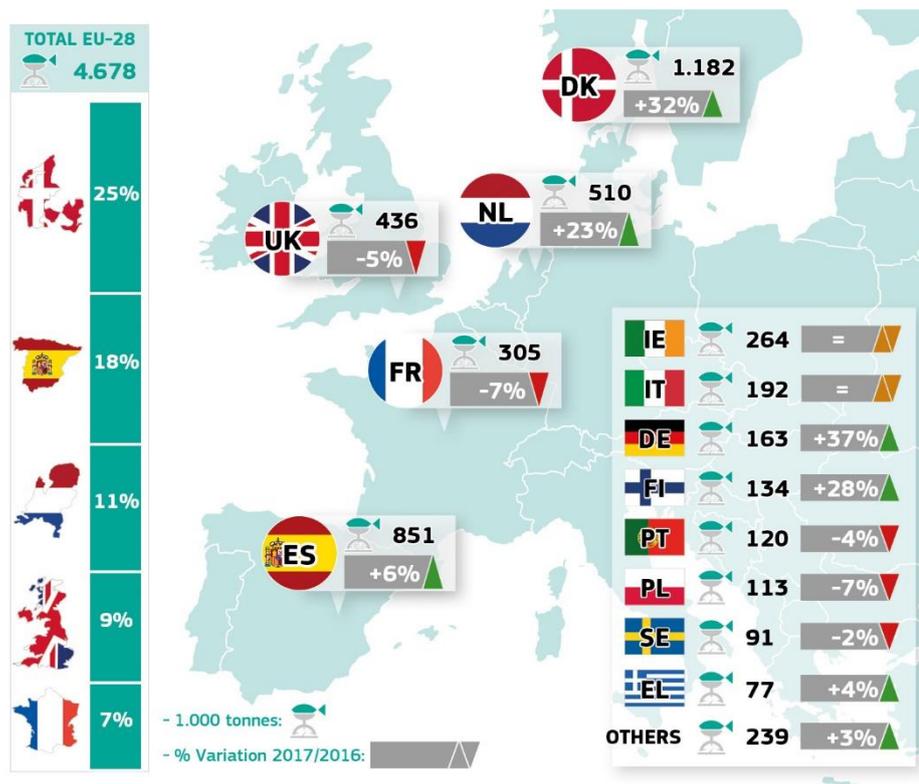
## BY MEMBER STATE

In 2017, the highest landed volumes were recorded in Denmark (mainly sandeels) and Spain (mainly skipjack tuna and mackerel). Landings in Spain also registered the highest value, mainly related to yellowfin tuna and hake.

It is also worth noting that, from 2016 to 2017, the Netherlands reported a notable volume increase linked to higher landings of blue whiting. The same species also contributed to the growth of landings in Germany.

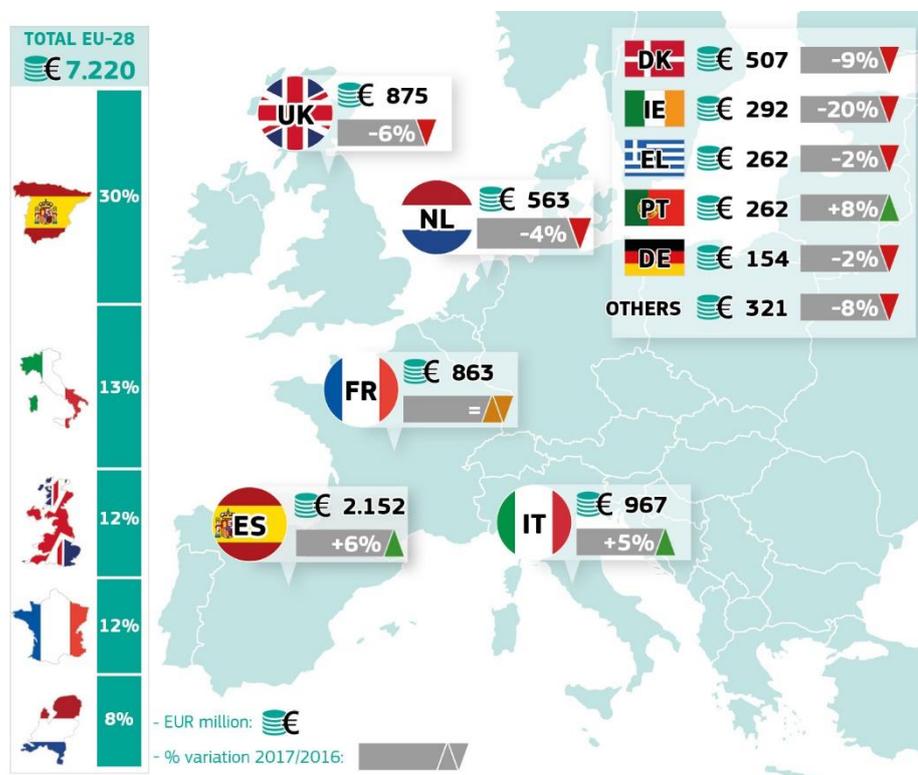
**CHART 69**  
**VOLUMES OF LANDED PRODUCTS IN MAIN EU COUNTRIES IN 2017 AND % VARIATIONS 2017/2016**

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 70**  
**VALUES OF LANDED PRODUCTS IN MAIN EU COUNTRIES IN 2017 AND % VARIATIONS 2017/2016**

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 2017, landings of small pelagics in the EU totalled 2,08 million tonnes, which was 54.043 tonnes or 3% more than 2016, but 99.517 tonnes or 5% less than the 10-year peak registered in 2015. Nevertheless, their value of EUR 1,24 billion represented a EUR 78,04 million or 6% decrease from 2016, and was EUR 27,49 million lower than the 2008–2017 average.

Five of the main small pelagics commercial species, namely herring, mackerel, sprat, sardine and anchovy, together accounted for 41% of total landed volumes.

### HERRING

Herring, the most landed main commercial species in the EU, accounted for 16% of total volumes and, in 2017, it increased by 6% and reached a 10-year peak of 743.856 tonnes. However, its landing value, which had reached a 10-year peak of EUR 369,41 million in 2016, dropped 26% in 2017, to EUR 272,15 million.

In 2017, 25% of herring volumes were landed in Denmark, the Netherlands accounted for 20% of the total and Finland covered 15% of the total, while most of the rest was landed in other northern EU Member States. The Netherlands and Finland led the overall increase of landings in the EU: volumes of landed herring moved from 126.559 to 152.005 tonnes in the Netherlands for a 20% increase over 2016, and from 92.002 to 113.400 tonnes in Finland, for a 23% increase over 2016. While landings of herring in the Netherlands were mainly made by Dutch and German vessels, which together accounted for 86% of the total, in Finland they were made exclusively by the national fleet.

As for the value drop, many landing countries recorded price decreases in 2017. Except for Finland, these caused relevant value reductions from 2016, the most remarkable registered in Denmark (-25%), the Netherlands (-22%), Germany (-35%), Sweden (-67%) and the United Kingdom (-39%)

It should be considered that landings of herring consist of different stocks (North Sea stock, Atlantic Spring spawning stock, Baltic stock) and herring from each stock have different market preferences and consequently achieve different prices in the market. Another factor, especially applicable for Denmark and Sweden, is that the landings for non-human consumption vary from year to year, resulting in significant price differences. Nevertheless, the price drop recorded in many landing countries may have been due to Norway's 43% increase in landings from 2016 to 2017. This growth led to a 40% decrease in the yearly average price in Norway, which also affected prices of herring landed in northern EU countries.

**TABLE 19**  
YEARLY AVERAGE 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.

Member State	2008	2016	2017	2017/2016	2017/2008
Denmark	0,34	0,56	0,42	-25%	+24%
Netherlands	0,75	0,72	0,47	-35%	-37%
Germany	0,37	0,66	0,42	-36%	+14%
United Kingdom	0,32	0,75	0,46	-39%	+44%
Finland	0,14	0,19	0,19	0%	+36%
Sweden	0,28	0,63	0,22	-65%	-21%
Poland	0,32	0,33	0,34	+3%	+6%
Ireland	0,58	0,53	0,67	+26%	+16%
Latvia	0,19	0,23	0,28	+22%	+47%
Estonia	0,16	0,19	0,19	0%	+19%
France	0,32	0,44	0,61	+39%	+91%

**MACKEREL** In 2017, landings of mackerel in the EU totalled 439.012 tonnes worth EUR 385,68 million. Compared with 2016, this was an increase of 17% in volume and 16% in value. One-quarter of mackerel landings took place in the United Kingdom, where the 108.223 tonnes landed in 2017 represented a 5% reduction from 2016. Of this, 88% originated from national vessels, while the rest was from Irish, Norwegian, Swedish and Danish fleets. The United Kingdom also recorded a 5% decrease from 2016 in total values, dropping to EUR 112,96 million.

Member States other than United Kingdom, were thus responsible for the overall growth of mackerel landings at EU level. Spain, Ireland and the Netherlands, which in 2017 accounted for 59% of the total, all recorded significant increases compared with 2016. The most remarkable variation was recorded in Spain, where the 47% volume growth from 68.483 tonnes in 2016 to 100.853 tonnes in 2017 partially offset the 20% price decrease and resulted in values increasing by 18%, to EUR 61,18 million. In all three countries, landings of mackerel were made by national vessels.

**TABLE 20**  
**YEARLY AVERAGE PRICES**  
**OF MACKEREL LANDED**  
**IN MAIN EU MEMBER**  
**STATES (EUR/KG)**

Source: EUMOFA, based on Eurostat (online data code: [fish\\_ld\\_main](#))  
 More details on the sources used can be found in the Methodological background.

Member State	2008	2016	2017	2017/2016	2017/2008
United Kingdom	0,97	1,04	1,04	0%	+7%
Netherlands	1,11	0,89	0,98	+10%	-12%
Ireland	0,75	0,74	0,83	+12%	+11%
Spain	0,51	0,75	0,61	-19%	+20%
Germany	0,90	0,76	0,90	+18%	0%
France	0,83	1,40	1,56	+11%	+88%
Denmark	1,29	1,14	0,91	-20%	-29%
Portugal	0,24	0,37	0,46	+24%	+92%
Italy	2,20	2,76	2,88	+4%	+31%
Greece	2,67	2,12	1,84	-13%	-31%

**SPRAT** Landings of sprat in the EU amounted to 409.120 tonnes and EUR 81,01 million in 2017, with a decline of 11% in volume and 35% in value compared with 2016. Their average price also declined, moving from 0,27 to 0,20 EUR/kg.

Denmark is by far the main landing country of this species, accounting for 59% of EU volumes in 2017, mainly consisting of products destined for the fishmeal industry. Nevertheless, its share declined from 2016: volumes landed decreased 25%, from 319.698 to 240.546 tonnes, while, due to a 33% price drop, values decreased 48%, from EUR 84,9 to EUR 43,8 million. The decrease in volume was due to a significant reduction of sprat quotas in the North and Norwegian Seas, where those for Denmark decreased by around 50% from 2016 to 2017.

Poland and Latvia follow at distance, even if in 2017 their shares of total EU landings of sprat increased compared with 2016. Sprat landings in Poland increased in volume by 5%, from 47.376 to 49.878 tonnes, while value reduced by 7%, from EUR 9,83 to EUR 9,13 million. In Latvia, sprat landings grew by 27% in both volume and value terms, increasing from 27.281 to 34.710 tonnes and from EUR 6,82 to EUR 8,68 million. In both countries, the increased sprat landings, which were mainly made by their national vessels, resulted from higher quotas in the Baltic Sea.

**TABLE 21**  
YEARLY AVERAGE 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.

Member State	2008	2016	2017	2017/2016	2017/2008
Denmark	0,14	0,27	0,18	-33%	+29%
Poland	0,18	0,21	0,18	-14%	0%
Latvia	0,19	0,25	0,25	0%	+32%
Estonia	0,17	0,18	0,18	0%	+6%
Sweden	0,16	0,50	0,22	-56%	+38%

**SARDINE**

In 2017, landings of sardine in the EU registered a 10% decrease from the five-year peak of 2016, thus totalling 195.491 tonnes. Together with the average price decreasing by a slight 0,82 to 0,81 EUR/kg, this led to a 12% decrease in value, from EUR 178,61 million in 2016 to EUR 157,45 million in 2017.

The negative trend involved all main EU Member States landing sardine, namely Croatia, with 25% of the total volumes, Spain with 16%, the Netherlands with 15%, and Italy with 12%. However, these countries all recorded different price variations from 2016 to 2017. The most remarkable decreases were registered in the Netherlands, where sardine landings dropped 19% from 36.537 to 29.553 tonnes and value dropped 30% from EUR 19,57 million to EUR 13,69 million, and in Italy, where landings dropped 18% from 29.536 to 24.284 tonnes and value dropped 32%, from EUR 22,85 million to EUR 15,60 million. The only exception was reported in France, where 2017 sardine landings increased 1% in volume and 3% in value from 2016, thus reaching 24.724 tonnes worth EUR 24,37 million.

**TABLE 22**  
YEARLY AVERAGE PRICES  
OF SARDINE LANDED IN  
MAIN EU MEMBER  
STATES (EUR/KG)

Source: EUMOFA, based on Eurostat (online data code: [fish\\_ld\\_main](#))  
More details on the sources used can be found in the Methodological background.

Member State	2008	2016	2017	2017/2016	2017/2008
Spain	0,79	1,24	1,31	+6%	+66%
France	0,50	0,97	0,99	+2%	+98%
Portugal	0,59	2,03	1,64	-19%	+179%
Croatia	n/a <sup>54</sup>	0,38	0,38	0%	n/a
Greece	1,72	1,25	1,24	-1%	-28%
Italy	1,06	0,77	0,64	-17%	-40%
Netherlands	0,53	0,54	0,46	-15%	-13%

<sup>54</sup> Croatia is analysed from 2013 on, since it joined the EU in 2013.

**ANCHOVY** In 2017, landings of anchovy in the EU touched the 10-year peak of 127.561 tonnes and EUR 212,85 million. Compared with 2016, they grew by 11% in volume and 10% in value. The landing price showed a slight decrease from 1,68 to 1,67 EUR/kg, which was 0,10 EUR/kg less than the 10-year average.

Spain, the main EU country where anchovy is landed, accounted for 40% of total volumes in 2017. Compared with 2016, its landings volumes increased by 10% from 46.192 to 50.774 tonnes, and its values increased 9% from EUR 81,95 million to EUR 89,22 million. This upward trend could be linked to the 30% increase of Spanish quotas in the North-East Atlantic recorded from 2016 to 2017.

The other important EU anchovy-landing countries, Italy, Greece and Croatia, together contributed around 50% of total volumes in 2017. Croatia reported the highest increases, growing 32% in volume and 29% in value, which represented a 2% price decrease from 2016.

**TABLE 23**  
**YEARLY AVERAGE PRICES**  
**OF ANCHOVY LANDED IN**  
**MAIN EU MEMBER**  
**STATES (EUR/KG)**

Source: EUMOFA, based on Eurostat (online data code: [fish\\_ld\\_main](#))

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

Member State	2008	2016	2017	2017/2016	2017/2008
Spain	3,23	1,77	1,76	-1%	-46%
Italy	1,71	1,73	1,93	+12%	+13%
Greece	1,92	1,58	1,47	-7%	-23%
Portugal	4,27	1,70	1,58	-7%	-63%
Croatia	n/a <sup>55</sup>	0,94	0,92	-2%	n/a
France	2,09	1,96	0,98	-50%	-53%

## GROUND FISH

Landings of groundfish in the EU registered a significant variation in 2017 compared with 2016: total volumes reached the 10-year peak of 1,26 million tonnes, thus growing 59% or 465.928 tonnes, while values increased 3%, from EUR 1,19 billion to EUR 1,23 billion. This was due to the fact that in 2017, sandeel recorded a significant increase compared with the previous year, as its landings grew 797% from 45.955 to 412.034 tonnes, and value increased 299%, from EUR 16,32 million to EUR 65,03 million. This growth mainly regarded landings in Denmark. Indeed, an increase of the reproductive biomass of this species in recent years has contributed to the full reproductive capacity of its stock in the North Sea, and additionally, a decrease of fishing mortality as well as increased quotas led to a growth of sandeel catches<sup>56</sup>.

The most landed groundfish species in the EU is blue whiting, which accounts for 35% of the total, while hake accounts for 12% and cod for 6%.

### BLUE WHITING

*Compared with 2016, in 2017, landings of blue whiting in the EU grew by 40% in volume and the Netherlands reported the most significant increase.*

Compared with 2016, the 2017 landed volumes of blue whiting in the EU showed a 40% increase, growing from 312.682 to 439.176 tonnes, while total values decreased by 5% from EUR 106,94 million to EUR 101,88 million. This was due to an average price reduction of 32%, dropping from 0,34 to 0,23 EUR/kg.

The increasing trend in volume terms involved almost all EU landing countries, but it especially concerned the Netherlands and Ireland, which both recorded higher blue whiting quotas in all fishing areas of the North Atlantic from 2016 to 2017.

Landings of blue whiting in the Netherlands reached a 10-year peak of 121.038 tonnes in 2017, a 90% increase from 2016. The country also registered a 57% increase in values, from EUR 11,75 million in 2016 to EUR 18,49 million in 2017.

<sup>55</sup> *Ibidem*

<sup>56</sup> Source: [https://www.fishsource.org/stock\\_page/1972](https://www.fishsource.org/stock_page/1972).

As for Ireland, landed volumes of blue whiting grew by 42% in 2017 compared with 2016, thus totalling 53.218 tonnes. With an average price moving from 0,20 to 0,17 EUR/kg, corresponding values rose 15%, from EUR 7,64 million to EUR 8,80 million. It is worth noting that most of the blue whiting landings in the EU are not destined for human consumption.

**TABLE 24**  
YEARLY AVERAGE PRICES  
OF BLUE WHITING  
LANDED IN MAIN EU  
MEMBER STATES  
(EUR/KG)

Member State	2008	2016	2017	2017/2016	2017/2008
Denmark	0,14	0,31	0,17	-45%	+21%
Spain	1,04	1,05	0,78	-26%	-25%
Netherlands	0,50	0,18	0,15	-17%	-70%
Germany	0,30	0,34	0,36	+6%	+20%
Ireland	0,14	0,20	0,17	-15%	+21%

Source: EUMOFA, based on Eurostat (online data code: [fish\\_ld\\_main](#))  
More details on the sources used can be found in the Methodological background.

**HAKE** In 2017, volumes of hake landings decreased by 7% compared with the 10-year peak reached in 2016, thus totalling 146.178 tonnes. Although the average price increased at a slight 0,4%, from 3,22 to 3,23 EUR/kg, there was a 7% drop in total values, which reached EUR 472,59 million. In terms of volume, European hake (*Merluccius merluccius*) accounted for 76%, Argentine hake (*Merluccius hubbsi*) accounted for 18% and Senegalese hake (*Merluccius senegalensis*) and Cape hakes (*Merluccius capensis*, *M.paradox.*) accounted for the rest.

With around 50% of total landings in the EU, Spain is the Member State reporting the highest volumes and values, amounting to 73.403 tonnes and EUR 223,71 million, respectively, in 2017. Spain and Portugal, are the only countries where hake is not exclusively represented by European hake (*Merluccius merluccius*).

The decreasing trend recorded in Spain, where landings were 4% less in 2017 than in 2016, was due to the combined landings reduction of both European hake (*Merluccius merluccius*) and Argentine hake (*Merluccius hubbsi*), whose volumes diminished by 5% and 4%, respectively.

**TABLE 25**  
YEARLY AVERAGE PRICES  
OF HAKE LANDED IN  
MAIN EU MEMBER  
STATES (EUR/KG)

Member State	2008	2016	2017	2017/2016	2017/2008
Spain	3,42	2,94	3,05	+4%	-11%
Italy	7,37	8,07	8,21	+2%	+11%
United Kingdom	2,55	3,25	2,77	-15%	+9%
France	2,59	2,92	2,91	0%	+12%
Ireland	2,71	2,88	2,89	0%	+6%
Greece	6,92	7,36	6,68	-9%	-3%

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 2017, landings of cod in the EU totalled 81.378 tonnes worth EUR 218,57 million, which meant an 11% decrease in volume and a 3% decrease in value from 2016. This was linked to an average price increase of 9%, from 2,47 to 2,69 EUR/kg.

Among all relevant EU countries landing cod, the United Kingdom was the main one and also the only one to experience an upward trend – compared with 2016, its volumes increased by 6% and its values by 18%. On the other hand, Denmark and Poland

reported the greatest decreases in cod landings from 2016 to 2017, in both volume and value terms, and with both accompanied by price increases. This was probably due to the fact that, from 2016 to 2017, the United Kingdom benefitted from the highest quotas in its main fishing areas in the North Atlantic, while Denmark and Poland had the opposite experience in the Baltic Sea.

**TABLE 26**  
YEARLY AVERAGE PRICES  
OF COD LANDED IN MAIN  
EU MEMBER STATES  
(EUR/KG)

Source: EUMOFA, based on  
Eurostat (online data code:  
[fish\\_ld\\_main](#))

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

Member State	2008	2016	2017	2017/2016	2017/2008
United Kingdom	3,04	2,90	3,21	+11%	+6%
Denmark	2,62	2,78	3,22	+16%	+23%
Spain	7,63	2,85	2,66	-7%	-65%
France	2,80	3,66	4,15	+14%	+48%
Poland	1,55	1,26	1,35	+7%	-13%

## CRUSTACEANS

In 2017, landings of crustaceans decreased 2% from 2016, and totalled 162.415 tonnes. However, in value terms, the landings increased 3% and reached a 10-year peak of EUR 1,10 billion.

### SHRIMPS

Shrimps, with 56.039 tonnes worth EUR 531,50 million, were the most valued product landed in the EU in 2017. The main EU countries where they were landed varied depending on the species.

*Due to a 8% increase in average price, in 2017 shrimps became the top-ranked landed species in value terms.*

*Crangon* shrimp was mainly landed in the Netherlands, where it reached 11.855 tonnes worth EUR 86,36 million. Compared with 2016, the landed volumes in 2017 dropped by 27% and values by 23%, which, in turn, drove EU-level decreases of 14% volume and 9% value. It is worth noting that, in the last 10 years, the landing price of this species more than doubled in all main landing countries.

Other types of coldwater shrimps were mainly landed in Denmark and Sweden. In Denmark, in 2017, they amounted to 2.160 tonnes worth EUR 9,58 million, and in Sweden they amounted to 1.548 tonnes worth EUR 15,00 million. Compared with 2016, Sweden registered a decrease of 21% in volume and 10% in value, while Denmark recorded a 26% increase in volume and a 20% increase in value.

The two main landing countries for deep-water rose shrimps were Italy and Spain. In 2017, both countries reported increasing landings of deep-water shrimps from 2016: Italy grew 4% in volume, from 8.833 to 9.210 tonnes, and 2% in value, from EUR 55,94 million to EUR 57,07 million, while Spain increased 73% from 2.278 to 3.937 tonnes and 71% from EUR 23,85 million to EUR 40,74 million.

Italy was also the main landing country of warmwater shrimps, represented exclusively by Caramote prawns (*Penaeus kerathurus*). In 2017, it reported landings of 1.597 tonnes and EUR 24,69 million for this species, which represented increases of 42% and 26%, respectively, from 2016.

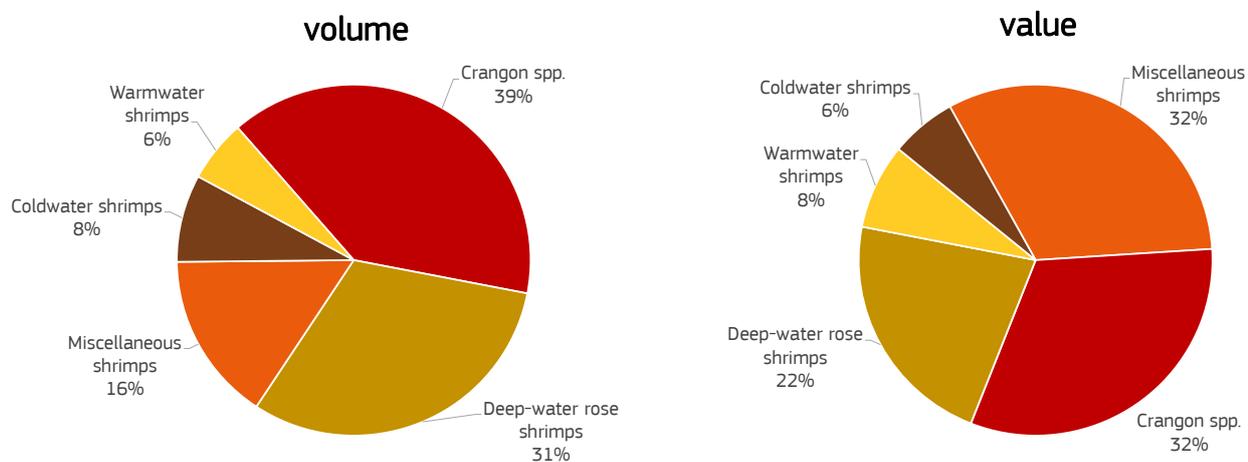
As for "miscellaneous shrimps", this grouping is mainly composed of giant red shrimp (*Aristaeomorpha foliacea*), blue and red shrimp (*Aristeus antennatus*) and striped red shrimp (*Aristeus varidens*). Italy and Spain accounted together for 94% of all landings recorded in the EU in 2017, both in volume and value terms. While landings in Italy were mainly constituted by giant red shrimp, in Spain they mainly included striped red shrimps, and blue and red shrimps. Italy registered landings for 4.592 tonnes and EUR 99,25 million, with increases of 37% in volume and 38% in value from 2016. Spain

had landings of 3.558 tonnes and EUR 60,59 million, which were increases of 12% and 13%, respectively, from the previous year.

### CHART 71

#### LANDINGS OF SHRIMPS IN THE EU IN 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.



### TABLE 27

#### YEARLY AVERAGE PRICES OF SHRIMPS 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.

Main commercial species	Member State	2008	2016	2017	2017/2016	2017/2008
Shrimp <i>Crangon</i> spp.	Netherlands	3,65	6,98	7,28	+4%	+99%
	Germany	3,53	7,66	7,99	+4%	+126%
	Denmark	4,14	8,99	9,02	0%	+118%
Coldwater shrimps	Sweden	5,23	8,51	9,69	+14%	+85%
	Denmark	2,11	4,65	4,44	-5%	+110%
	Spain	6,07	7,70	8,53	+11%	+41%
Deep-water rose shrimps	Italy	7,78	6,33	6,20	-2%	-20%
	Spain	8,62	10,47	10,35	-1%	+20%
	Greece	7,49	2,28	3,80	+67%	-49%
Warmwater shrimps	Italy	20,77	17,40	15,45	-11%	-26%
	Spain	18,97	13,56	14,92	+10%	-21%
	Portugal	8,66	30,73	30,54	-1%	+253%
Miscellaneous shrimps	Italy	19,71	21,43	21,61	+1%	+10%
	Spain	23,98	16,96	17,03	0%	-29%
	France	20,12	18,25	20,26	+11%	+1%

## TUNA AND TUNA-LIKE SPECIES

In 2017, volumes of tuna and tuna-like species landed in the EU registered a 2% increase from 2016 and totalled 339.703 tonnes. Nevertheless, values decreased by 2%, from EUR 998,26 million to EUR 975,47 million.

Spain, the EU's main tuna-landing country, accounted for 88% of total volumes and 82% of total value in 2017. The country was thus responsible for the EU trend, as national landings increased 1% from 2016, reaching 300.259 tonnes but with a 3% drop in value, to EUR 804,57 million.

### SKIPJACK TUNA

Among all tuna landed in the EU, skipjack reported the largest 2017 volumes, with a 20% increase from 2016 that brought the total to 155.253 tonnes. Corresponding values showed an increase of 30% with respect to the previous year, and reached EUR 172,17 million. EU catches in the Atlantic constitute less than half of total EU landing volumes of skipjack tuna, as a major share of skipjack landings are caught in other regions (Indian Ocean and the Pacific) and then landed in the EU. Most of the skipjack tuna landed in the EU is then processed into canned products.

The majority of skipjack tuna landings in the EU, namely 95% of the total, occurs in Spain, is made by the national fleet and mainly consists of frozen products. Spain thus determines the overall trend recorded at EU level: in 2017 it totalled 146.995 tonnes worth EUR 51,75 million, which represented increases of 16% in volume and 25% in value terms compared with 2016.

TABLE 28

YEARLY AVERAGE PRICES  
OF SKIPJACK TUNA  
LANDED IN MAIN EU  
MEMBER STATES  
(EUR/KG)

Member State	2008	2016	2017	2017/2016	2017/2008
Spain	1,09	0,96	1,03	+7%	-6%
France	5,05	0,95	0,83	-13%	-84%
Italy	0,92	4,74	4,76	0%	+417%

Source: EUMOFA, based on Eurostat (online data code: [fish\\_ld\\_main](#))

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

### YELLOWFIN TUNA

In 2017, yellowfin tuna was among the top five species landed in the EU in value terms and represented 29% of the total value of all tuna. Nevertheless, compared with 2016, its landings decreased by 24% in both volume and value, dropping from 91.698 to 69.635 tonnes and from EUR 376,64 million to EUR 284,81 million. The average price also showed a reduction, decreasing from 4,11 to 4,09 EUR/kg. As with skipjack tuna, most of the yellowfin tuna landed in the EU is caught in regions other than the Atlantic. 94% of yellowfin tuna landings, which amounted to 65.685 tonnes and were mainly frozen, occurred in Spain.

TABLE 29

YEARLY AVERAGE PRICES  
OF YELLOWFIN TUNA  
LANDED IN MAIN EU  
MEMBER STATES  
(EUR/KG)

Member State	2008	2016	2017	2017/2016	2017/2008
Spain	2,12	4,14	4,19	+1%	+98%
France	n/a	6,30	3,09	-51%	n/a
Italy	1,36	1,90	1,90	0%	+40%

Source: EUMOFA, based on Eurostat (online data code: [fish\\_ld\\_main](#))

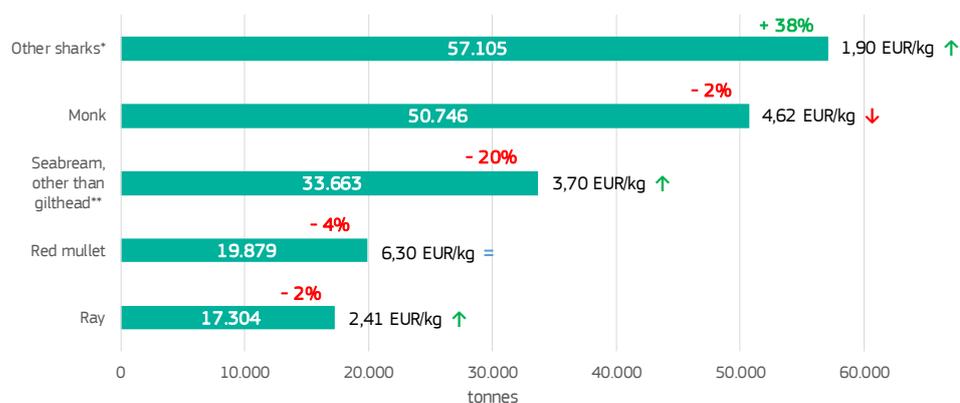
More details on the sources used can be found in the Methodological background.

## OTHER MARINE FISH

In 2017, EU landings of the commodity group “Other marine fish” amounted to 296.374 tonnes worth EUR 1,03 billion, which represented a 4% decrease in volume and an 0,46% decrease in value from 2016. Among the main species in this group, “Other sharks” recorded a strong growth, with blue shark volumes landed in Spain increasing 71% from 22.180 tonnes in 2016 to 37.885 tonnes in 2017.

**CHART 72**  
MAIN SPECIES OF “OTHER MARINE FISH”: VOLUME LANDED IN 2017, % VARIATIONS 2017/2016 AND 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” includes blue shark (69% of the total), small-spotted catshark (13%), shortfin mako and smooth-hounds (6%), requiem sharks nei and catsharks nei (2%), tope shark and catsharks, nursehounds nei (1% each).

\*\*The grouping “Seabream, other than gilthead” includes bogue (44% of the total), black seabream (11%), common pandora (8%), white seabream (6%), axillary seabream (5%), red porgy (4%), blackspot seabream, dentex nei and saddled seabream (3% each), sand steenbras, large-eye dentex, common dentex and common two-banded seabream (2% each) and annular seabream and pink dentex (1% each).

## MONK

In 2017, landings of monk in the EU amounted to 50.746 tonnes worth EUR 234,46 million. This was a decrease of 2% in volume and 8% in value compared with the 10-year peak registered in 2016. Of the total volumes, 59% was represented by anglerfishes nei (*Lophiidae*), 33% by monkfishes nei (*Lophius spp*) and the rest by angler (*Lophius piscatorius*) and blackbellied angler (*Lophius budegassa*). France, the United Kingdom and Ireland together accounted for 74% of total volumes landed in 2017. Among all EU Member States landing monk, Ireland recorded the largest price decrease.

**TABLE 30**  
YEARLY AVERAGE PRICES OF MONK LANDED IN MAIN EU MEMBER STATES (EUR/KG)

Source: EUMOFA, based on Eurostat (online data code: [fish\\_ld\\_main](#)). More details on the sources used can be found in the Methodological background.

Member State	2008	2016	2017	2017/2016	2017/2008
France	5,40	5,15	5,06	-2%	-6%
United Kingdom	5,09	5,01	4,61	-8%	-9%
Spain	6,35	5,67	5,76	+2%	-9%
Ireland	4,43	3,35	2,45	-27%	-45%
Denmark	5,26	5,08	5,00	-2%	-5%
Italy	8,59	8,41	7,04	-16%	-18%

**RED MULLET** In 2017, 18.875 tonnes of red mullet were landed in the EU. Of this, 60% was represented by the species *Mullus barbatus*, 33% by the species *Mullus surmuletus* (ie. surmullet) and the rest by surmullets “not elsewhere identified”.

The main EU landing countries were Italy, Greece and Spain. Although prices in these three countries are different and, from 2016 to 2017, presented dissimilar trends, the species *Mullus barbatus* was the most landed in all of them in 2017, accounting for 62% in Italy, 58% in Greece and 46% in Spain.

**TABLE 31**  
YEARLY AVERAGE PRICES  
OF RED MULLET LANDED  
IN MAIN EU MEMBER  
STATES (EUR/KG)

Source: EUMOFA, based on Eurostat (online data code: [fish\\_ld\\_main](#)).

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

Member State	2008	2016	2017	2017/2016	2017/2008
Italy	6,51	6,46	6,05	-6%	-7%
Greece	10,03	8,64	8,35	-3%	-17%
Spain	6,01	5,76	6,14	+7%	+2%
France	6,09	6,67	7,09	+6%	+16%

**RAY** In 2017, landings of ray in the EU amounted to 17.286 tonnes worth EUR 41,64 million, which represented a slight 1% decrease in volume and a 2% increase in value compared with 2016. The species Thornback ray was the most landed, covering 32% of total volumes.

France and Spain, the main EU Member States landing ray in 2017, accounted together for 54% of total volumes and 57% of total values. France mainly landed Cuckoo ray (*Raja naevus*) and Thornback ray (*Raja clavata*), while Spain mainly landed Raja rays nei (*Raja spp*).

**TABLE 32**  
YEARLY AVERAGE PRICES  
OF RAY LANDED IN MAIN  
EU MEMBER STATES  
(EUR/KG)

Source: EUMOFA, based on Eurostat (online data code: [fish\\_ld\\_main](#)).

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

Member State	2008	2016	2017	2017/2016	2017/2008
France	2,15	2,42	2,50	+3%	+16%
Spain	1,85	2,44	2,57	+5%	+39%
United Kingdom	1,80	2,04	1,86	-9%	+3%
Italy	3,81	3,63	3,27	-10%	-14%
Portugal	2,04	2,12	2,45	+16%	+20%
Belgium	1,75	2,34	2,41	+3%	+38%
Ireland	1,60	1,54	1,82	+18%	+14%

# 6/ AQUACULTURE<sup>57</sup>

## 6.1 OVERVIEW

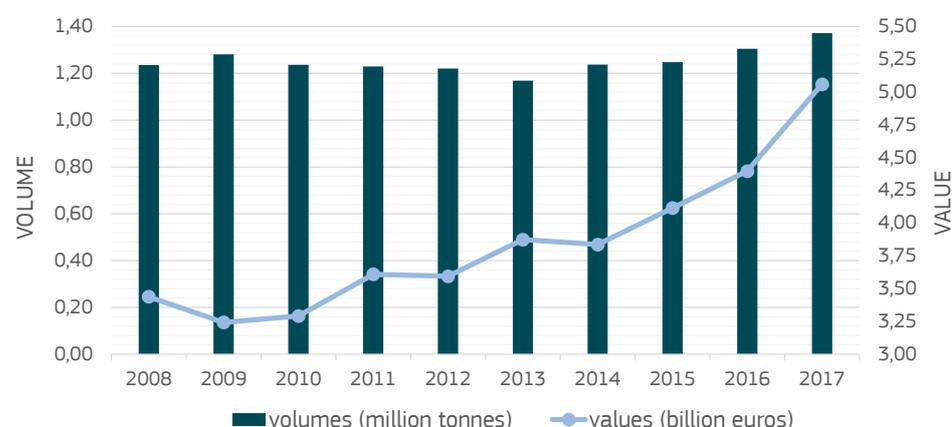
### TOTAL EU

In 2017, aquaculture production in the EU<sup>58</sup> reached a 10-year high of 1,37 million tonnes with a value of EUR 5,06 billion.

This represented a 5% and 67.172-tonne increase over 2016 production, and a significant 15% or EUR 662 million increase over 2016 value. Compared with 10 years ago, its value almost doubled, while its volume increased 11%, growing to 136.760 tonnes. The increasing value of aquaculture over the past decade is 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 (salmon, seabass, gilthead seabream, oyster and clam). Price increases can be related to the increase in demand, but there were also other factors such as the higher quality of products (including organic) as well as the decrease of supplies due to high mortalities (e.g. of oysters)<sup>59</sup>.

**CHART 73**  
**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.



Production of bivalves and other molluscs and aquatic invertebrates reached an 8-year high, mainly due to the increased production of mussel in Spain and oyster in France from 2016 to 2017.

Despite representing almost half of the volumes of EU aquaculture, the share of this commodity group on total decreased during the decade analysed, with salmonids<sup>60</sup> and the grouping “other marine fish<sup>61</sup>” registering the opposite trend.

<sup>57</sup> The main source of data for EU aquaculture production is Eurostat. Data were integrated using FAO, FEAP and national sources for the following Member States: Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, France, Italy, Latvia, Hungary, the Netherlands, Austria, Poland, Romania, Slovenia, Sweden and the United Kingdom. More details on the integrations made and on the data collected for each country can be found in the Methodological background.

<sup>58</sup> 2013-2017 data are for EU-28, as they include Croatia among reporting countries.

<sup>59</sup> It is worth underlying that nominal values are analysed in this report, so the increase could also be partially explained by inflation which is not taken into account in these data.

<sup>60</sup> Salmonids include salmon and trout, plus other types of salmonids species.

<sup>61</sup> 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>.

In value terms, all commodity groups farmed in the EU reached a 10-year peak in 2017. The most significant growths compared with 2016 were registered for salmonids, which increased by 18% or EUR 321 million; bivalves which increased by 20% or EUR 204 million; and freshwater fish<sup>62</sup>, which increased by 19% or EUR 55 million.

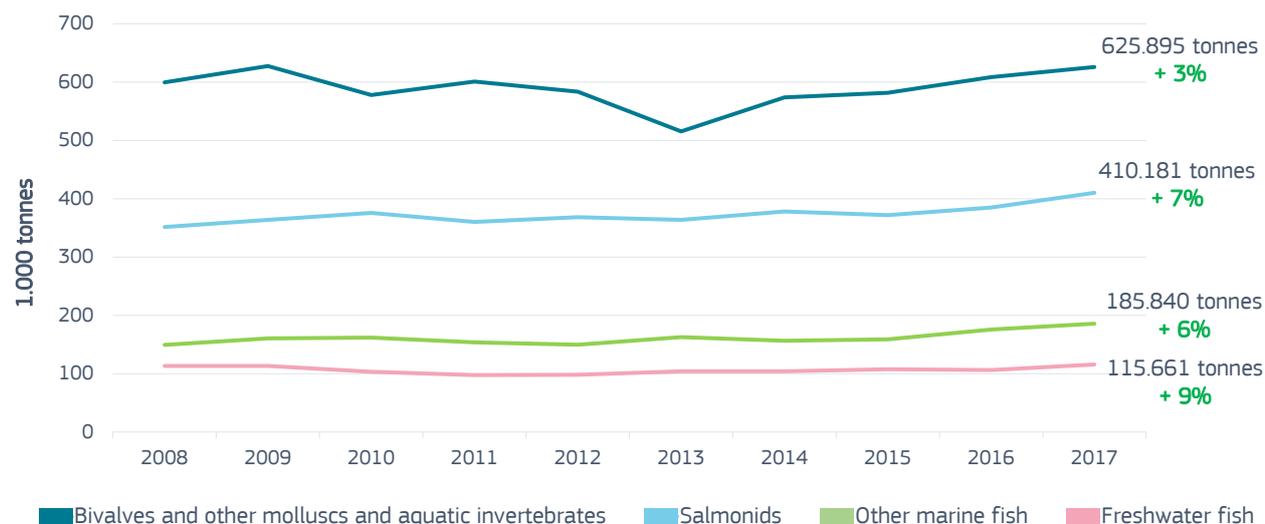
The volume and value composition of EU's farmed production detailed by main commercial species is shown in charts 76 and 77.

### CHART 74

#### VOLUMES OF MAIN COMMODITY GROUPS FARMED IN THE EU AND % VARIATIONS 2017/2016

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.

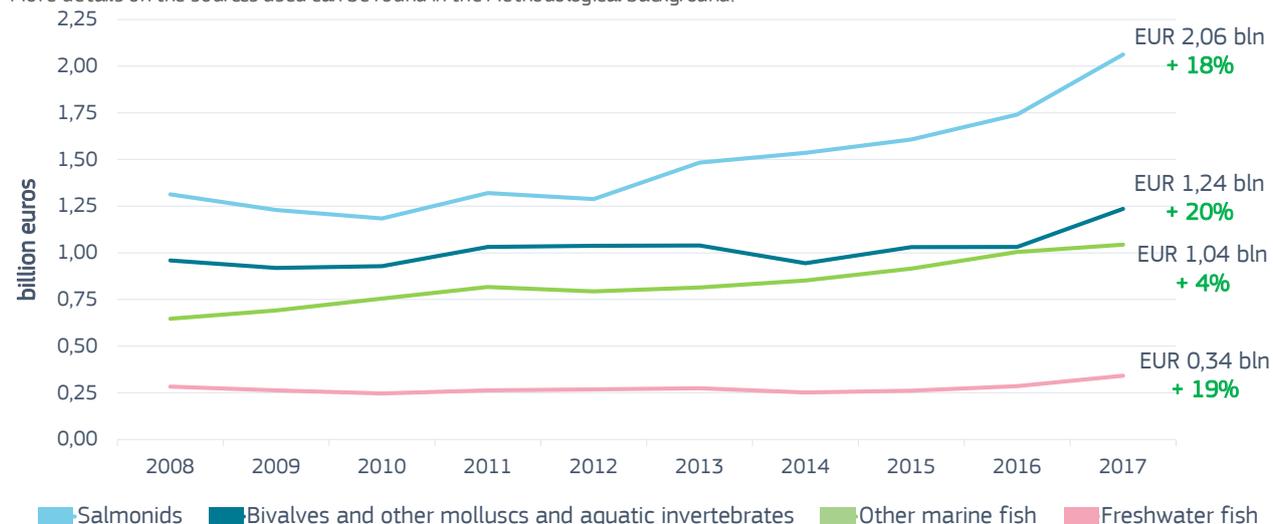


### CHART 75

#### VALUES OF MAIN COMMODITY GROUPS FARMED IN THE EU AND % VARIATIONS 2017/2016

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.

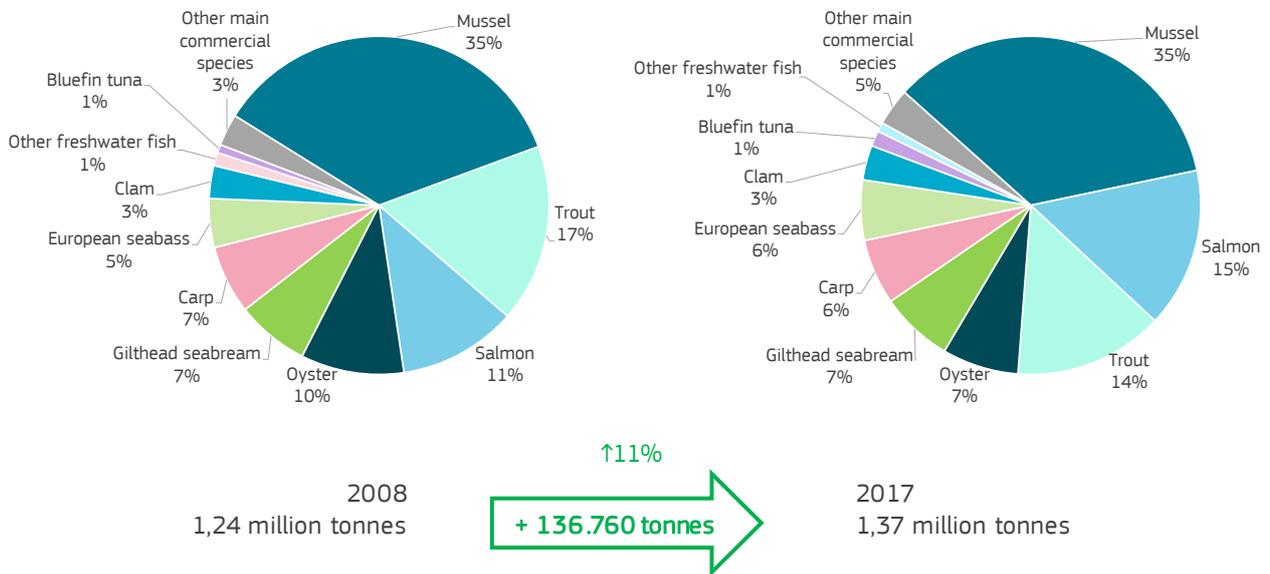


<sup>62</sup> Freshwater fish excludes trout.

**CHART 76**

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

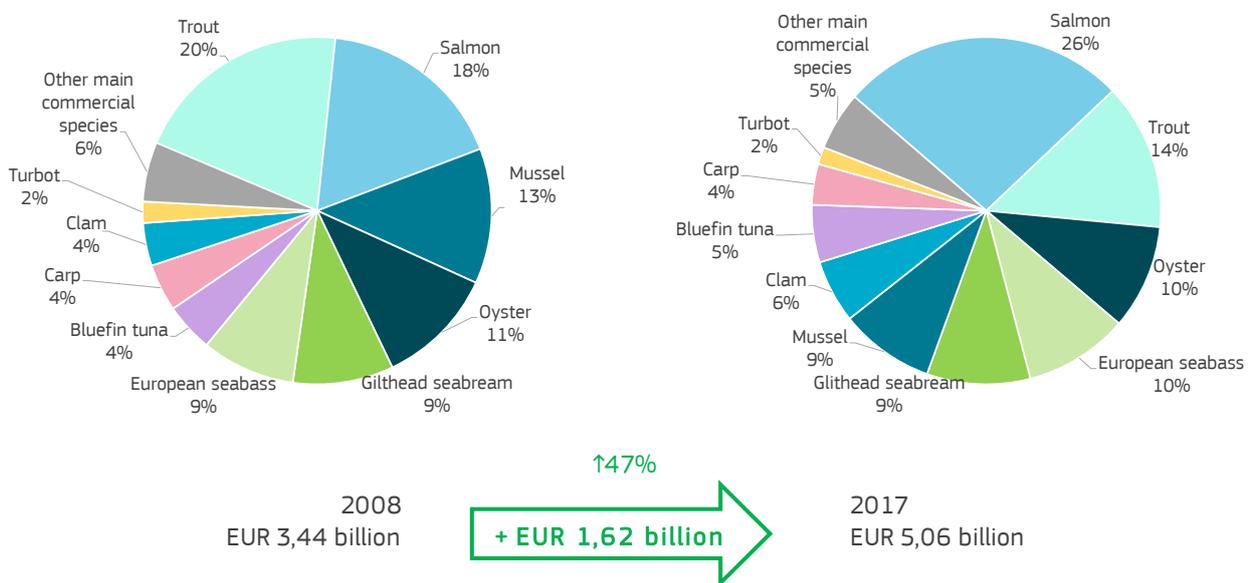
Source: EUMOFA, based on Eurostat (online data code: [fish\\_aq2a](#)) and FAO data.  
 More details on the sources used can be found in the Methodological background.



**CHART 77**

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

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.



In volume terms, the species composition of EU aquaculture production remains similar to ten years ago, while there have been significant variations in its value structure. The shift in the top-ranked species, namely salmon and trout, was due to the decreasing trend of trout's value in Italy accompanied by a doubling of salmon's value (mainly in the UK), whose price increase was caused by its overall production shrinkage in Europe from 2015 to 2017.

From 2008 to 2017, the value of seabass and seabream augmented considerably. Greece and Spain registered the strongest increases, with both species' value increasing by around 50% in Greece, and the value of farmed seabass rising by 125% in Spain. These trends, together with the decline of mussels, resulted in the lowering of mussel's share on total value of EU's aquaculture production.

Although not being included in the four commodity groups mostly farmed in the EU, a special mention should be made for bluefin tuna and turbot. Bluefin tuna has seen an outstanding trend in Maltese production which increased by 161% (+8.085 tonnes) from 2008 to 2017. As such, it reached 13.120 tonnes for a value of EUR 168 million, which was almost two times higher than ten years ago (+EUR 81 million). For turbot, Spain production reached an all-time peak, amounting to 8.771 tonnes with a value of EUR 59 million.

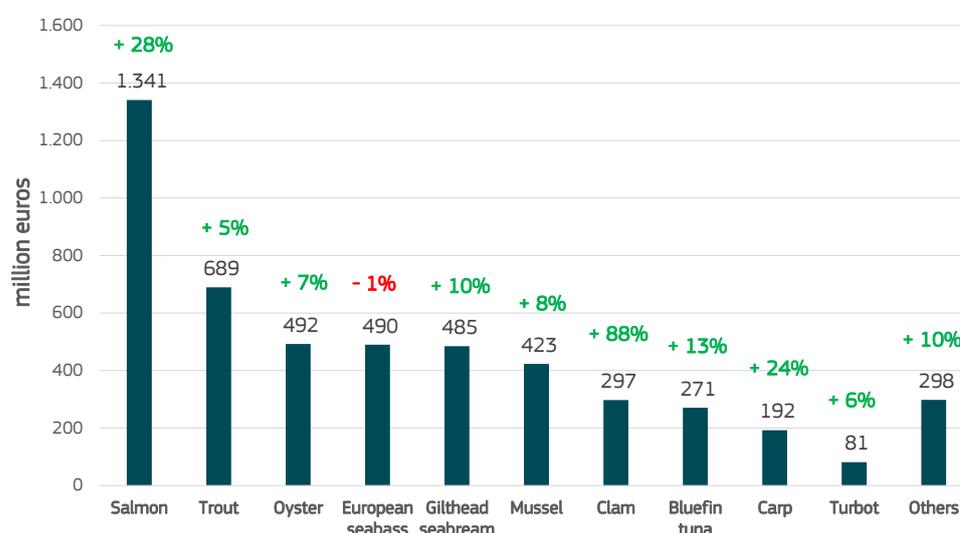
In addition, some "new" species, such as meagre and Senegalese sole, deserve mentioning. Their production in the EU rose in 2017, with meagre reaching 5.510 tonnes for a 24% increase from 2016, and Senegalese sole reaching 1.418 tonnes for a 23% increase. Spain is the leading producer for both, accounting for 64% and 71% of total EU production, respectively. Other notable producers are Greece and Croatia for meagre, and France and Portugal for Senegalese sole.

All main commercial species farmed in the EU registered a value growth between 2016 and 2017, which did not depend on mere inflation effects. The only exception was European seabass, although its value decrease was marginal.

*All main commercial species farmed in the EU registered a value growth between 2016 and 2017 apart from European seabass.*

**CHART 78**  
**VALUES OF MAIN SPECIES FARMED IN THE EU IN 2017 AND % VARIATION 2017/2016**

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

Aquaculture in the EU is characterised by production specializations in a few Member States: Greece for gilthead seabream and European seabass, Spain for mussel and turbot, France for oyster, Italy for clam and the UK for salmon.

These top-five EU producer countries accounted for three-quarters of EU aquaculture production in 2017 in both volume and value terms. A general upward trend was observed in the value of their production, both on a short and long term. The value increases in Portugal and Malta are also worth remarking, linked to clam and oyster farming in Portugal and bluefin tuna fattening in Malta.

On the other hand, as a consequence of the decrease in mussels production, Italy, and more significantly, the Netherlands, recorded considerable decline in volume terms with respect to 2016. In the Netherlands, decreased production of mussels was due to bad weather conditions in autumn 2017 which affected the harvest<sup>63</sup>. In Italy, a combination of factors led to a decline in production, including changes in water conditions, climate and sources of nutrition for bivalves<sup>64</sup>.

As concerns France, the noteworthy drop compared with 2008 was due to lower oyster production, as this species accounts for half of total French aquaculture. However, it is worth stressing that French production of oyster significantly increased from 77.622 in 2016 to 84.927 tonnes in 2017 (+9%), marking its highest production since 2009.

**TABLE 33**  
**VOLUME OF**  
**AQUACULTURE**  
**PRODUCTION IN THE**  
**EU TOP-5 PRODUCERS**  
**(1.000 TONNES)**

Source: EUMOFA, based on Eurostat (online data code: [fish\\_aq2a](#)) and FAO data. More details on the sources used can be found in the Methodological background.

Member State	2008	2016	2017	2017/2016	2017/2008
Spain	252	287	315	+10%	+25%
United Kingdom	180	194	222	+14%	+24%
France	238	182	189	+4%	-20%
Italy	158	157	156	-1%	-1%
Greece	94	123	126	+2%	+34%

**TABLE 34**  
**VALUE OF AQUACULTURE**  
**PRODUCTION IN THE**  
**EU TOP-5 PRODUCERS**  
**(MILLION EUROS)**

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.

Member State	2008	2016	2017	2017/2016	2017/2008
United Kingdom	685	1.019	1.283	+26%	+87%
France	692	727	771	+6%	+11%
Spain	411	559	578	+3%	+41%
Greece	364	526	546	+4%	+50%
Italy	466	387	543	+40%	+17%

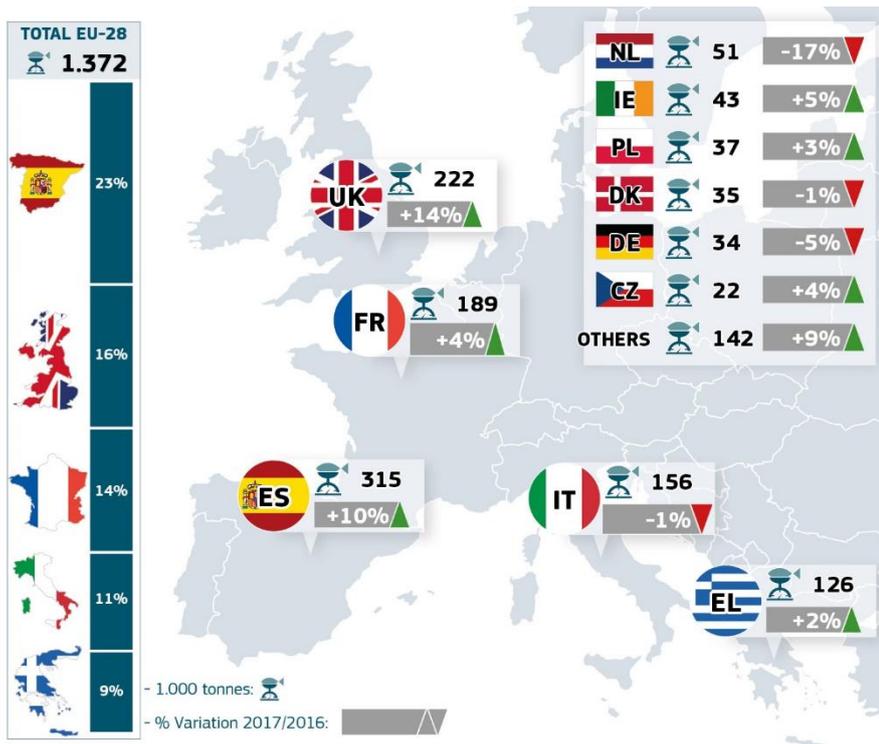
<sup>63</sup> Source: [Visserijnieuws.nl](#).

<sup>64</sup> Source: industry contacts.

**CHART 79**

**VOLUME OF AQUACULTURE PRODUCTION IN THE MAIN EU PRODUCERS IN 2017 AND % VARIATION 2017/2016**

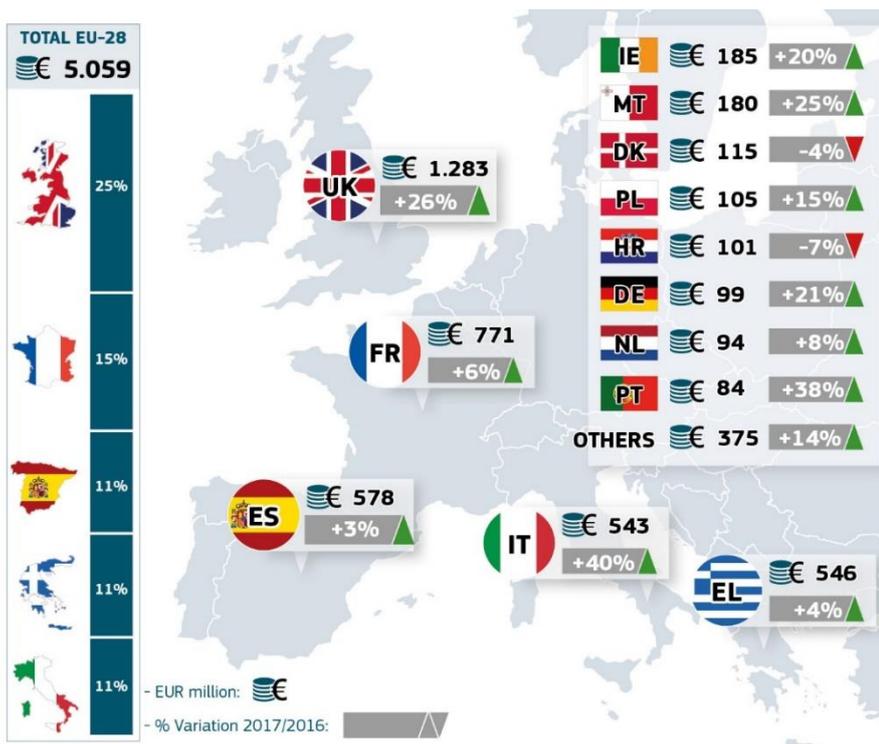
Source: EUMOFA, based on Eurostat (online data code: [fish\\_aq2a](#)) and FAO data. More details on the sources used can be found in the Methodological background.



**CHART 80**

**VALUE OF AQUACULTURE PRODUCTION IN THE MAIN EU PRODUCERS IN 2017 AND % VARIATION 2017/2016**

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

More than 40% of the value of EU farmed production is represented by salmonids species. In 2017 salmon accounted for more than 25% of all species farmed in the EU and trout accounted for 14%.

### SALMON

EU production of salmon achieved a peak in 2017, amounting to 209.628 tonnes sold at an average price of 6,40 EUR/kg. This was the highest price ever registered for this species, resulting in a total value of EUR 1,34 billion. The high unit price recorded in 2017 must be seen in relation to the lack of growth in Atlantic salmon production from 2015 to 2017 in Europe and a slight 1% decline in global production. Simultaneously, market demand has remained strong.

As 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 81. When compared with 2016, the growth in the UK was 16% in volume, increasing from 163.135 to 189.707 tonnes, and 28% in value, augmenting from EUR 936 million to EUR 1,20 billion also due to prices increasing by 10%, from 5,74 to 6,32 EUR/kg. Ireland followed at distance: in 2017, 18.342 tonnes of salmon were farmed for a total value of EUR 134 million, corresponding to increases of 13% in volume and 28% in value.

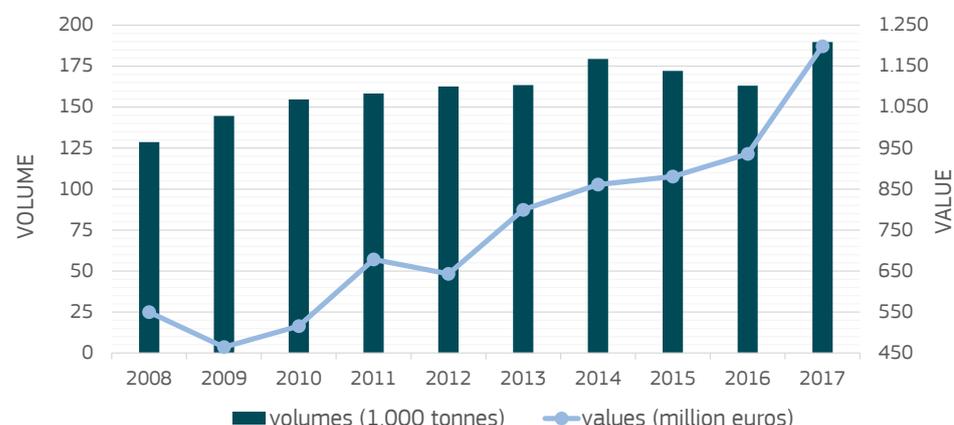
While salmon production in Ireland is exclusively organic, only around 2% of salmon farmed in the UK is organic<sup>65</sup>.

During 2018, production in both the UK and Ireland declined notably, although it was a temporary decrease, as volumes are returning to stronger levels again in 2019<sup>66</sup>. The price level in 2018 has remained stable compared to 2017<sup>67</sup>.

**CHART 81**

#### 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.



### TROUT

In 2017, trout farmed in the EU reached 195.417 tonnes, which was 2.341 tonnes or 1% less than in 2016. Together with European seabass, it was the only main species whose production registered a decrease in the two-year period. However, its average price of 3,53 EUR/kg was the highest of the last ten years and generated a total value of EUR 689 million, 5% above 2016 and the peak since 2008.

<sup>65</sup> Source: 2017 estimates from BIM (Bord Iascaigh Mhara) and experts.

<sup>66</sup> Source: Kontali Analyse, monthly report on salmon.

<sup>67</sup> *Ibidem*.

More than half of EU production of trout takes place in three countries, namely Italy, France and Denmark, which in 2017 accounted for respective shares in volume terms of 18%, 18% and 16%. As in other Member States, production almost entirely consists of rainbow trout (*Oncorhynchus mykiss*).

The production of large trout, which is dominated by Chile and Norway globally, was stable from 2017 to 2018, but prices did see a notable decline<sup>68</sup>. The average export price of fresh trout from Norway declined by 12%, while the average export price of frozen trout from Chile declined by 17%. In 2019 (up to July), exported volumes increased from both Chile and Norway, but the price remained stable or slightly higher than in 2018<sup>69</sup>.

At the same time, this trend is not necessarily equal for the portion-sized trout segment, which the majority of the EU trout production falls within. For instance, from 2017 to 2018, price quotes for farmed trout at the Rungis-market in France increased by more than 6%<sup>70</sup>.

**TABLE 35**  
**PRODUCTION OF FARMED**  
**TROUT IN MAIN EU**  
**PRODUCERS**

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.

Member State	2017			% variations 2017/2016		
	Volume (tonnes)	Price (EUR/kg)	Value (million euros)	Volume	Price	Value
France	35.668	3,85	137	-2%	+7%	+5%
Italy	35.900	2,98	107	-2%	+10%	+7%
Denmark	30.580	3,29	100	+1%	+1%	+2%

## BIVALVES AND OTHER MOLLUSCS AND AQUATIC INVERTEBRATES

In 2017, EU Member States farmed 625.895 tonnes of bivalves and other molluscs and aquatic invertebrates, which represented a 3% or 17.317-tonne increase from 2016. Their value reached EUR 1,24 billion, the highest ever recorded, thanks to a 20% rise from 2016 which represented an increase of more EUR 200 million.

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

### MUSSEL

Among all species farmed in the EU, mussel accounts for the highest volumes, covering 34% of total EU production.

In 2017, the EU production of 464.240 tonnes of mussel with a total value of EUR 423 million represented 10-year peaks for both volume and value. These also represented increases of 2% in volume and 8% in value from 2016.

Spain and France each account for 30% of total mussel value in the EU. However, Spain covers more than half of the total in volume terms, due to the different species farmed in the two countries. Spain mainly produces Mediterranean mussel (*Mytilus galloprovincialis*) while French production mainly includes Blue mussel (*Mytilus edulis*). In Spain, the vast majority (97–98%) of the mussel production takes place in Galicia, where during 2017, production reached record-high levels. In 2018, the increase continued with 5% growth<sup>71</sup>.

<sup>68</sup> Source: Kontali Analyse, yearly report "Salmon world" and monthly report on salmon.

<sup>69</sup> Source: Statistics Norway and Chilean Customs.

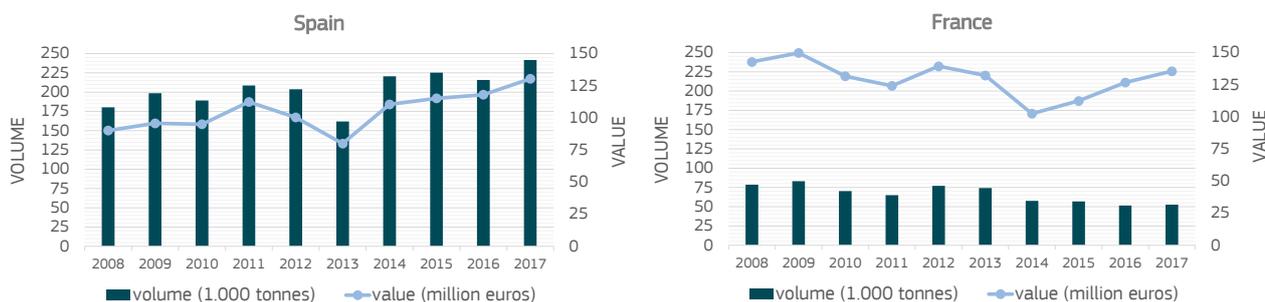
<sup>70</sup> Source: France Agrimer – RNM (Réseau des nouvelles des marchés).

<sup>71</sup> Source: Pesca de Galicia.

## CHART 82

### PRODUCTION OF FARMED MUSSEL IN MAIN EU PRODUCERS

Source: EUMOFA, based on Eurostat data (online data code: [fish\\_aq2a](#)).



## CLAM

In 2017, EU production of clam achieved an all-time high in value terms at EUR 297 million, representing an 88% increase from 2016. This was mainly driven by the increase registered in Italy for the species Japanese carpet shell (*Ruditapes philippinarum*). In volume terms, EU production of clam rose by 4% to 45.505 tonnes in 2017 but it still remained 22% lower than the volume achieved in 2015. Italy is by far the main EU producer of clams. In 2017, its production of 37.157 tonnes worth EUR 224 million represented 82% of the volume and 75% of the value of total EU production.

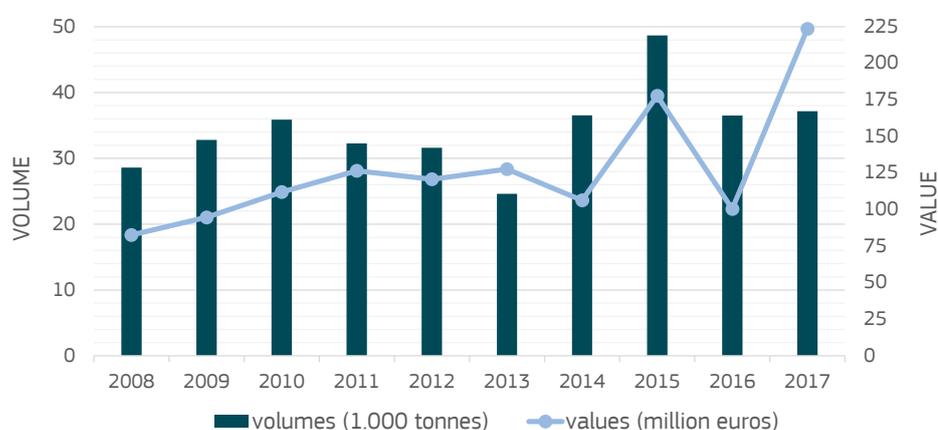
A significant 22% production decrease from 2015 to 2017 led to a shortage of supply in the Italian market, which resulted in a strong 65% price increase.

In 2018, market prices for clam in Italy continued to increase, but at a moderate pace<sup>72</sup>. EU production continues to be too low to meet the demand, primarily in Italy, its major market, which is into an increasingly degree being met by imports of frozen clams from Asia<sup>73</sup>.

## CHART 83

### 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.



## OYSTER

The EU farmed 99.857 tonnes of oysters in 2017 with a total value of EUR 492 million. In volume terms, production was 7% higher than the previous year but 18% below the level of ten years before, while the value was the highest ever. 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 2017, 84.927 tonnes were farmed in the country (+9% over 2016) and sold at an average price of 4,97

<sup>72</sup> Source: Globefish.

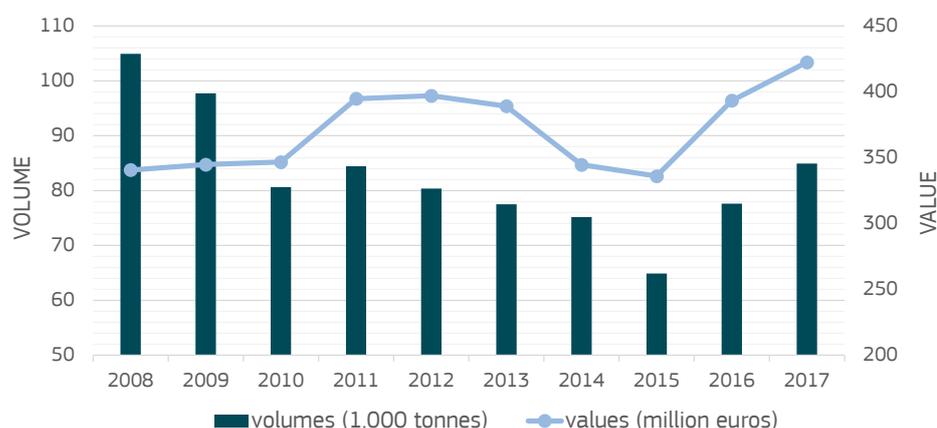
<sup>73</sup> *Ibidem*.

EUR/kg, slightly lower than the previous year (-2%). However, the total value of French oyster production achieved an all-time high at EUR 422 million, which was 7% above the 2016 level.

Oyster production in France was affected by high mortality during the summer, mostly linked to variable climate conditions and pathogens. This, combined with a decreasing size of oysters, caused a downward volume trend for the latter part of 2018 and into 2019<sup>74</sup>. Due to reduced availability, exports to major destinations, such as Italy, China and Hong Kong, have suffered, while retail prices have increased<sup>75</sup>.

**CHART 84**  
**PRODUCTION OF FARMED OYSTER IN FRANCE**

Source: EUMOFA, based on Eurostat data (online data code: [fish\\_aq2a](#)).



## OTHER MARINE FISH

Two species of this commodity group, namely gilthead seabream and European seabass, together account for around 20% of the total value of EU aquaculture production. They are usually farmed in the same plants in the Mediterranean, prevalently in Greece and Spain.

## GILTHEAD SEABREAM

In 2017, EU production of gilthead seabream increased by 14% in both volume and value with respect to 2016, reaching 94.936 tonnes and EUR 485 million.

Greece recorded a similar increase in volume, reaching 55.948 tonnes. In spite of a 5% price decline, which decreased from 4,88 to 4,62 EUR/kg, the EUR 258 million value of Greek production in 2017 was the highest in 10 years and also represented a 7% increase from 2016.

During 2016–2017, a more significant increase was observed in Spain, where the volume grew by 37% to 17.005 tonnes and the value grew by 27% to EUR 88 million. This was despite prices decreasing by 7%, from 5,60 to 5,20 EUR/kg. In the years 2010-2018, Spain's production of seabass rose while its production of seabream followed a downward trend. In 2016, seabream production in Spain was the lowest since 2002, while, conversely, seabass production was the highest ever.

It can thus be assumed that seabream production reached a floor in 2016 and started to grow again from 2017, which has been confirmed by APROMAR<sup>76</sup> data for 2018.

The price decrease in Spain (from 5,60 in 2016 to 5,20 EUR/kg in 2017, -7%) can be explained by both the production increase and the pressure of import prices, especially from Greece and Turkey: import price of Greek seabream in Spain fell from 5,32 to 4,86 EUR/kg in 2017 (-9%), while import price of Turkish seabream in the country declined from 4,40 to 4,26 EUR/kg (-3%).

<sup>74</sup> Source: Globefish, industry contacts and [Mispieces.com](#).

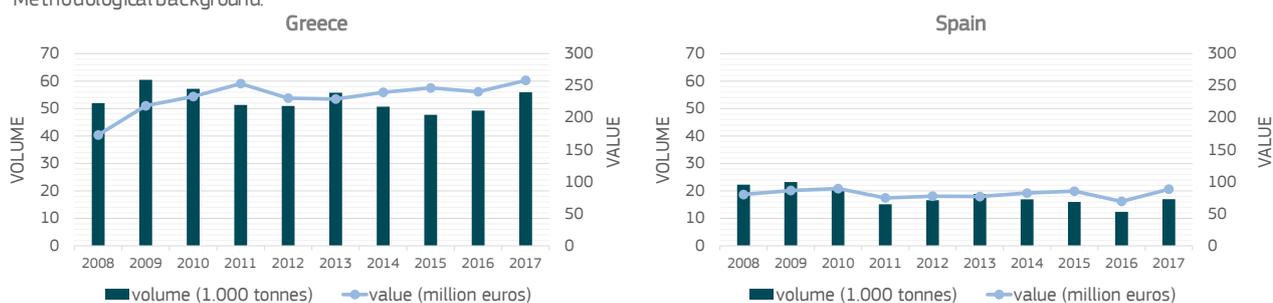
<sup>75</sup> Source: France Agrimer – RNM (Réseau des nouvelles des marchés).

<sup>76</sup> Asociación Empresarial de Acuicultura de España.

The EU production of gilthead seabream increased steadily until 2018 but is flattening/dropping slightly in 2019<sup>77</sup>. The increase was far lower from 2017 to 2018 (less than 1%) than from 2016 to 2017 (14%). Export prices of whole fresh gilthead seabream from EU Member States in 2018 decreased by 1% compared with 2017. This was due to high import volumes to EU markets from Turkey, which led to supplies exceeding demand. The negative export price trends from 2017 to 2018 is continuing in 2019<sup>78</sup>.

**CHART 85**  
**PRODUCTION OF FARMED GILTHEAD SEABREAM IN MAIN EU PRODUCERS**

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.



## EUROPEAN SEABASS

Of the main species farmed in the EU, only European seabass showed a decline in production from 2016 to 2017, in both volume and value terms. The decrease was however marginal, by 3% in volume and only 1% in value, yet the total amounts of 79.102 tonnes and EUR 490 million were both largely above their 10-year average. In 2017, Greece saw a slowing of the production growth it had been experiencing since 2015. Nonetheless, it achieved an all-time high of 44.285 tonnes sold at an average price of 5,59 EUR/kg, for a total value of EUR 248 million.

On the other hand, after four years of growth, production in Spain decreased by more than 20%, dropping to 17.656 tonnes. Despite being sold at an average price of 6,75 EUR/kg, which was the highest of the 10-year period, the total value fell by more than 20% as well, to EUR 119 million.

The growth of EU production slowed in 2018 and is expected to show decline in 2019<sup>79</sup>. Export prices of whole fresh European seabass in 2018 were 4% below those of 2017 due to the high supply volumes to the main EU markets from Turkey. In 2019, export prices to main EU consuming countries continue to decline, with little sign of improvement<sup>80</sup>.

<sup>77</sup> Source: Kontali Analyse, monthly report on seabass and seabream.

<sup>78</sup> Source: Eurostat (online data code: [DS-016890](#)).

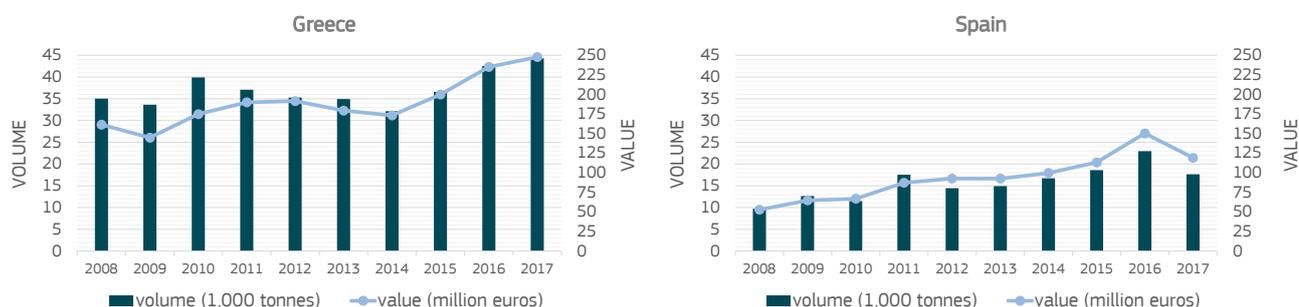
<sup>79</sup> Source: Kontali Analyse, monthly report on seabass and seabream.

<sup>80</sup> Source: Eurostat (online data code: [DS-016890](#)).

## CHART 86

### PRODUCTION OF FARMED EUROPEAN SEABASS IN MAIN EU PRODUCERS

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.



## 6.3 CROSS-BORDER INVESTMENTS IN THE EU

In January 2019, EUMOFA published the study “Factors affecting cross-border investments in EU aquaculture”<sup>81</sup>.

The study explores investments in aquaculture farms across different Member States, provides an overview of the extent of cross-border investments, and identifies barriers and drivers influencing such investments.

Along with a literature review, interviews with three aquaculture companies were carried out in the context of this study. All of them have invested in two or more countries, in northern Europe and in the Mediterranean, for producing Atlantic salmon, seabass, seabream, meagre, cobia and warmwater shrimps.

<sup>81</sup> The study is available at the link <http://www.eumofa.eu/market-analysis>.

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