



THE EU FISH MARKET

2021 EDITION



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

EUMOPA

European Market Observatory for
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Scope

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

A comparative analysis allows to assess the performance of fishery and aquaculture products in the EU market compared with other food products. In this report, value and price variations for periods longer than five years are analysed by deflating values using the GDP deflator (base=2015); for shorter periods, nominal value and price variations are analysed.

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

This edition is based on data available as of June 2021. The analyses included in this report do not take into account possible updates occurred in the sources used after this date.

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

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

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

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

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

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METHODOLOGICAL BACKGROUND

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

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

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

CATCHES Catches include all products fished by a country’s fleet in any fishing area (both marine and inland waters), independently from the area of landing/sailing. Catches data are provided in this report in live weight equivalent. The main sources of data on catches are FAO (for non-EU countries) and Eurostat (for EU Member States, online data code: [fish_ca_main](#), extraction made on 10th June 2021). As catches data are available up to 2019, in line with the approach adopted by EUMOFA following BREXIT, UK is still considered as part of the EU for the analysis. For the purpose of properly conducting an analysis on EU-28 catches, since Eurostat does not provide data on catches in inland waters, EUMOFA has integrated EU data with data collected from the FAO database.

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

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

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

- Denmark: 2018-2019 data on Northern prawn.
- Greece: 2016, 2017, and 2018 data on several species.
- Ireland: 2018-2019 data on several species, as well as 2010-2011 data on horse mackerels other than Atlantic horse mackerel.
- Latvia: 2017, 2018 and 2019 data on several species.

Moreover, other issues to consider are the following:

- data include FAO forecasts for a number of non-EU countries and for 2019 Ireland data on seaweed and other algae;
- for some EU Member States, Eurostat data include estimates and provisional figures, as below listed:
 - o Bulgaria: 2017 data are national estimates.
 - o Denmark: 2017 data on Northern prawn are national estimates.
 - o Germany: 2017 data for almost all species are provisional.
 - o Ireland: 2017 data on saithe, haddock and “anglerfishes nei” are national estimates.
 - o France: 2018-2019 data are provisional.
 - o Italy: 2018 data and most of 2019 data are provisional.
 - o Romania: 2017 data are national estimates.
 - o Finland: 2016 and 2017 data are national estimates.

AQUACULTURE The source of data on aquaculture production in non-EU countries is FAO, most of them representing forecasts. For EU countries, the main source used by EUMOFA for aquaculture data is Eurostat. As aquaculture data are available up to 2019, in line with the approach adopted by EUMOFA following BREXIT, UK is still considered as part of the EU for the analysis. For the purpose of properly conducting an analysis on aquaculture production in the EU, in some instances EUMOFA has integrated Eurostat EU data (online data code: [fish_aq2a_extraction_made_on_16th_June_2021](#)) with data deriving from [FAO database](#), national sources and sector associations. The list below reports such instances, as well as those instances for which data are estimates or provisional figures. For all other instances not reported in this list, only Eurostat data were used.

➤ Belgium

2010-2016 Eurostat confidential data were integrated with FAO estimates.
2017-2018-2019 data were collected from FAO.

➤ Bulgaria

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

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

2014 data on freshwater crayfish were collected from FAO.

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

2018 data for seaweed were collected from FAO.

2019 data for oyster were collected from FAO.

- **Czechia**

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 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 on turbot, char, sturgeon, and pike-perch were collected from FAO.
2015-2018 data for seaweed were collected from FAO, those of 2015 and 2016 being forecasts.
2014, 2015 and 2016 Eurostat confidential data were integrated with figures from FAO (those on eel for 2016 being forecasts).
2011, 2017 and 2018 data for pike-perch were collected from FAO.
2017-2018 data for the groupings “other salmonids” and “other freshwater fish” were collected from FAO.
2018 data on eel are FAO forecasts.
2019 data on values were integrated with figures from FAO.
- **Germany**

Data on carp for the years 2008-2012 and 2014, 2015, 2016 and 2018 were collected from FAO.
2011-2019 Eurostat confidential data were collected from FAO, those of oyster being forecasts.
2010 and 2011 Eurostat confidential data on the grouping “other freshwater fish” were collected from FAO.
2011 Eurostat confidential data for trout, pike, pike-perch and eel were integrated with figures collected from the national source (DESTATIS).
- **Estonia**

2012, 2014 and 2015 Eurostat confidential data were integrated with figures from FAO.
2016-2019 Eurostat confidential data on the grouping “other freshwater fish” were collected from FAO.
2019 Eurostat confidential data on trout were collected from FAO.
- **Ireland**

For 2014, values are National estimates available in Eurostat except from scallop and the grouping “Other molluscs and aquatic invertebrates”, whose confidential values were integrated with figures from FAO.
For 2015, Eurostat confidential values of the grouping “Other molluscs and aquatic invertebrates” were integrated with figures from FAO.
2016 data on the grouping “other molluscs and aquatic invertebrates” were collected from FAO.
2017-2018 data are National estimates available in Eurostat.
- **Greece**

2013 Eurostat confidential data were integrated with figures from FAO.
2015 and 2016 Eurostat confidential data on the grouping “other freshwater fish” were integrated with figures from FAO.
2017 data are National provisional figures available in Eurostat.

- Spain
2019 data were collected from FAO for the following species: abalone, carp, crab, octopus, scallop, spotted seabass, white seabream, warmwater shrimps, tilapia, sea trout, seaweed and other algae, and the grouping “other freshwater fish”.
- France
For sole, data are FAO forecasts.
For salmon, 2015-2017 data are FAO forecasts. 2010-2014 data were integrated with figures provided by FEAP and respective values were estimated by multiplying the volumes to its 2008-unit price, as available in Eurostat.
For turbot, 2015-2017 data are FAO forecasts. 2009-2014 data were integrated with figures provided by FEAP and respective values were estimated by multiplying the volumes to its 2008-unit price, as available in Eurostat.
2012-2013 and 2016-2017 data on carp, catfish and other freshwater fish include National estimates available in Eurostat.
2018-2019 data on values of carp, pike, pike-perch and on the grouping “other freshwater fish” include National estimates available in Eurostat.
2019 data for abalone are FAO’s forecasts.
- Italy
2015 data are National estimates and forecasts available in Eurostat.
2017 data on grooved carpet shell are FAO forecasts.
For 2019, data on clam, oyster, mussel, European seabass, gilthead seabream, and on the grouping “other freshwater fish” are National estimates available in Eurostat. In addition, for the following species, data were collected from FAO: carp, eel, freshwater catfish, grooved carpet shell, white seabream, porgy, common sole, warmwater shrimps, tilapia, trout, and the groupings “other freshwater fish”, “other salmonids” and “other marine fish”. Except those on warmwater shrimps, 2019 FAO data are forecasts.
- Latvia
2014-2015 and 2017-2018 Eurostat confidential data were integrated with figures from FAO.
2019 data for pike and pike-perch were collected from FAO.
- Lithuania
2019 data for pike-perch were collected from FAO.
- Hungary
2016 data for the grouping “other freshwater fish” were collected from FAO.
- Netherlands
For eel, freshwater catfish and the grouping “other marine fish”, 2012, 2015, 2018 and 2019 values are National estimates available in Eurostat.
For mussel, data of 2012 and 2014-2016 are National estimates available in Eurostat.
For turbot, 2012 data are National estimates available in Eurostat, and data of 2008-2010 and 2013-2017 are FAO forecasts.
For pike-perch, all data are FAO forecasts. In addition, for 2019, the data on the following species are FAO forecasts: sole, trout, turbot, and the groupings “other freshwater fish” and “other molluscs and aquatic invertebrates”.
- Austria
2010-2019 Eurostat confidential data were integrated with figures from FAO.

- Poland
2010 data were collected from FAO. Data on pike, freshwater catfish and other freshwater fish are FAO forecasts.
2011 data for freshwater crayfish, pike, trout, salmon and other freshwater fish are National provisional figures available in Eurostat.
2016 data on tilapia are FAO forecasts.
2019 data on the grouping “other freshwater fish” were integrated with FAO’s forecasts.
- Portugal
2013 and 2014 data on clam are National estimates available in Eurostat.
For 2015, data on trout and clam are National estimates available in Eurostat while data on all other species are National provisional figures available in Eurostat.
2015-2018 data on sea mussels were collected from FAO.
- Romania
2015 data are National estimates available in Eurostat.
For turbot, 2015-2016 data are FAO forecasts.
2019 data were collected from FAO.
- Slovenia
2010 and 2012 data on mussel *Mytilus* spp. were collected from FAO (the latter being forecasts).
2013- 2016 Eurostat confidential data were integrated with figures from FAO.
2016 and 2018 data on European seabass, and 2015, 2017 and 2018 data on clam are FAO forecasts.
2017 and 2019 Eurostat confidential data on the groupings “other freshwater fish” and “other salmonids” were integrated with figures from FAO, and those on European seabass with FAO forecasts.
- Slovakia
For 2019, data on pike and pike-perch are FAO forecasts. In addition, data on the following species were integrated with FAO forecasts: carp, freshwater catfish, trout.
- Sweden
Data were collected from FAO for eel (2010) and salmon (2013, 2014 and 2016).
2019 Eurostat confidential data on mussel, and on the groupings “other freshwater fish” and “other salmonids” were integrated with FAO’s forecasts.
- United Kingdom
2008 values of Atlantic halibut, European seabass, clam, warmwater shrimp, turbot, great Atlantic scallop and the grouping “Other molluscs and aquatic invertebrates” were integrated using FAO; value of queen scallop was estimated by multiplying the volume to its 2009-unit price, as available in Eurostat. 2014-2018 values are National estimates available in Eurostat.
2019 data are FAO forecasts.

SUPPLY BALANCE SHEET The supply balance is a proxy that allows to follow the evolutions of internal supply and apparent consumption of fishery and aquaculture products in the EU. In the light of this, the supply balance and apparent consumption should be used in relative terms (e.g. analysing trends) rather than in absolute terms. The supply balance is built on the basis of the following equation, calculated in live weight equivalent:

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

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

The sources used are as follows:

- Catches: products caught by fishing vessels of the EU Member States and destined to human consumption. Amounts of catches not destined to human consumption were estimated using proxies based on destination use of landings (as available in EUROSTAT). Catches data are available in live weight equivalent. Source: EUROSTAT for catches in marine areas (reference dataset: [fish_ca_main](#)), integrated with FAO for catches in inland areas.
- Aquaculture production: products farmed in the EU Member States. Aquaculture data are available in live weight equivalent. Sources: EUROSTAT (reference dataset: [fish_aq2a](#)), integrated with data from FAO, FEAP and national administrations (for sources' details by year and country, please refer to the related section of this methodological background).
- Imports - Exports: fishery and aquaculture products imported/exported by the EU Member States from/to non-EU countries. Non-food use products are not included. Import and export data are available in net weight. For the supply balance purposes, net weight is converted into live weight equivalent in order to have a harmonized supply balance sheet (for conversion to live weight equivalent, please refer to the specific section below in this methodological background). Through the assessment of origin of imports and exports in terms of production method, it is possible to estimate the share of imports/exports originating from aquaculture and captures by making use of FAO data (for the method applied, please refer to the specific section below in this methodological background). Source: EUROSTAT-COMEXT (reference dataset: [DS-575274](#)).
- 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>.

<p>ASSESSMENT OF ORIGIN OF IMPORTS AND EXPORTS IN TERMS OF PRODUCTION METHOD</p>	<p>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.</p> <p>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.</p>
<p>EXPENDITURE AND PRICES FOR FISHERY AND AQUACULTURE PRODUCTS</p>	<p>EU expenditure data are provided by EUROSTAT. These data are compiled basing on a common methodology elaborated within the “EUROSTAT – OECD PPP Programme” (http://www.oecd.org/std/prices-ppp/eurostat-oecdmethodologicalmanualonpurchasingpowerparitiesppps.htm).</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 (PPP) 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 (https://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM_DTL&StrNom=HICP_2019&StrLanguageCode=EN&IntPcKey=43907206&StrLayoutCode=HIERARCHIC). It includes all food products purchased for consumption at home. In this report, analyses are provided for the following items belonging to the “Food” aggregate:</p> <ul style="list-style-type: none"> ○ “Fishery and aquaculture products”, corresponding to COICOP 01.1.3. It includes “fresh or chilled”, “frozen”, “dried, smoked or salted”, and “other preserved or processed products”, as well as land crabs, land snails and frogs, as well as fish and seafood purchased live for consumption as food. ○ “Meat”, corresponding to COICOP 01.1.2. It includes “fresh, chilled or frozen, dried, salted or smoked meat and edible offal” and “other preserved or processed meat and meat-based preparations”. It also includes meat and edible offal of marine mammals and exotic animals, as well as animals and poultry purchased live for consumption as food.

HOUSEHOLD CONSUMPTION OF FRESH FISHERY AND AQUACULTURE PRODUCTS Data are collected from Europanel, Kantar and GfK, and refer to households' purchases of selected fresh species in 11 EU Member States, which are then aggregated for the EUMOFA purposes into "Main commercial species".

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

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

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

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

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

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

Poland	Portugal	Sweden
Carp	Clam	Cod
Mackerel	European seabass	Flounder
Salmon	Gilthead seabream	Haddock
Trout	Hake	Halibut
Other unspecified products	Mackerel	Herring
	Miscellaneous shrimps	Salmon
	Octopus	Pike-perch
	Salmon	Other salmonids
	Sardine	Other unspecified products
	Scabbardfish	
	Other unspecified products	

RETAIL SALES AND OUT-OF-HOME CONSUMPTION Data for retail sales and out-of-home consumption are provided by Euromonitor International¹ (<https://www.euromonitor.com/>), whose data and estimates could be different from other statistics available at national level, as different methodological approaches may be used. They refer to “unprocessed” and “processed” products.

Unprocessed products

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

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

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

Processed products

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

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

- Shelf-stable: includes shelf-stable fish, shellfish and seafood typically sold in cans, glass jars or aluminium/retort packaging. It is also usually preserved in oil, brine, salt water or with a sauce (e.g. sardines in tomato sauce). Pickled fish/seafood sold ambient is also included. Product types include: cod, haddock, mackerel, sardines, tuna, prawns, crab, mussels, anchovies, caviar etc.

- Chilled processed: includes all packaged processed chilled fish/seafood products and smoked fish sold in the self-service shelves of retail outlets. Processed fish/seafood products sold together with a sauce and cooked prawns are included. Note: herring products sold in chiller/refrigerator cabinets, and which have a shelf-life of more than 6 months are excluded. These products, which are very common in Scandinavian countries, are included in shelf-stable seafood as they have similar shelf-life to shelf-stable fish sold ambient.

- Frozen processed: includes all processed fish and seafood products which are further prepared with the addition of other ingredients, including breading/batter, sauce, seasoning, etc. Product types include: fish fingers, fish pies, battered or breaded fish, fish with any type of sauce, fish balls, cuttlefish balls, scampi, calamari, etc.

IMPORT-EXPORT The trade flows of fishery and aquaculture products are analysed for the items referring to the list of CN-8 codes at the link <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 (online data code: [DS-575274](#), extraction made on 21st April 2021). For more information on the methodology and principles behind EUROSTAT’s recording of “country of origin” and “country of destination”, please visit EUROSTAT’s “Quality Report on International Trade Statistics”, at <https://ec.europa.eu/eurostat/documents/7870049/9568307/KS-FT-19-002-EN-N.pdf/856f28e5-e9f6-4669-8be0-2a7aa5b1ee67>.

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

EXTRA-EU TRADE FLOWS They encompass all transactions between European Union (EU) Member States and countries outside the EU (non-member countries). The source used for these trade flows is EUROSTAT – COMEXT. In line Eurostat’s guidelines on the production and dissemination of statistical data by Commission services after the UK withdrawal from the EU, and since most recent reference period is year 2020, UK is excluded from the EU aggregations of each year. This means that UK is dealt with as extra-EU country of

origin/destination of EU-27 imports and exports. In addition, EU data has included Croatia since 2013, which is when it became an EU Member state.

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

INTRA-EU TRADE FLOWS They encompass all transactions declared by Member States of the European Union (EU) with one another. For the analysis of intra-EU trade, only export flows have been considered. The source used for these trade flows is EUROSTAT - COMEXT. In general, bilateral comparisons between Member States of intra-EU flows reveal major and persistent discrepancies, thus comparisons dealing with intra-EU trade statistics and related results must be taken into account cautiously and should consider the existence of these discrepancies. This is the official explanation from Eurostat: considering that the intra-EU trade data are based on common and largely harmonised rules, one might expect the intra-EU trade balance to be zero or at least close to it. However, it is worth underlining that a perfect match is made impossible first of all by the CIF/FOB³ approach: the import value should be higher than the mirror export value as it includes extra transport costs. A close match could nevertheless be legitimately expected given that trading partners within the EU are often neighboring countries, but deliveries to vessels and aircraft are another methodological reason preventing this: such movements of goods create asymmetries in intra-EU ITGS as specific legal provisions state that only dispatches are to be reported. At global level, most methodological reasons for asymmetries disappear. The remaining issues are in data reporting (e.g. missing Intrastat declarations, and trade in specific goods like sea-going vessels and aircraft not being properly captured).

LANDINGS Eurostat data regarding landings (online data code: [fish_ld_main](#), data collected on 11th June 2021) comprise the initial unloading of any fisheries products from on board a fishing vessel to land in a given EU Member State. As landings data are available up to 2019, in line with the approach adopted by EUMOFA following BREXIT, UK is still considered as part of the EU for the analysis. Data include landings made by vessels from EU Member States and from Canada, Faroe Islands, Greenland, Kosovo, Iceland, Norway and the UK. Data also include landings of species not destined for human consumption and seaweed.

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

- Confidentiality. As indicated by national data providers to Eurostat, landings are confidential when they originate from less than 3 vessels. Therefore, in some instances, Member States provide data at more aggregated level, in others data are just not available. Details for these instances, broken down by country, year and species involved, are listed below:

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

- Denmark
For 2017, some confidential figures are excluded, related to destination use and/or presentations/preservations of some specific species belonging to the following main commercial species: eel, pike, cod, sole, sardine, bluefin tuna, crab, coldwater shrimps, Norway lobster, oyster, clam and the groupings “other freshwater fish”, “other groundfish”, “miscellaneous small pelagics” and “miscellaneous tunas”. Only totals are available and were collected from Statistics Denmark.
For 2019, data do not include the following confidential figures:
 - for blue whiting, landings of the Irish fleet
 - for herring, landings of the German and UK fleets destined for industrial use
 - for Atlantic horse mackerel, landings of the Danish fleet destined for industrial use
 - for sandeels, landings of the German fleet
 - for sprat (= Brisling), landings of the German and Estonian fleets as well as landings of the Latvian fleet destined for industrial use.

- Ireland
2018 data are confidential for the following main commercial species: abalone, dab, dogfish, European flounder, grenadier, Atlantic halibut, ray’s bream, redfish, sardine, scabbardfish, sea cucumber, European seabass, seabreams, swordfish, bluefin tuna and weever. Furthermore, for all other main commercial species, some confidential figures are excluded, related to vessels’ flag, destination use and/or presentations/preservations of some specific species.
2019 data are confidential for the following main commercial species: anchovy, European flounder, grenadier, Greenland halibut, mussel *Mytilus* spp., sardine, sea urchin, warmwater shrimps, swordfish. Furthermore, for all other main commercial species, some confidential figures are excluded, related to vessels’ flag, destination use and/or presentations/preservations of some specific species.

- Greece
2016 and 2017 data are confidential for those landings made by one single vessel operating in Atlantic, Eastern Central regarding the following main commercial species: cuttlefish, flounder (other than European flounder), John dory and the grouping “other flatfish”. Only for 2017, data do not include confidential figures for frozen deep-water rose shrimp.
Furthermore, for 2016-2017-2018, some confidential figures are excluded related to destination use and/or presentations/preservations of some specific species. This concerns:
 - For 2016-2017: some species belonging to the following main commercial species: octopus, red mullet, seabream (other than gilt-head seabream), squid, and the groupings “other sharks” and “other marine fish”. Only for 2017, data do not include confidential figures for some species belonging to the grouping “warmwater shrimps”.
 - For 2018: some species belonging to the following main commercial species: crab, John dory, octopus, red mullet, squid, seabream (other than gilthead seabream) and the grouping “other marine fish”.

- Malta
Data for the period 2012-2019 regarding landings made by vessels with Cyprus flag are excluded as they are confidential.
- Provisional data
 - France
2018 and 2019 volumes and values are provisional data available in Eurostat.
 - Italy
2018 and 2019 volumes and values are provisional data available in Eurostat.
- Estimates
 - Bulgaria
2017 volumes and values are national estimates available in Eurostat.
 - Denmark
Most of 2019 values are national estimates available in Eurostat.
 - Ireland
Most of 2017 volumes and values are national estimates available in EUROSTAT. In addition, the following data were collected from SFPA (Sea-Fisheries Protection Authority) and Central Statistics Office:
 - 2013, 2014, 2018 and 2019 data regarding hake
 - 2014 data regarding mackerel
 - 2016 data regarding herring
 - 2018 data regarding blue whiting and monk
 - 2019 data regarding the value of mackerel and blue whiting
 - Lithuania
2017 volumes and values are national estimates available in EUROSTAT.
 - Netherlands
Most of 2017-2018-2019 volumes and values are national estimates available in Eurostat.
 - Portugal
Most of 2018-2019 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
 - Cyprus - 2019
 - Denmark – 2009, 2010, 2011, 2012, 2013, 2014 and 2018
 - Estonia - 2019
 - Germany – 2009 and 2014
 - Croatia - 2019
 - Ireland – 2009, 2010 and 2018
 - Malta - 2019

- Netherlands – 2011 and 2019
- Poland – 2011, 2012, 2016 and 2019
- Portugal – 2009, 2010, 2011, 2012 and 2015 and 2016
- Sweden – 2009, 2010, 2011 and 2019
- United Kingdom – 2009, 2010, 2011, 2012 and 2019

HIGHLIGHTS

EFFECTS OF COVID-19 PANDEMIC ON THE EU CONSUMERS OF FISHERY AND AQUACULTURE PRODUCTS IN 2020

From 2019 to 2020⁴, household expenditure on fishery and aquaculture products grew by a remarkable 17%, which was much higher than the 2,1% inflation of prices for these products⁵. This increasing trend was confirmed by Europanel, Kantar and GfK data on household consumption of fresh fish in the EU's largest consuming countries⁶. The data showed an increase of 7% in value and 4% in volume from 2019 to 2020. This increase was most likely due to the closings in the HoReCa sector due to the COVID-19 pandemic⁷, and the consequent increase in at-home consumption.

The effects of the pandemic are also quite apparent when looking at 2020 data on out-of-home consumption of processed products. The most significant decreases from 2019 were registered in the largest countries, which had seen their restaurants closed for longer periods⁸. For example, Euromonitor estimates that Spain and Portugal, two of the largest EU consumers, will not see their consumption back to the pre-pandemic level until 2024, and estimates for France show that a recovery will start in 2022 but, consumption will not have reached the pre-pandemic level even by 2025.

IMPROVEMENT OF THE EU TRADE BALANCE FOR FISHERIES AND AQUACULTURE PRODUCTS IN 2020

In 2020, extra-EU imports of fishery and aquaculture products totalled 6,15 million tonnes worth EUR 24,21 billion. Compared with 2019, this represented a value decrease of 9% or EUR 2,30 billion, and a volume decrease of 2% or more than 125.500 tonnes. Values decreased more than volumes from 2019 to 2020 because of the significant decrease in high-value species. These species were mainly destined for the HoReCa sector, which had faced shutdowns initiated to control the spread of COVID-19. Extra-EU exports on the other hand reached a six-year peak of 2,21 million tonnes, showing a growth of 1% from 2019. In value terms, they totalled EUR 6,96 billion, which represented a 4% drop of more than EUR 290 million from 2019. Cod accounted for most of the overall value decrease of extra-EU exports from 2019 to 2020, as a consequence of decreased exports to China and the UK

Due to decreased imports, the trade deficit in 2020 was 10% or EUR 2 billion less than in 2019. Among the EU countries, almost all of those with the highest deficits (>EUR 1 billion) saw their situations improve from 2019 to 2020. The exception was the Netherlands, which is one of the major entry points for high-value products originating from outside the EU and destined for the internal market, such as salmon, cod and shrimps.

Intra-EU exchanges followed the same trend as extra-EU imports, as they largely consist of northern Member States exporting products originating from Norway and Iceland – mostly salmon and cod – to other EU countries.

⁴ In line with Eurostat's guidelines on the production and dissemination of statistical data by Commission services after the UK withdrawal from the EU, in cases in which the most recent reference period is year 2020, UK is excluded from the EU aggregations of each year within historical series analysed.

⁵ Source: Eurostat

⁶ Germany, Denmark, Spain, France, Hungary, Ireland, Italy, the Netherlands, Poland, Portugal and Sweden.

⁷ A consolidated analysis of the effects of COVID-19 on the EU fisheries and aquaculture sectors from March to December 2020 that was developed for the EU Parliament can be consulted at this link [https://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL_STU\(2021\)690880](https://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL_STU(2021)690880). For more recent data and contextual analyses, you may want to consult the monitoring reports developed by EUMOFA at <https://www.eumofa.eu/covid-19>.

⁸ For more details, see <https://www.ecdc.europa.eu/en/publications-data/download-data-response-measures-covid-19>. It should be noted that regulations concerning response measures to COVID-19 evolve rapidly and are heterogeneous. For example, the closure of restaurants might be implemented in different ways depending on the specific situation of each country or even region.

DECREASED SUPPLY AND APPARENT CONSUMPTION OF FISHERIES AND AQUACULTURE PRODUCTS FROM 2018 TO 2019

Consolidated data regarding EU production of fishery and aquaculture products are available up to 2019⁹. This includes estimates on EU total supply for EU consumers (catches + aquaculture production + imports) and EU apparent consumption (supply - exports),

In 2019, the EU supply of fisheries and aquaculture products for human consumption totalled 14,53 million tonnes of live weight. Although this was one of the highest amounts of the 2010-2019 decade, it still represented a 206.402-tonne decrease from 2018, due to a drop in catches. In 2019, catches touched the lowest amount of the decade under analysis, as a result of decreased herring quotas in the North East Atlantic, including the Baltic. The drop in catches offset the increases in imports and aquaculture production. The latter in particular registered a 10-year peak which was made possible by a boost in salmon production in the UK.

The EU self-sufficiency ratio¹⁰, which measures the capacity of EU Member States to meet demand with their own production, was 41,2% in 2019. During the 2010-2019 period, the highest level of self-sufficiency was observed in 2014, which was a record year for EU catches, in particular for catches of mackerel and yellowfin tuna. Since then, self-sufficiency has been following a negative trend which again reflects the downward trend of EU catches and, even more, the increase of imports.

Per capita apparent consumption, estimated at 23,97 kg of live weight of mostly wild-caught products, was almost stable in 2019 compared with 2018. According to EUMOFA estimates, in 2019 EU citizens consumed, on average, 390 grams less of live weight fishery and aquaculture products than in 2018. The drop was again driven by a decrease in catches and, thus, in apparent consumption of wild products, especially of herring. According to EUMOFA and national estimates, Portugal stands out as the major EU consumer. This was confirmed in 2019, although apparent its consumption decreased from 2018 due to decreased imports (and thus supply) and increased exports. In contrast with the negative trend at EU level¹¹, Latvia registered a 59% increase, the most significant increase of per capita apparent consumption from 2018 to 2019.

Landings of fisheries products, including species not destined for human consumption and seaweed, totalled 4,07 million tonnes with a value of EUR 6,91 billion in 2019, marking drops of 10% in volume and 4% in value from 2018. The main reduction concerned landings of sandeels in Denmark destined for industrial use. Herring and blue whiting also saw significant drops, due to lower landings of frozen herring in the Netherlands and fresh blue whiting in Denmark.

RECENT DYNAMICS FOR SOME MAIN SPECIES

For the first time in history, the EU's imports of salmon exceeded 1 million tonnes in 2020. This represented an increase of 4% from 2019. One driver behind the increase was the number of constraints on air freight to overseas markets due to COVID-19 pandemic and the consequent higher share of the European production (mainly Norwegian production) being sold on the EU market. In value terms, from an all-time high in 2019 of more than EUR 6,4 billion, imports of salmon fell to EUR 5,94 billion in 2020.

⁹ Since consolidated data regarding EU production of fishery and aquaculture products are available up to 2019, in line with the approach adopted by EUMOFA following BREXIT, the United Kingdom is considered part of the EU till 2019 and its data until that year are available in all tables, charts and analyses at EU level. In addition, EU data include Croatia since 2013, date of the EU's enlargement to this country.

¹⁰ Ratio between EU production and apparent consumption of the EU market.

¹¹ It is worth underlining that the methodologies for estimating apparent consumption at EU and Member State levels are different, the first based on data and estimates as described in the Methodological background, the latter also requiring the adjustment of abnormal trends due to the higher impact of stock changes.

Another important species for the EU processing industry, Alaska pollock from China, also registered a decline in value. In 2020, imports of Alaska pollock from China dropped to 128.485 tonnes with a value of EUR 354 million. This corresponded to decreases of 11% in both volume and value from 2019, due to pandemic challenges. In the first half of 2021, the pandemic hit the Alaska pollock industry in the US and, at the same time, China closed its ports to the Russian Federation. This created a very difficult raw material supply situation for Chinese processors, and had a negative impact on the EU supply chain, causing volatile prices¹².

In 2020, whole tuna and tuna fillets imports to the EU increased by 7% and 11%, respectively, and were imported at lower prices. In 2020, EU imports of tuna fillets (frozen and preserved) exceeded imports of whole tuna for the first time. Import volume for both products ended just above 190.000 tonnes. In terms of trade balance, 2020 was also a special year for tuna. For the first time, extra-EU import value of whole tuna (EUR 422 million) was higher than its export value (EUR 412 million).

Despite ICES¹³ proposed an 8%-reduction in Atlantic mackerel quotas for 2021 to 852.284 tonnes¹⁴, the sum of the quotas set by each fishing country individually (EU Member States, Iceland, Norway, Faroe Islands and Russia) was higher than ICES's advice¹⁵. The catch season started early in 2021 and, by the end of September 2021, the coastal states of Norway, Iceland, the Faroe Islands and the UK had landed approximately 630.000 tonnes of Atlantic mackerel, which was significantly higher than 2020 landings. On top of this, the EU fleet has a quota just above 200.000 tonnes in 2021. Despite high catch volumes, export prices of whole frozen Atlantic mackerel from the EU averaged 1,41 EUR/kg during the first seven months of 2021, which represented a 4% decrease from the same period in 2020.

EU production of farmed seabass and seabream in 2020 was a slight 1% lower than 2019, while global production (including the EU) fell by 4%. Exports between Member States showed a 5% increase in prices for seabass and 2% increase for seabream in 2020 compared with 2019. However, 2021 looks to be a stronger year in terms of production, with a 6-9% growth rate expected for the full year¹⁶. The highest expectations are related to seabass. A production decrease in Turkey led to higher market prices in late summer 2021, with EU import prices of farmed Turkish seabass increasing by 20% in one year¹⁷.

MACROECONOMIC TRENDS

On average, in 2020, the Euro (EUR) appreciated against the four currencies important to operations in the fish and seafood industry – US dollar (USD), Icelandic króna (ISK), British pound (GBP) and Norwegian krone (NOK). This was in contrast to the mixed picture seen in 2019. The EUR appreciated an average 10% against the USD, 6% against the GBP and NOK, and 12% against the ISK. However, during the first three quarters of 2021, the EUR depreciated against all the above-mentioned currencies.

As of the end of October 2021, the European Central Bank (ECB) interest rate had remained unchanged at -0,5% since September 2019¹⁸. In March 2020, the Bank of England dropped its interest rate from 0,75% to 0,1% and, as of the end October 2021, it remained unchanged¹⁹.

¹² Source: FAO (<https://www.fao.org/in-action/globefish/market-reports/resource-detail/en/c/1416623/>)

¹³ International Council for the Exploration of the Sea

¹⁴ <https://www.ices.dk/sites/pub/Publication%20Reports/Advice/2021/2021/mac.27.nea.pdf>

¹⁵ <https://www.intrafish.com/fisheries/norway-sets-own-mackerel-quota-for-northeast-atlantic-after-coastal-states-fail-to-reach-agreement/2-1-1017045>

¹⁶ Source: Kontali, Monthly seabass and seabream report, September 2021

¹⁷ Source: EUMOFA elaboration of Eurostat-COMEXT data online data code: [DS-575274](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&code=ds-575274)

¹⁸ Source: European Central Bank (https://www.ecb.europa.eu/stats/policy_and_exchange_rates/key_ecb_interest_rates/html/index.en.html)

¹⁹ Source: Bank of England (<https://www.bankofengland.co.uk/monetary-policy/the-interest-rate-bank-rate>)

Overall, the 2020 inflation rate of 0,7% in the EU-27 was down from the annual 2019 rate of 1,4%²⁰.

In 2020, the COVID-19 pandemic also led to a major drop in prices of crude oil, which is the main driver of marine fuel prices. This resulted in lower fuel cost for the EU fishing fleet. However, in 2021, the prices have trended upward toward the 2019 level. Marine fuel prices in the first three quarters of 2021 were on average 33% higher than in the corresponding period in 2020, but 11% lower than in the corresponding period in 2019. In the third quarter of 2021, marine fuel prices were 59% higher than in the corresponding period in 2020 but only 2% lower than in the corresponding period in 2019²¹. The boost in 2021 gas prices has also led to high electricity prices in both Europe and the US.

The consumer price index for fish and seafood in the EU²² was quite stable throughout 2020, while the first half of 2021 saw an upward trend. Compared with the first eight months of 2020, consumer prices were on average 1% higher in 2021.

As 2021 began, the Brexit transition period ended. Massive delays and confusion were observed at the UK borders following the withdrawal, but the situation has normalized as the year has progressed.

²⁰ Source: Eurostat Harmonized index of consumer prices (<https://ec.europa.eu/eurostat/databrowser/view/tec00118/default/table?lang=en>)

²¹ Source: EUMOFA macroeconomic dashboard (<https://www.eumofa.eu/macroeconomic>)

²² Source: Eurostat food price monitoring tool, EU-27. (https://ec.europa.eu/growth/sectors/food/competitiveness/prices-monitoring_en)

1/ THE EU IN THE WORLD

1.1 PRODUCTION

In 2019, total world catches²³ and aquaculture production reached a new peak. With a 1% increase from 2018, their combined totals moved from almost 212 million tonnes to close to 214 million tonnes. This was driven by a 5% growth in aquaculture production, which increased from 114 million tonnes in 2018 to 120 million tonnes in 2019. Catches, on the other hand, registered a 4% decrease, dropping from 97 million tonnes to less than 94 million tonnes.

China and Indonesia were the major contributors to the growth of farmed production, while Peru was behind the decrease in catches, due to the drop in catches of “anchoveta” (*Engraulis ringens*), which are designated for fishmeal production.

TABLE 1

TOP-15 PRODUCERS IN 2019 (1.000 TONNES)

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

	Catches	Aquaculture	Total production	% of total	% evolution of total production 2019 / 2018
China	14.170	68.424	82.594	39%	+2%
Indonesia	7.525	15.893	23.418	11%	+6%
India	5.477	7.800	13.277	6%	+7%
Vietnam	3.429	4.456	7.885	4%	+5%
EU-28	4.824	1.367	6.191	3%	-7%
United States	4.804	490	5.294	2%	+1%
Russia	4.983	248	5.231	2%	-2%
Peru	4.851	154	5.005	2%	-32%
Philippines	2.057	2.358	4.415	2%	+1%
Bangladesh	1.896	2.489	4.384	2%	+3%
Japan	3.231	944	4.174	2%	-5%
Norway	2.472	1.453	3.925	2%	-2%
Chile	2.377	1.407	3.784	2%	+3%
Republic of Korea	1.367	2.406	3.773	2%	+2%
Myanmar	1.951	1.082	3.033	1%	-4%
Others	28.106	9.132	37.238	18%	+1%
Total	93.519	120.104	213.623	100%	+1%

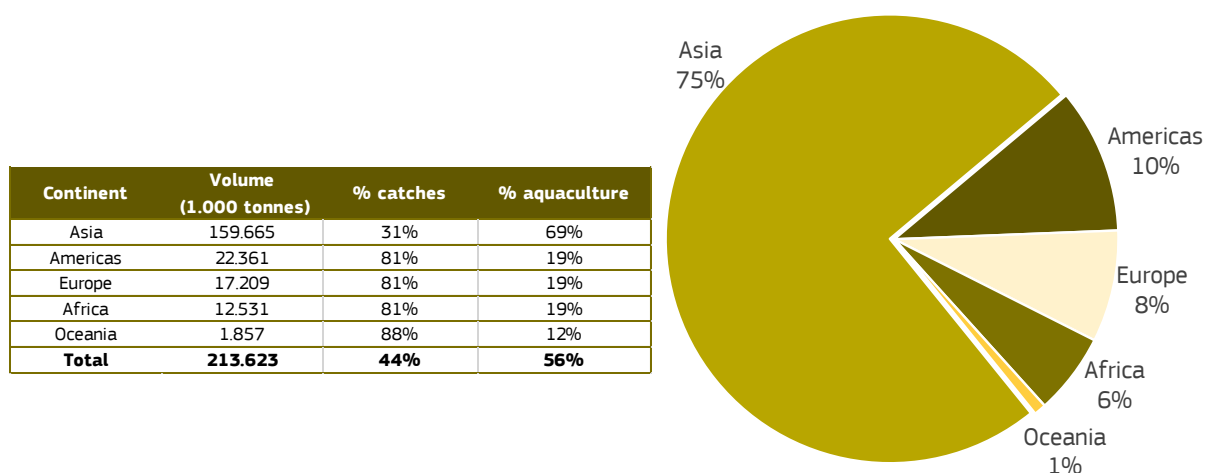
²³ Catches include all products fished by a country's fleet in any fishing area (both marine and inland waters), independently from the area of landing/selling.

Aquaculture’s share of total world production has increased continuously since 2000, and, since 2013, aquaculture production has been higher than that of catches. This trend has been driven by Asian countries, where aquaculture production represented more than 90% of the world’s total farmed production in 2019. Asia is the only continent where farmed production exceeds wild production (see breakdown in Chart 1). In fact, in each of the world’s top four producing countries – China, Indonesia, India and Vietnam – the majority of production originates from aquaculture: more than 80% in China, close to 70% in Indonesia, and almost 60% in India and Vietnam. By contrast, only 22% of EU production originated from aquaculture in 2019.

CHART 1

WORLD PRODUCTION BY CONTINENT IN 2019

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



ASIA

Asia not only leads the world in farmed production, it also leads in fisheries production. In 2019, Asia’s farmed production amounted to 110 million tonnes, up 5% from 2018, and its wild production settled at close to 50 million tonnes, which was a slight decrease from the previous year. Wild production in Asia, mainly in China and Vietnam, largely consists of catches of bony fish (Osteichthyes), which accounted for 28% of the total in 2019.

In 2019, China alone accounted for 57% of global farmed production and 15% of global wild-caught production. The country mainly farms seaweed and carp, with production reaching 20 million tonnes and 18 million tonnes, respectively, in 2019. If compared with world farmed production of these two species, China covered almost 60% of the total for seaweed and 84% of carp. While Chinese production of seaweed was at its highest in 2019 thanks to a 9% increase from 2018, carp production was 1% lower in 2019 than in 2018. By comparison, in 2019 the EU produced less than 90.000 tonnes of carp, of which 90% was from aquaculture, and almost 85.000 tonnes of seaweed, which represented a 10-year peak. However, EU seaweed production originates mostly from wild harvesting for non-food purposes, which limits the relevance of the comparison with Chinese production.

AMERICAS

In the Americas – including North, Central and South America – catches account for more than 80% of total fishery and aquaculture production.

Due to a 12% decrease from 2018, 2019 catches dropped to 18 million tonnes, although they remained in line with their 10-year average. The decrease was driven by Peruvian catches of anchoveta which plummeted from more than 6 million tonnes in 2018 to 3,5 million tonnes. Indeed, the second fishing season for Peruvian anchovy

which started in mid-November only reached 36% of the quota of 2,8 million tonnes – the highest quota in history. The decrease was due to the high presence of juveniles and an unfavourable change in oceanic characteristics. The fleet hoped 2020 would be better, but the outbreak of COVID-19 forced the fishers to stay in port. Nonetheless, Peru was the major American fishing country in 2019²⁴. After Peru came the United States, due to its catches of Alaska pollock which decreased a slight 0,3% from 2018 to 2019 arriving at a total of 1,5 million tonnes.

Aquaculture production, on the other hand, compensated for the drop in catches in the Americas. A 10% increase from 2018 brought the total to more than 4 million tonnes in 2019, mainly driven by the growth observed in Chile, which is by far the largest producer, and Ecuador, which ranks second to Chile. Farmed production in Chile increased by 9% and reached 1,4 million tonnes, while that of Ecuador registered a 29% boost and achieved close to 700.000 tonnes. In the case of Ecuador, this was linked with increased production of warmwater shrimps. In Chile, aquaculture production increased for all species farmed in the country, especially salmon and mussels, which reached 907.370 tonnes and 379.097 tonnes, respectively. By comparison, EU farmed production of salmon totalled 203.832 tonnes, but its production of mussels amounted to almost 480.000 tonnes, which was higher than Chile's.

EUROPE

Two non-EU countries – Russia and Norway – accounted for more than half of total European production of fishery and aquaculture products in 2019. Russia's production of 5,2 million tonnes was almost entirely from fisheries activity, while Norway's production of 3,9 million tonnes consisted of 63% from catches and 37% from farmed products. Looking at the EU level, the combined production from fishery and aquaculture totalled 6,2 million tonnes. This was 7% lower than the 2018 level, and the lowest amount since 2013, when it was just above 6 million tonnes. The decrease from 2018 to 2019 was due to decreased Danish catches.

More than two thirds of Russian production is from its catches of Alaska pollock, which in 2019 grew by 3% compared with 2018 and totalled 1,7 million tonnes. Salmon and herring followed at a distance with catches of around 500.000 tonnes each. Indeed, Russia has the largest catch of wild Pacific salmon of any nation in the world.

In Norway, production of farmed salmon prevails. In 2019, it amounted to 1,4 million tonnes, the highest level ever achieved, thanks to a 6% increase from 2018. On the fisheries side, Norwegian catches mainly include herring with more than 560.000 tonnes in 2019; blue whiting, with more than 350.000 tonnes; and cod with 327.648 tonnes. Of these, herring catches increased 12% from 2018 while catches of blue whiting and cod both decreased, dropping by 20% and 13%, respectively, and driving the overall decrease of fishery production in the country. By comparison, EU catches of cod were much lower with 103.597 tonnes in 2019; blue whiting catches were similar with 351.527 tonnes; and herring catches amounted to 678.851 tonnes, which was more than 100.000 tonnes higher than the Norwegian catches of this species.

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

²⁴ Sources: Global Fishing Watch (<https://globalfishingwatch.org/fisheries/peruvian-fisheries-covid-19/>) and Agencia Peruana de Noticias (<https://andina.pe/Ingles/noticia-second-anchovy-season-in-peru-sees-highest-quota-in-history-774182.aspx>).

AFRICA In Africa, the main producers are Egypt, which mainly farms Nile tilapia; Morocco, which mainly catches sardine; and Nigeria, which mainly produces freshwater catfish and other freshwater species of both wild and farmed origin. By comparison with the EU, Moroccan production of sardine amounted to 974.124 tonnes in 2019, which was almost five times higher than that of EU Member States.

OCEANIA In Oceania, almost 90% of total production is wild caught: this fishery production amounted to 1,6 million tonnes in 2019, the highest in ten years. Skipjack tuna is by far the main species caught in Oceania, mostly by Papua New Guinea where the 195.239 tonnes produced in 2019 amounted to a 7% decrease from 2018. The other top producers are Kiribati which produced 187.079 tonnes for a 19% increase, and the States of Micronesia which produced almost 131.000 tonnes for a 42% increase. If combining skipjack tuna production in these three major countries with the rest of Oceania, total production reached a 10-year peak of more than 700.000 tonnes, which was more than three times the EU's 226.512-tonnes production of this species.

1.2 IMPORT-EXPORT²⁵

EU-27 In 2020, the EU trade of fisheries and aquaculture products – which is presented here as the combined amounts of imports and exports with third countries – was the highest in the world. It totalled EUR 31,17 billion and 8,72 million tonnes. Imports, which accounted for 78% of the total in terms of value and for 71% of the total volumes, amounted to EUR 24,21 billion and 6,15 million tonnes. Compared with 2019, they decreased by 9% in value and by 2% in volume. This was due to the significant decrease of imports of high-value species mainly destined for the Hotels, Restaurants and Catering (HoReCa) sector, which had been highly impacted by the consequences of the COVID-19 pandemic. Exports, on the other hand, increased 1% from 2019 and amounted to 2,21 million tonnes. In value terms, they totalled EUR 6,96 billion, which represented a 4% drop from 2019.

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

CHINA With a total flow of 10,73 million tonnes valued at EUR 30,79 billion, China ranked second in the world after the EU for total trade of fishery and aquaculture products in 2020. China is a net exporter in terms of value, but a net importer in terms of volume. A significant share of its surplus comes from its large processing sector, which processes both internally produced and imported products for export. The main destinations for Chinese exports in 2020 were the EU, Japan and the United States (ranked in decreasing order in volume terms), with the EU mainly importing frozen fillets of Alaska pollock and products not destined for human consumption, Japan mainly receiving frozen and prepared/preserved fillets of marine fish²⁶, and the US mostly receiving prepared/preserved fish²⁷. From 2019 to 2020, Chinese exports decreased by 10% in both volume and value, reaching a total of 4,9 million tonnes and EUR 17 billion, which were the lowest amounts recorded since 2015. The drop concerned exports to almost all main

²⁵ Sources used in this chapter are Eurostat for EU-28 (online data code [DS-575274](#)), StatBank Norway and Global Trade Atlas - IHS Markit for non-EU countries.

²⁶ No detail is available in terms of species.

²⁷ *Ibidem*

destinations and was probably linked with the outbreak of COVID-19. Despite this drop, Chinese exports were still twice as large as EU exports in both volume and value. The Chinese trade surplus rose, also thanks to decreased imports, to EUR 3,5 billion, 47% higher than in 2019. Indeed, China's imports plummeted from 2019 to 2020. With drops of 18% in value and 8% in volume, they reached 5,8 million tonnes (nearly as much as EU imports) and EUR 14 billion (around two thirds of EU imports' value).

UNITED STATES

The total amount of imports and exports of fishery and aquaculture products to/from the US in 2020 was 6,14 million tonnes worth EUR 25 billion. The US is a net importer of these products and, in 2020, its trade deficit reached one of its highest levels at EUR 14 billion due to the combined effects of increased imports and decreased exports from 2019.

Imports grew 3% in volume but decreased 4% in value, totalling 3,4 million tonnes worth close to EUR 20 billion, which were yet half the volumes of EU imports and three fourths of the value of EU imports. The volume increase was linked with increased imports from the main South American and Asian suppliers: Ecuador and Chile, which provided mostly shrimps and salmon, respectively; and Thailand and Indonesia, which provided mostly tuna and shrimps, respectively. On the other hand, the value decrease was mainly linked with imports from three countries, consisting mostly of crab, lobster *Homarus* and salmon from Canada, tilapia from China and shrimps from India.

The US exports dropped by 5% in volume from 2019 to 2020, reaching 2,8 million tonnes which was the lowest level in 10 years and almost in line with EU exports. In value, they totalled EUR 5,7 billion which was a 13% drop from 2019 and one of the lowest levels of the period under analysis. These decreases were mainly linked with exports of non-food use products to Indonesia and Canada, as well as with exports of frozen marine fish²⁸ to Japan.

JAPAN

In 2020, Japan's imports and exports of fishery and aquaculture products totalled 3 million tonnes with a value of EUR 14 billion. Japan, the EU and the US are the major net importers of these products in the world, but Japan's trade deficit of EUR 10 billion in 2020 was half as much as the EU's and around 20% lower than the US's.

In 2020, with an 8% decrease in volume and a 13% decrease in value from 2019, imports in Japan touched on of the lowest levels since 2015, totalling 2,5 million tonnes and EUR 12 billion. These were half the value of EU imports and one third of the volumes of EU imports. The import decrease in Japan was largely due to decreased imports from China and the United States.

Japanese exports totalled 615.259 tonnes which did not represent significant changes in volumes from 2019. However, they decreased in value by 12% to reach EUR 1,8 billion. These exports only equalled one fourth of the amounts exported by the EU. In volume terms, they mainly comprised exports of frozen mackerel to Vietnam. However, the largest share of the value of Japanese exports was covered by exports of frozen marine fish to the United States and molluscs²⁹ to China.

NORWAY

Norway's total trade flows of fishery and aquaculture products reached 3,3 million tonnes worth EUR 11 billion in 2020, for a trade surplus of EUR 8,6 billion.

Due to the significant amounts of salmon Norway exports all over the world, in 2020 Norwegian exports of fishery and aquaculture products ranked second in the world

²⁸ *Ibidem*

²⁹ *Ibidem*

after those from China in value terms, and third after those from China and the US in volume terms. The EU, its main destination, absorbs 60% of total Norwegian exports³⁰. From 2019 to 2020, Norwegian exports slightly increased to reach 2,7 million tonnes, while their value decreased by 9% to reach EUR 9,7 billion. These are in the same order of magnitude as the volumes of EU exports but their value is 40% higher because they mainly include salmon. The fall in Norwegian exports of salmon that was behind the total value decrease was probably linked to the HoReCa closures due to the COVID-19 outbreak – a segment to which part of these supplies had been destined. Imports in Norway totalled 624.486 tonnes in 2020, slightly more than in 2019, and decreased by 2% in terms of value to reach EUR 1,17 billion. These were one tenth of the volumes of fishery and aquaculture products imported by the EU and one twentieth of the value of EU imports. Norwegian imports mainly include fishmeal and fish oil used in the aquaculture industry for farming salmonids.

THAILAND

The total amount of imports and exports of fishery and aquaculture products to/from Thailand in 2020 reached 4 million tonnes worth EUR 8,8 billion. The country is a net exporter of these products, with a 2020 surplus close to EUR 1,7 billion.

In 2020, exports grew by 8% in volume and decreased by 3% in value from 2019, ending at 1,6 million tonnes worth EUR 5,2 billion. Compared with EU exports, these amounts were around 30% lower in both volume and value.

The volume increase of exports from Thailand was due to increased exports of prepared/preserved tuna and products not destined for human consumption, while the value-decrease was due to decreased exports of shrimps (frozen and prepared/preserved). The United States, China and Japan are the main markets for exports from Thailand.

From 2019 to 2020, imports increased by 2% in volume and decreased by 8% in value, reaching 2,5 million tonnes and EUR 3,5 billion, which represented around half of EU imports in volumes but was almost seven times lower than EU imports in terms of value. The major suppliers are Myanmar, China and the US, with Myanmar mainly supplying Thailand with fresh whole marine fish³¹, China supplying non-food use products and frozen cephalopods³², and the US mainly supplying non-food use products.

³⁰ This does not include re-exports within the EU of products originally imported from Norway.

³¹ No detail is available in terms of species.

³² *Ibidem*

TABLE 2

EXPORTS OF FISHERIES AND AQUACULTURE PRODUCTS OF MAIN WORLD TRADERS (VOLUME IN MILLION TONNES AND NOMINAL VALUE IN EUR BILLION)
 AND % OF EXPORTS DESTINED FOR THE EU ON TOTAL IN 2020

Source: EUMOFA elaboration of data from EUROSTAT (for EU trade flows, online data code [DS-575274](#)), StatBank Norway and Global Trade Atlas - IHS Markit (for other non-EU countries). Possible discrepancies in % changes are due to rounding.

	2016		2017		2018		2019		2020		2020 / 2019	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
China	5,18	19,22	5,35	19,17	5,43	19,55	5,46	18,99	4,92 (14% to the EU)	17,17 (10% to the EU)	-10%	-10%
Norway	2,45	9,77	2,61	10,06	2,76	10,29	2,64	10,74	2,66 (58% to the EU)	9,74 (60% to the EU)	+1%	-9%
EU-27	2,38	6,64	2,52	6,86	2,55	7,13	2,55	7,26	2,57	6,96	+1%	-4%
US	2,99	6,72	3,12	6,86	3,02	6,58	2,91	6,53	2,78 (11% to the EU)	5,68 (15% to the EU)	-5%	-13%
Thailand	1,68	5,46	1,51	5,50	1,51	5,31	1,52	5,40	1,64 (3% to the EU)	5,22 (4% to the EU)	+8%	-3%
Japan	0,53	1,91	0,59	1,87	0,73	2,04	0,62	2,05	0,62 (1% to the EU)	1,81 (2% to the EU)	-0,06%	-12%

TABLE 3

IMPORTS OF FISHERIES AND AQUACULTURE PRODUCTS OF MAIN WORLD TRADERS (VOLUME IN MILLION TONNES AND NOMINAL VALUE IN EUR BILLION)
 AND % OF IMPORTS ORIGINATING FROM THE EU ON TOTAL IN 2020

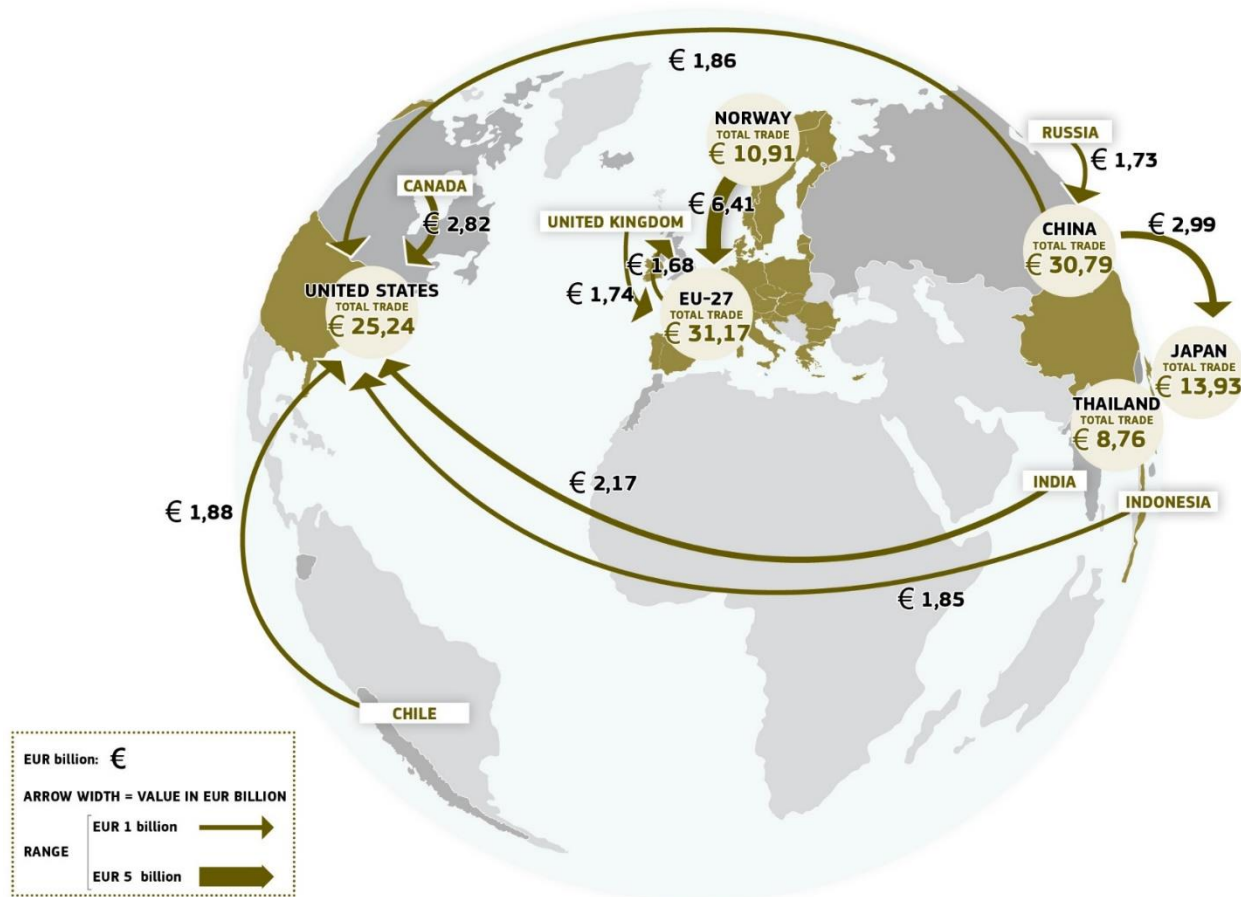
Source: EUMOFA elaboration of data from EUROSTAT (for EU trade flows, online data code [DS-575274](#)), StatBank Norway and Global Trade Atlas - IHS Markit (for other non-EU countries). Possible discrepancies in % changes are due to rounding.

	2016		2017		2018		2019		2020		2020 / 2019	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
EU-27	6,03	24,14	6,02	25,45	6,26	25,91	6,28	26,50	6,15	24,21	-2%	-9%
US	3,16	18,22	3,20	19,74	3,27	19,74	3,27	20,38	3,36 (5% from the EU)	19,56 (4% from the EU)	+3%	-4%
China	4,11	8,39	4,99	9,93	5,30	12,67	6,34	16,57	5,80 (3% from the EU)	13,62 (3% from the EU)	-8%	-18%
Japan	2,56	13,06	2,72	13,87	2,60	13,50	2,68	14,00	2,46 (5% from the EU)	12,12 (5% from the EU)	-8%	-13%
Thailand	2,11	3,13	2,22	3,56	2,41	3,76	2,42	3,86	2,48 (4% from the EU)	3,54 (4% from the EU)	+2%	-8%
Norway	0,63	1,15	0,66	1,08	0,61	1,08	0,61	1,19	0,62 (30% from the EU)	1,17 (32% from the EU)	+2%	-2%

CHART 2

TOP-10 TRADE FLOWS IN VALUE OF FISHERY AND AQUACULTURE PRODUCTS IN THE WORLD (2020, NOMINAL VALUES)

Source: EUMOFA, based on elaboration of data from EUROSTAT (for EU trade flows, online data code [DS-575274](#)), StatBank Norway, and Global Trade Atlas - IHS Markit (for trade flows of other non-EU countries)



1.3 EXPENDITURE AND CONSUMPTION³³

In 2017³⁴, the EU as a whole reported the highest expenditure on fish in the world. However, when looking at per capita expenditure, it ranked 8th after Iceland, Japan, Korea, Norway, Australia, Israel and Switzerland.

On the other hand, according to the OECD-FAO Agricultural Outlook forecasts for 2020, the EU ranked 13th in terms of per capita consumption, amounting to less than half of the forecast for the top three ranked countries – Malaysia, Korea and Norway.

According to OECD forecasts, world consumption of fish increased by 1% from 2019 to 2020, growing from almost 178,5 million tonnes to more than 180,2 million tonnes. When looking at EU consumption, the increase was less significant (+0,5%). For both world and EU consumption, an increase is also expected for 2021.

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

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

TABLE 5
 CONSUMPTION OF FISH,
 TOP OECD COUNTRIES,
 2020 (FORECASTS)
 Source: OECD

	Per capita consumption (Kg)	Total consumption (1.000 Tonnes)
Malaysia	58,23	1.998
Korea	57,55	3.204
Norway	54,86	1.029
Japan	46,10	6.279
Viet Nam	40,92	4.905
China	40,89	61.133
Indonesia	39,63	12.214
Thailand	28,40	2.447
New Zealand	27,44	187
Philippines	26,38	2.894
Australia	25,39	682
Egypt	24,07	2.478
EU-27	23,98	11.360

³³ Data in this section are collected from the OECD website (Organization for Economic Co-operation and Development). More details available at the links <https://stats.oecd.org/Index.aspx?DataSetCode=PPP2017> (for expenditure) and https://stats.oecd.org/viewhtml.aspx?datasetcode=HIGH_AGLINK_2019&lang=en (for consumption).

³⁴ Latest available data.

2/ MARKET SUPPLY

2.1 SUPPLY BALANCE AND SELF-SUFFICIENCY OVERVIEW

In 2019, the EU supply of fishery and aquaculture products for human consumption, which includes both domestic production and imports, totalled 14,53 million tonnes in live weight equivalent (LWE). This was 206.402 tonnes LWE less than in 2018, but still 100.000 tonnes LWE above the average supply of the 2010–2019 decade.

From 2018 to 2019, both imports and aquaculture production increased, but their increases were offset by a drop in catches, which in 2019 touched the lowest amount of the decade under analysis. As a result, the total available supply declined. More in detail, catches decreased by 8% or 310.184 tonnes LWE, aquaculture production continued to grow reporting an increase of 4% or 46.565 tonnes LWE, and imports increased by 1% or 57.218 tonnes LWE. Exports, on the other hand, registered a 1% decrease, which corresponded to a decline of 19.751 tonnes LWE.

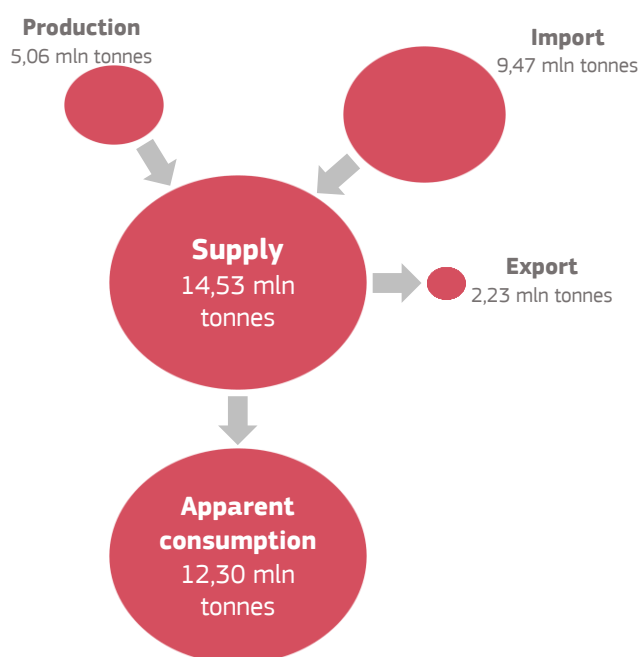
Consequently, the 2019 apparent consumption³⁵ was almost 50.000 tonnes LWE below the average of the decade under analysis. Indeed, with a 1% decrease from 2018, it dropped from 12,49 million tonnes LWE to 12,30 million tonnes LWE, which corresponded to a drop of 186.651 tonnes LWE.

CHART 3

EU SUPPLY BALANCE (2019, LIVE WEIGHT EQUIVALENT, FOOD USE ONLY)

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-575274](#)) and FAO data. Details on the sources and on the methodological approach used for assessing the production method of imports and exports can be found in the Methodological background.

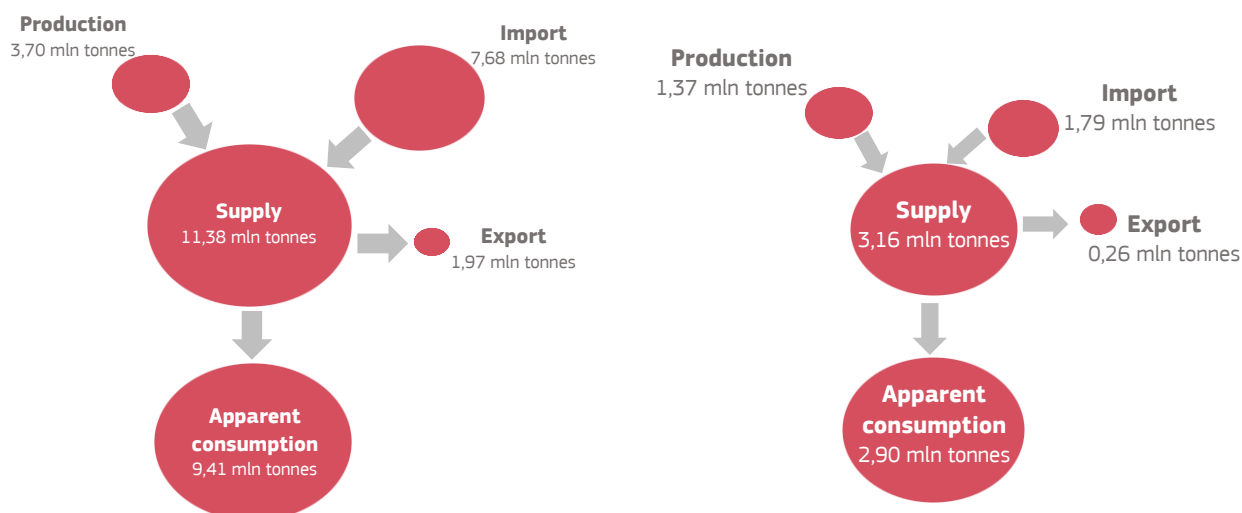
TOTAL FISHERIES AND AQUACULTURE PRODUCTS



³⁵ 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. In 2019, catches for food use and non-food catches³⁶ both registered a decrease from the previous year, mainly due to lower catches of herring that were linked with an overall 35% drop in herring quotas in the North East Atlantic (including the Baltic) that impacted all of its major fishing nations – Denmark, the Netherlands, Sweden, Germany and Poland.

Wild-caught products for food use accounted for 76% of total apparent consumption in 2019. Indeed, the average EU citizen consumed 23,97 kg LWE of fish and seafood, of which 18,33 kg originated from fisheries production and 5,64 kg from aquaculture. However, from 2018 to 2019, per capita apparent consumption of wild products decreased by 3%, reaching its lowest amount since 2012. At the same time, per capita apparent consumption of farmed products registered a 2% increase.

More detailed analyses on apparent consumption can be found in Chapter 3.

TABLE 6

EU PRODUCTION (TONNES, LIVE WEIGHT)

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

		2015	2016	2017	2018	2019
Food use	Catches	4.204.237	4.269.062	4.197.520	4.006.001	3.695.817
	Aquaculture	1.208.263	1.182.219	1.195.516	1.320.117	1.366.682
Total production destined for food use		5.412.500	5.451.281	5.393.036	5.326.118	5.062.499
Non-food use	Catches	1.056.128	857.683	1.227.268	1.347.545	1.128.569

³⁶ Source: Eurostat. For the species considered not to be destined to human consumption, please refer to the Methodological background.

TABLE 7

EU SUPPLY BALANCE FOR FISHERIES AND AQUACULTURE PRODUCTS BY COMMODITY GROUP AND PRODUCTION METHOD (2019, LIVE WEIGHT EQUIVALENT, FOOD USE ONLY)

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-575274](#)) 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	224.786	622.190	204.596	76.924	35.767	18.319	393.616	680.795	1.074.411	0,77	1,33	2,09
Cephalopods	87.756	1	670.052	0	64.735	1	693.073	0	693.072	1,35	0	1,35
Crustaceans	174.185	414	466.617	389.551	136.552	504	504.250	389.461	893.711	0,98	0,76	1,74
Flatfish	156.456	12.994	157.653	1.116	82.071	312	232.038	13.798	245.836	0,45	0,03	0,48
Freshwater fish	98.484	109.404	156.133	216.759	10.025	5.044	244.592	321.118	565.710	0,48	0,63	1,10
Groundfish	630.103	0	2.917.041	478	488.445	0	3.058.698	478	3.059.176	5,96	0	5,96
Miscellaneous aquatic products	80.860	569	325.727	0	48.795	0	357.792	569	358.362	0,70	0	0,70
Other marine fish	286.215	195.677	403.324	112.799	98.358	25.466	591.180	283.009	874.190	1,15	0,55	1,70
Salmonids	14.765	403.000	229.851	989.544	4.148	20.1923	240.467	1.190.621	1.431.088	0,47	2,32	2,79
Small pelagics	1.482.493	0	635.471	0	652.769	0	1.465.194	0	1.465.194	2,86	0	2,86
Tuna and tuna-like species	459.715	22.434	1.512.795	9	346.802	8.838	1.625.708	13.605	1.639.313	3,17	0,03	3,19
Total	3.695.817	1.366.682	7.679.260	1.787.180	1.968.469	260.407	9.406.609	2.893.454	12.300.063	18,33	5,64	23,97

Data as of June 2021. 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 with their own production, can be calculated as the ratio of domestic production over domestic consumption.

In 2019, the EU self-sufficiency for fish and seafood was 41,2%. During the 2010-2019 period, the highest level of self-sufficiency was observed in 2014, which was a record year for EU catches, in particular for catches of mackerel and yellowfin tuna. Since then, self-sufficiency has been following a negative trend which again reflects the downward trend of EU catches and, even more, the increase of imports. On the other hand, 2016 was the year with the highest apparent consumption, due to a good level of production and also high imports, which brought the self-sufficiency rate to 43%.

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

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-575274](#)), FAO, national administrations and FEAP data. Details on the sources used can be found in the Methodological background.

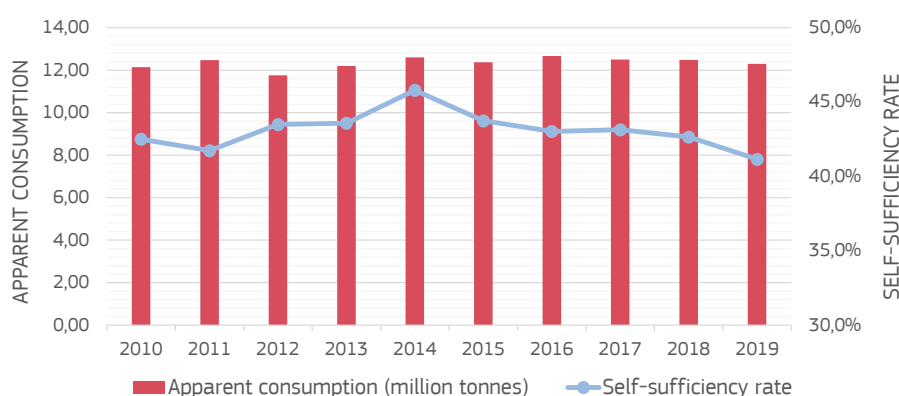


TABLE 8

SELF-SUFFICIENCY RATES BY COMMODITY GROUP

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-575274](#)), FAO, national administrations and FEAP data. Details on the sources used can be found in the Methodological background.

Commodity groups and share of total apparent consumption in 2019	Self-sufficiency rates									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Groundfish (25%)	23%	19%	20%	22%	24%	25%	23%	24%	21%	21%
Tuna and tuna-like species (13%)	21%	23%	26%	29%	34%	27%	28%	28%	33%	29%
Small pelagics (12%)	118%	113%	119%	116%	132%	119%	107%	107%	105%	101%
Salmonids (12%)	35%	33%	31%	31%	29%	28%	27%	29%	27%	29%
Bivalves and other molluscs and aquatic invertebrates (9%)	60%	59%	64%	61%	61%	63%	65%	73%	79%	79%
Crustaceans (7%)	22%	21%	21%	22%	22%	22%	22%	21%	21%	20%
Other marine fish ³⁷ (7%)	55%	56%	68%	67%	65%	63%	61%	59%	56%	55%
Cephalopods (6%)	22%	24%	27%	28%	31%	34%	36%	39%	36%	37%
Freshwater fish (5%)	17%	18%	21%	21%	22%	20%	16%	14%	13%	13%
Miscellaneous aquatic products (3%)	7%	13%	13%	20%	17%	6%	16%	13%	13%	23%
Flatfish (1%)	97%	98%	77%	79%	75%	76%	72%	73%	70%	69%
Total	42,5%	41,7%	43,5%	43,6%	45,8%	43,7%	43,0%	43,1%	42,7%	41,2%

2.2 ANALYSIS BY MAIN SPECIES

As mentioned above, the demand for fish and seafood in the EU mainly relies on imports. Indeed, imports prevail for tuna, salmon, cod, Alaska pollock and shrimps, which are the top five species consumed in the EU. In considering these five species only, the EU had a self-sufficiency of 15% in 2019.

³⁷ 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>.

TABLE 9
SELF-SUFFICIENCY RATES
OF MOST CONSUMED
PRODUCTS IN THE EU
(2019)

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-575274](#)) and FAO data. Details on the sources used can be found in the Methodological background.

Products ³⁸ and share of total apparent consumption	Per capita consumption (kg, live weight equivalent)	Self-sufficiency rate
Tuna (13%)	3,10	29%
Salmon (10%)	2,36	17%
Cod (9%)	2,11	7%
Alaska pollock (7%)	1,67	0%
Shrimps (6%)	1,47	11%
Mussel (5%)	1,23	83%
Hake (4%)	1,02	40%
Herring (4%)	0,98	92%
Squid (3%)	0,62	10%
Surimi ³⁹ (2%)	0,59	n/a
Sardine (2%)	0,58	62%
Mackerel (2%)	0,53	109%
Trout (2%)	0,41	93%
Sprat (=Brisling) (2%)	0,39	113%
Saithe (=Coalfish) (1%)	0,35	17%

GROUND FISH

COD, ALASKA POLLOCK,
HAKE, SAITHE

Four groundfish species, namely cod, Alaska pollock, hake and saithe, had a combined per capita consumption total of 5,15 kg LWE in 2019. This accounted for more than one-fifth of the total EU apparent consumption of fisheries and aquaculture products. As all Alaska pollock available in the EU is imported, Member States are completely dependent on non-EU countries to meet their demand.

The total EU self-sufficiency for the other three species of this group was 18% in 2019. Cod, which is one of the most highly consumed species in the EU, dropped to a self-sufficiency of 7%, the lowest of the 10-year period analysed, mainly due to a drop in UK catches.

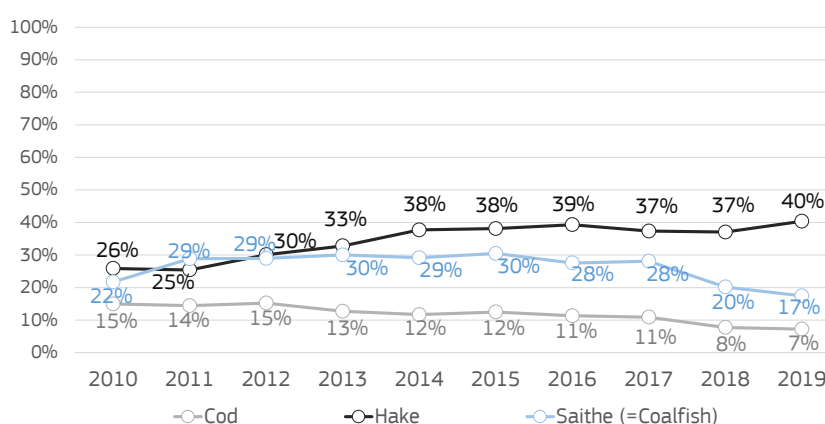
Saithe also continued to drop, registering its lowest level of self-sufficiency at 17%. In this case, the decline was caused by increased apparent consumption relying on imports while EU catches were decreasing.

On the other hand, thanks to increased Spanish production, the EU self-sufficiency for hake reached a 10-year peak of 40%.

CHART 5

SELF-SUFFICIENCY RATE
FOR MOST CONSUMED
GROUND FISH

Source: EUMOFA, based on EUROSTAT data (online data codes [fish_ca_main](#) and [DS-575274](#)). Details on the sources used can be found in the Methodological background.



³⁸ 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).

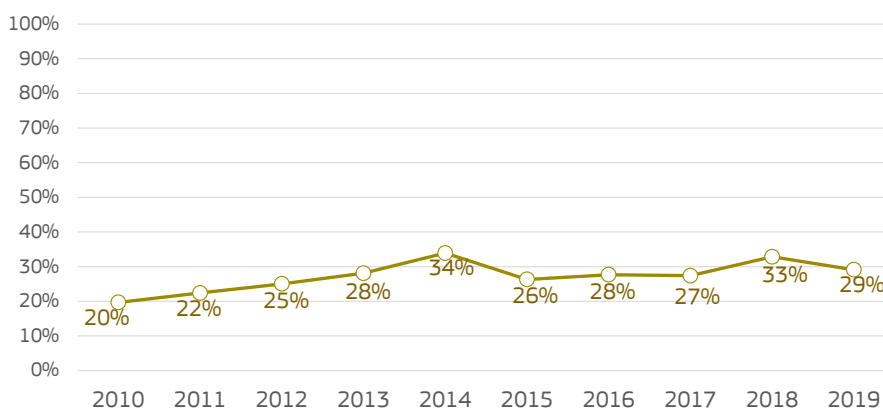
³⁹ As surimi is made of different species and there are no statistics specifically referring to surimi production, the self-sufficiency rate cannot be calculated for this product.

TUNA 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 29% in 2019, which is the same level as considering only tuna species.

Specifically for tuna, Autonomous Tariff Quotas (ATQs) increased in 2014. This followed the establishment of free trade agreements with major producing countries which contributed to the higher imports. Consequently, due to increased imports of yellowfin and skipjack tuna, the level of self-sufficiency dropped in 2015 and remained stable at an average of 27% until 2017. In 2018, it rose again to reach 33%, driven by increased catches of skipjack tuna by the Spanish and French fleets, and also due to reduced imports. From 2018 to 2019, these catches plummeted, causing a new decrease in terms of self-sufficiency.

CHART 6
SELF-SUFFICIENCY RATE
FOR TUNA

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-575274](#)) and FAO data. Details on the sources used can be found in the Methodological background.



SMALL PELAGICS

HERRING, MACKEREL
SARDINE, SPRAT

Of the volumes of all fisheries and aquaculture products produced in the EU, small pelagics accounted for 30% in 2019, with more than 2 million tonnes. This is much higher than EU imports of small pelagic species, which totalled just above 630.000 tonnes LWE in the same year, meaning the EU is fully capable of meeting the overall EU demand for these products.

As for herring during the decade under analysis, the EU was completely independent in terms of supplies from abroad in 2014 and 2015, with a self-sufficiency of 100% or higher. Lower self-sufficiency rates were registered in 2010 and 2011, because of lower production and higher imports. In 2019, the EU self-sufficiency for this species decreased to 92%, its lowest level in seven years. This was due to the drop of herring quotas in the North East Atlantic which meant decreased catches.

As regards mackerel and sprat, the EU is fully capable of meeting the overall EU demand, showing self-sufficiency rates above 100% throughout the decade under analysis.

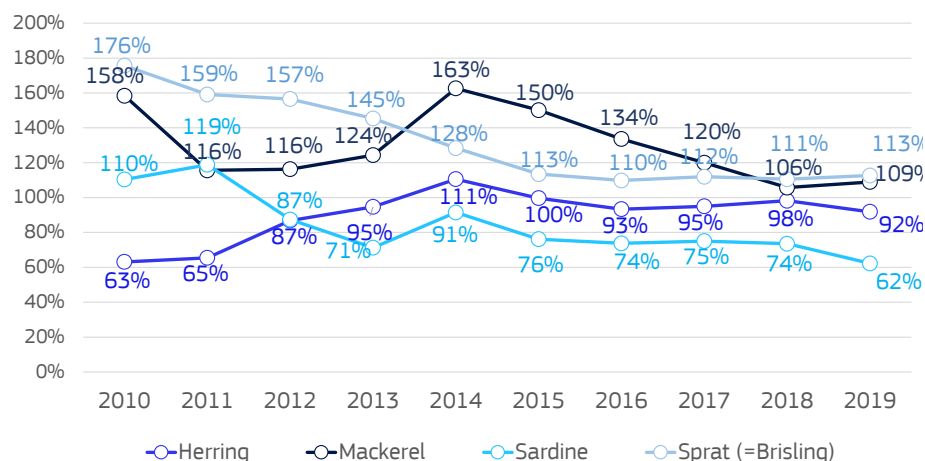
For sprat in particular, imports were negligible compared with production, thus the self-sufficiency is only based on the balance between production and exports. From 2013 to 2016, it began a downward trend but, considering that production remained stable at around 200.000 tonnes during the period, this was merely due to reduced exports causing increased availability of sprat for EU consumers. From 2017 to 2019, it averaged 112% without showing significant changes from one year to the other.

On the other hand, mackerel followed a negative trend of self-sufficiency from 2014 to 2018, which was linked to both reduced catches and increased imports. In 2019, despite catches being at their lowest level in six years, the self-sufficiency slightly increased from 2018, thanks to decreased imports.

As for sardine, its EU self-sufficiency has been declining from the peak it achieved in 2011, due to halving production. Its main production reductions were in the Netherlands, Lithuania, Portugal, Poland and Spain. In particular, the drop from 2018 to 2019 was due to decreased German catches.

CHART 7
SELF-SUFFICIENCY RATE
FOR MOST CONSUMED
SMALL PELAGICS

Source: EUMOFA, based on EUROSTAT data (online data codes: [fish_ca_main](#) and [DS-575274](#)). Details on the sources used can be found in the Methodological background.



SALMONIDS

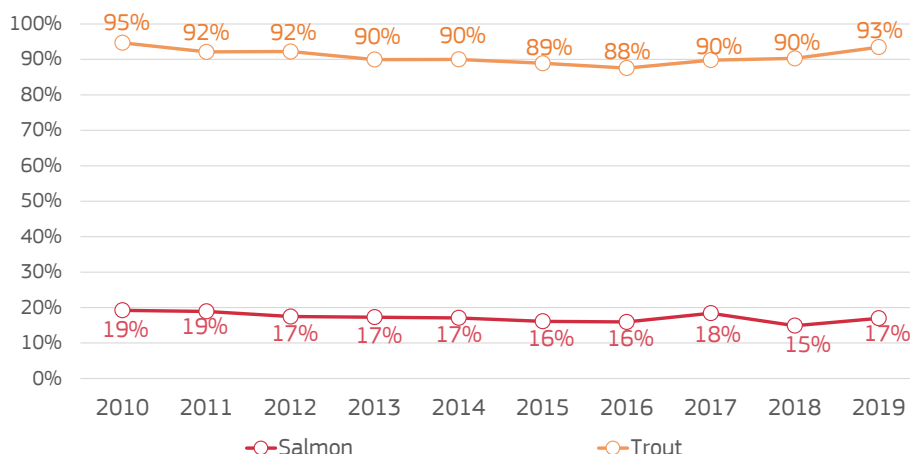
SALMON, TROUT

In 2019, 17% of the salmon consumed in the EU was produced internally. This represented an increase of self-sufficiency compared with 2018, which was made possible by increased production in the UK and decreased imports⁴⁰.

For trout⁴¹, the EU maintained a 91% self-sufficiency average during the 2010-2019 decade. The highest levels were in 2010 and 2019, when production was at its maximum.

CHART 8
SELF-SUFFICIENCY RATE
FOR MOST CONSUMED
SALMONIDS

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-575274](#)), FAO, national administrations and FEAP data. Details on the sources used can be found in the Methodological background.



OTHER PRODUCTS

SHRIMPS, MUSSELS,
SQUID, SURIMI

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

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

Mussel is one of the few most consumed species for which the EU has a high level of self-sufficiency. From 2010 to 2019, its level averaged 80%, mainly due to aquaculture production in Spain.

On the other hand, the EU is highly dependent on imports of shrimps and squid. The self-sufficiency for shrimps averaged 11% in the 10-year period analysed, without showing notable variations. The most consumed shrimp species (mainly supplied through imports) are warmwater shrimps and Argentine red shrimp, in the form of frozen or prepared/preserved products.

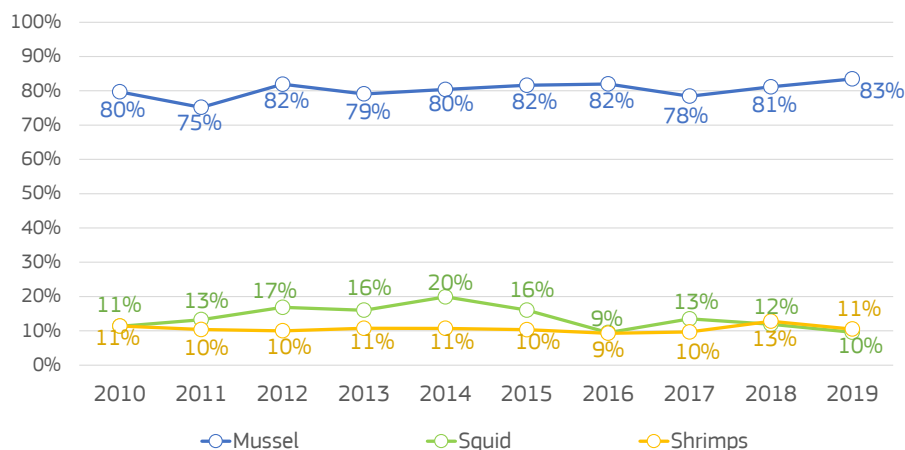
⁴⁰ Imports of salmon consist of both farmed and wild salmon, with the vast majority being farmed.

⁴¹ This consists of freshwater and ocean farmed trout.

As for squid, its self-sufficiency of 10% in 2019 was just slightly higher than the 9% it registered back in 2016. The drop from the 20% peak it reached in 2014 to 9% in 2016 was due to the combined effect of decreased production and increased imports. Then a recovery was observed in 2017, when production and imports followed opposite trends with respect to the previous year, thus raising self-sufficiency to 13%. The evolution of this rate was driven by the Spanish fleet's catches of the main squid species, namely Patagonian squid (*Loligo gahi*). In 2015 and 2016, the catches were significantly lower than in 2014, but they rose again in 2017. On the other hand, from 2018 to 2019, the self-sufficiency decline was mainly linked with reduced Spanish catches of Argentine shortfin squid (*Illex argentinus*).

CHART 9
SELF-SUFFICIENCY RATE
FOR OTHER MOST
CONSUMED PRODUCTS

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-575274](#)) and FAO data. Details on the sources used can be found in the Methodological background.



3/ CONSUMPTION

3.1 OVERVIEW FOR TOTAL FISHERY AND AQUACULTURE PRODUCTS

APPARENT CONSUMPTION

With 23,97 kg LWE, in 2019 per capita apparent consumption reached its lowest amount in ten years.

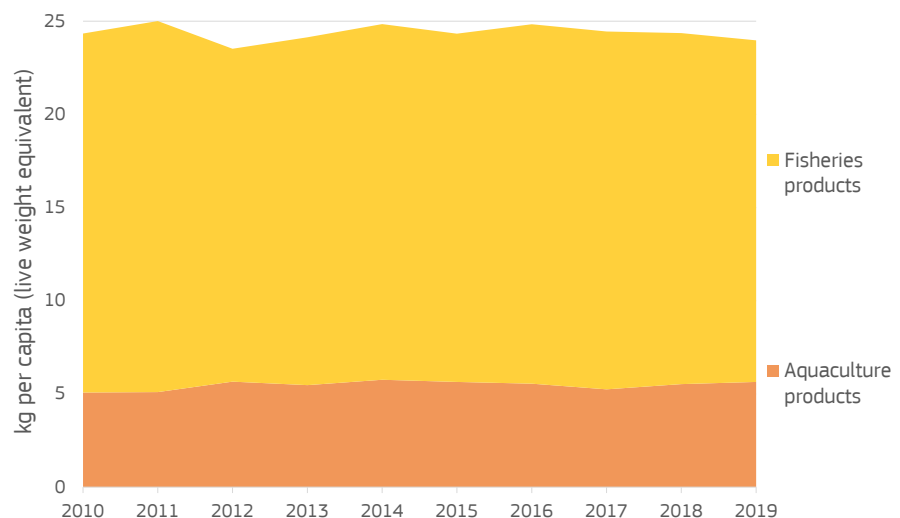
In 2019, apparent consumption⁴² of fishery and aquaculture products in the EU dropped to 12,30 million tonnes LWE, continuing a decreasing trend that began in 2017. Of this, wild products accounted for 76% or 9,41 million tonnes LWE, and farmed products for 24% or 2,89 million tonnes LWE.

Overall, EU apparent consumption decreased by 1% or almost 187.000 tonnes LWE from 2018 to 2019. The drop was driven by a decrease in catches and, thus, in apparent consumption of wild products, especially of herring.

At the same time, the per capita apparent consumption dropped more than 390 grams LWE from 2018, reaching 23,97 kg LWE, which represented its lowest amount of the decade under analysis. Of this, 18,33 kg LWE were wild products and 5,64 kg LWE were farmed products.

CHART 10 PER CAPITA APPARENT CONSUMPTION OF FISHERY AND AQUACULTURE PRODUCTS

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-575274](#)), FAO, national administrations and FEAP data. Details on the sources and on the methodological approach used for assessing the production method of imports and exports can be found in the Methodological background.



According to EUMOFA and national estimates, Portugal stands out as the major EU consumer of fishery and aquaculture products⁴³. This was confirmed in 2019, although apparent consumption decreased from 2018 due to decreased imports (and thus supply) and increased exports.

In contrast with the negative trend at EU level, Latvia registered a 59% increase, the most significant increase of per capita apparent consumption from 2018 to 2019.

⁴² The definition of “apparent consumption” is available in the “Supply balance sheet” section of the Methodological background.

⁴³ It is worth underlining that the methodologies for estimating apparent consumption at EU and Member State levels are different, the first based on data and estimates as described in the Methodological background, the latter also requiring the adjustment of abnormal trends due to the higher impact of stock changes.

CHART 11
 PER CAPITA APPARENT
 CONSUMPTION OF
 FISHERY AND
 AQUACULTURE
 PRODUCTS BY MEMBER
 STATE IN 2019 AND
 % VARIATION 2019/2018

Source: EUMOFA estimates.
 *Data are provided by the following
 National sources: BMEL-Statistik
 (Germany), CZSO Czech Statistical
 Office (Czechia), Estonian Institute of
 Economic Research (Estonia),
 Centrālā statistikas pārvalde (Latvia),
 Dutch Fish Marketing Board
 (Netherlands) and
 Statistics Poland (Poland).
 **Estimates for Denmark were not
 confirmed by the
 National contact point.
 ***OECD forecast was used
 for the UK.

Note:
 Given the significant relevance of
 imports of frozen fish likely used as
 fishmeal in the Maltese bluefin tuna
 fattening industry, and given the
 increasing imports of live tuna for
 fattening purposes, available data
 and information for Malta do not
 allow to produce precise estimates.
 However, annual per capita apparent
 consumption can be estimated
 between 30-40 kg LWE.

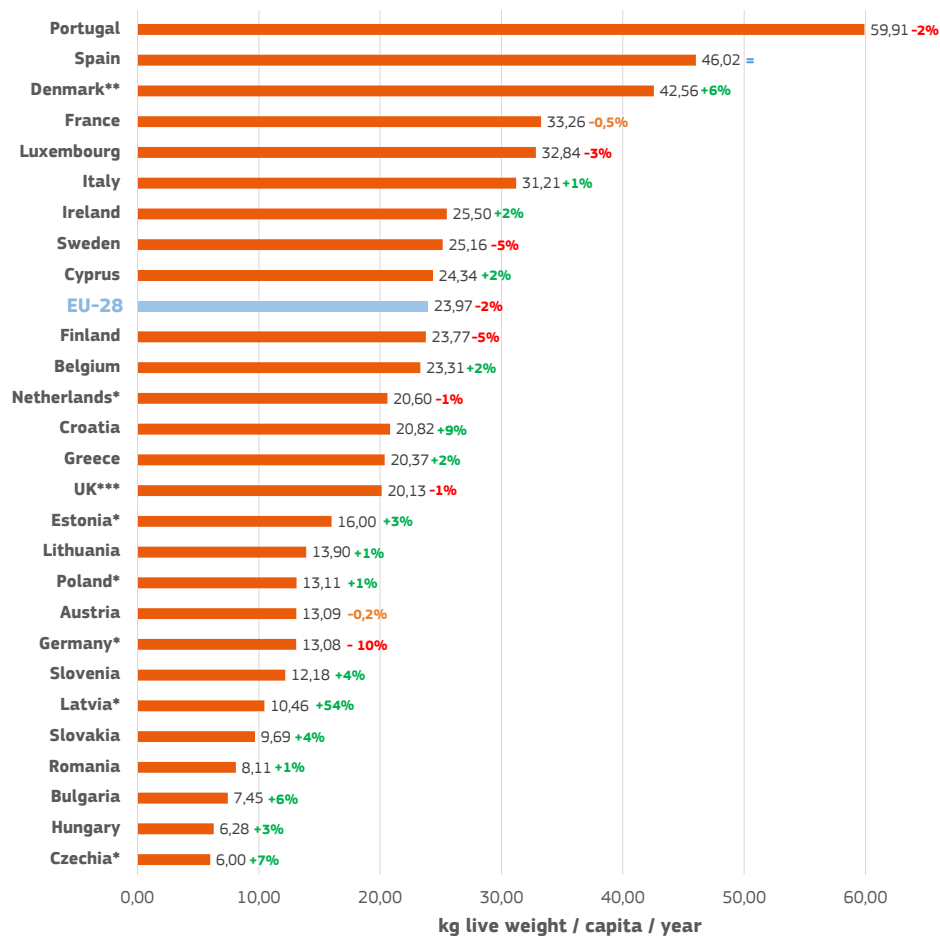


TABLE 10
 APPARENT CONSUMPTION
 OF MOST CONSUMED
 PRODUCTS (2019)

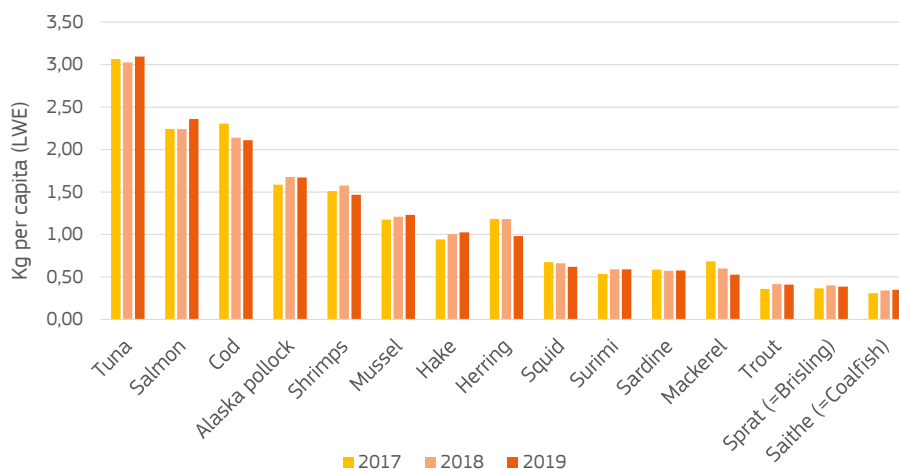
Source: EUMOFA, based on
 EUROSTAT (online data codes:
[fish_aq2a](#), [fish_ca_main](#) and
[DS-575274](#)) and FAO data.
 Details on the sources and on
 the methodological approach
 used for assessing the
 production method of imports
 and exports can be found in the
 Methodological background.

Products	Per capita consumption (kg, LWE)	Consumption evolution 2019/2018	% wild	% farmed
Tuna	3,10	+2%	99,14%	0,86%
Salmon	2,36	+5%	19,04%	80,96%
Cod	2,11	-1%	99,96%	0,04%
Alaska pollock	1,67	-0,4%	100%	0%
Shrimps	1,47	-7%	48,60%	51,40%
Mussel	1,23	+2%	20,37%	79,63%
Hake	1,02	+2%	100%	0%
Herring	0,98	-17%	100%	0%
Squid	0,62	-6%	100%	0%
Surimi	0,59	-0,2%	100%	0%
Sardine	0,58	+1%	100%	0%
Mackerel	0,53	-12%	100%	0%
Trout	0,41	-2%	1,73%	98,27%
Sprat (=Brisling)	0,39	-4%	100%	0%
Saithe (=Coalfish)	0,35	+2%	100%	0%
Other products	6,58	-2%	76,19%	23,81%
Total	23,97	-2%	76,48%	23,52%

ANALYSIS
BY MAIN SPECIES

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

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-575274](#)) and FAO data. Details on the sources used can be found in the Methodological background.



TUNA

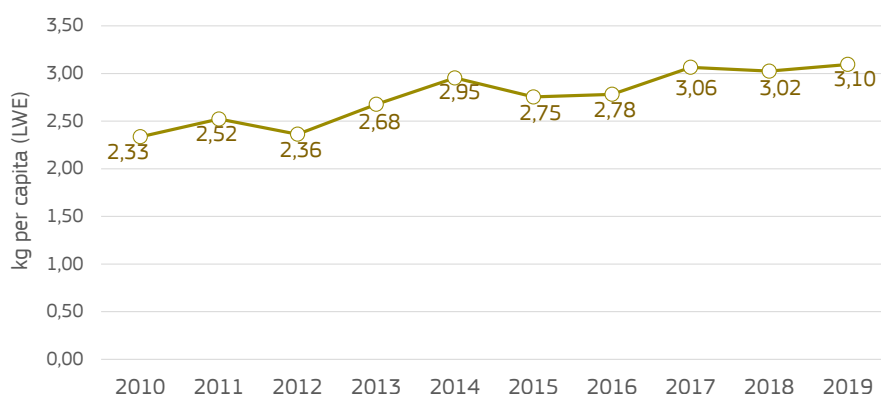
During the 2010-2019 decade, none of the fishery and aquaculture products consumed in the EU reached a level of annual apparent consumption higher than 3 kg LWE per capita until 2017, when tuna reached 3,06 kg LWE per capita. Since then, it first showed a slight decline in 2018, when consumption was at 3,02 kg LWE per capita, but then rose again in 2019 to achieve its highest level ever recorded, namely 3,10 kg LWE per capita. This largely included canned tuna and, more specifically, skipjack tuna whose consumption reached 1,81 kg LWE per capita in 2019, and yellowfin tuna whose consumption reached 790 grams LWE.

EU consumption of tuna is largely supported by imports, but there is also internal production, mainly consisting of Spanish and French catches. However, a significant share of these Spanish and French catches is landed abroad close to fishing areas, further processed there and then re-exported.

The 10% increase in per capita consumption from 2016 to 2017 was indeed driven by both increased imports and catches, which both showed growth of 9% in that period. On the other hand, the most recent increase of 2% per capita consumption from 2018 to 2019 was only linked to an import increase of 3%, as catches declined by 9% in the same period.

CHART 13
APPARENT CONSUMPTION
OF TUNA

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-575274](#)) and FAO data. Details on the sources used can be found in the Methodological background.



GROUNDFISH

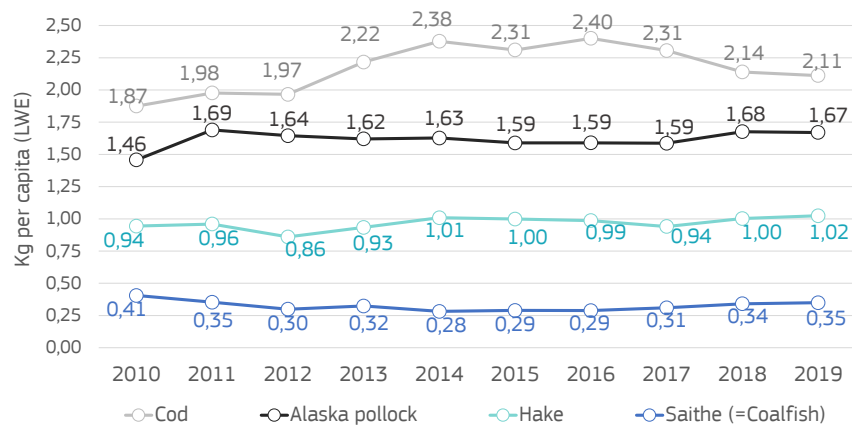
**COD,
ALASKA POLLOCK, HAKE,
SAITHE (=COALFISH)**

Four groundfish species account for more than one fifth of EU apparent consumption of fishery and aquaculture products: cod, Alaska pollock, hake, and saithe (= coalfish). EU cod consumption is mainly supplied by imports. It has been decreasing since its 2016 peak of 2,40 kg LWE per capita, due to a decline in catches and also in imports. Alaska pollock faced reduced availability in the EU market in 2010, due to US fishing quotas being reduced to around 950.000 tonnes on average. However, the US fishing quota recovered in 2011, increasing to 1.367.000 tonnes, and apparent consumption in the EU returned to its previous level. In the decade analysed, the highest levels of apparent consumption were in 2011 (1,69 kg LWE per capita), 2018 (1,68 kg) and 2019 (1,67 kg), which corresponded to import peaks.

Consumption of hake and saithe remained almost stable from 2010 to 2019, with hake at around 1 kg LWE per capita and saithe at 300 grams LWE per capita, which was in line with a flat trend of both imports and production.

CHART 14
APPARENT CONSUMPTION
OF MOST CONSUMED
GROUNDFISH

Source: EUMOFA, based on EUROSTAT data (online data codes [fish_ca_main](#) and [DS-575274](#)). 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, the most consumed among these species, also has the highest volatility in catches. In 2019, per capita apparent consumption of herring touched one of the lowest levels of the decade analysed, dropping to 980 grams LWE per capita. The drop from 2018 was due to drops in herring catches, which were linked with an overall 35% drop in herring quotas in the North East Atlantic (including the Baltic) that impacted all of its major fishing nations – Denmark, the Netherlands, Sweden, Germany and Poland. On the other hand, apparent consumption had reached 1,26 kg LWE per capita in 2016, the highest of the decade analysed, when catches destined for food use⁴⁴ reached peaks in two of the largest producers, namely Denmark and Sweden.

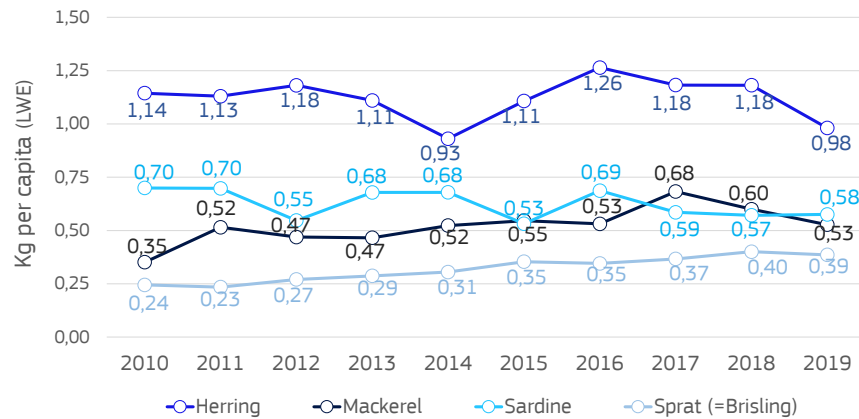
As for mackerel, sardine and sprat, their annual consumption per capita during the decade remained lower than 1 kg LWE. While sardine and sprat consumption did not show significant change from 2018 to 2019, mackerel registered a 12% decrease, which was due to the plummet of Spanish catches from 2018 to 2019.

⁴⁴ Amounts of catches not destined for human consumption were estimated using proxies based on destination use of landings, as available in EUROSTAT.

CHART 15

APPARENT CONSUMPTION OF MOST CONSUMED SMALL PELAGICS

Source: EUMOFA, based on EUROSTAT data (online data codes: [fish_ca_main](#) and [DS-575274](#)). Details on the sources used can be found in the Methodological background.



SALMONIDS

SALMON, TROUT

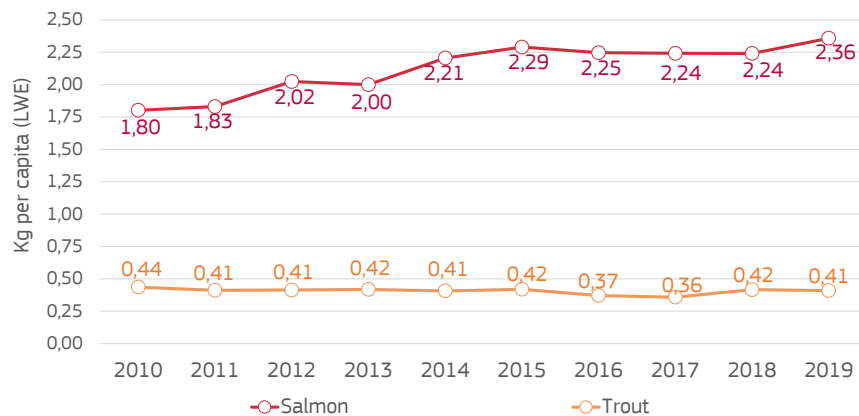
Salmon is by far the most-consumed farmed species in the EU⁴⁵: in 2019, it accounted for more than one third of the total apparent consumption of aquaculture products.

Thanks to a boost of UK aquaculture production, total apparent consumption of both wild and farmed salmon reached a 10-year peak of 2,36 kg LWE per capita in 2019. Apparent consumption of trout in the EU remained around 400 grams LWE per capita each year of the decade analysed, in line with an almost flat trend of the volumes farmed in main producing Member States.

CHART 16

APPARENT CONSUMPTION OF MOST CONSUMED SALMONIDS

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-575274](#)) and FAO data. Details on the sources used can be found in the Methodological background.



OTHER PRODUCTS

SHRIMPS, MUSSEL, SQUID, SURIMI

Shrimps consumption includes equal shares of wild-caught and farmed products. It largely relies on supplies from Ecuador, India, Vietnam, Thailand, Indonesia, Argentina, and Greenland. In 2019, with 1,47 kg LWE per capita, apparent consumption of shrimps in the EU registered a 7%-decline from 2018, when it had reached one of its highest levels of the decade analysed. The decline was linked with decreased supply from catches and imports, as well as increased exports.

After salmon, mussels are the main farmed product consumed in the EU, mostly supplied by Spanish production. Indeed, the recovery of total wild and farmed mussels consumption had started in 2014, with Spain's aquaculture recovering from a collapse caused by "red tide" or algae blooms in 2013. In most recent years (2018-2019), apparent consumption of mussels was slightly above 1,20 kg LWE per capita, of which 80% consisting of farmed mussels and 20% of wild mussels.

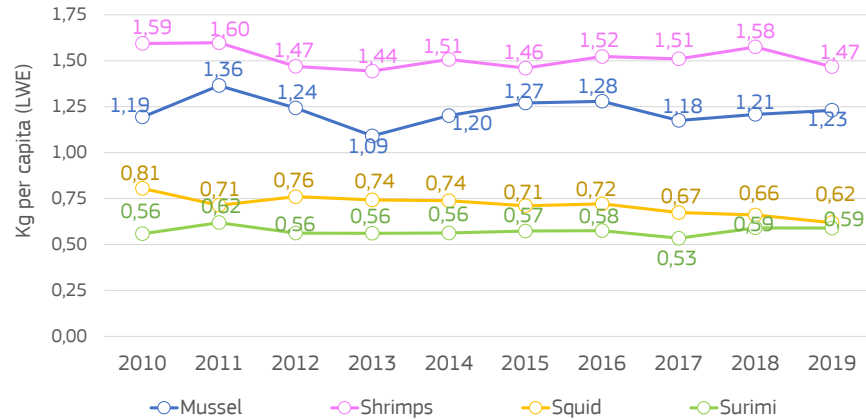
As for squid, apparent consumption in 2019 of 620 grams LWE per capita was the lowest of the 10-year period analysed. The drop from 2018 was due to the halving of Spanish catches in the same two-year period.

⁴⁵ To be noted, apparent consumption of salmon actually ranks first when considering total apparent consumption of both wild and farmed products. However, in this chapter, "tuna" includes several tuna species, so total apparent consumption of "tuna" is higher than that of salmon.

Finally, for surimi, no statistics specifically referring to its production are available, as it is made of different species. Therefore, apparent consumption is calculated as the result of imports *minus* exports. In both 2018 and 2019, per capita apparent consumption of surimi in the EU was 590 grams LWE, largely comprising surimi imported from the United States.

CHART 17
APPARENT CONSUMPTION
OF OTHER MOST
CONSUMED PRODUCTS

Source: EUMOFA, based on EUROSTAT (online data codes: [fish_aq2a](#), [fish_ca_main](#) and [DS-575274](#)) and FAO data. Details on the sources used can be found in the Methodological background.



HOUSEHOLD
EXPENDITURE
AND PRICES

In 2020, household expenditure on fishery and aquaculture products in the EU-27 reached EUR 59,7 billion.

While this represented an increase of 17% from the year before, it also represented a decade increase of 26% when compared with 2011, with inflation effects taken into account⁴⁶.

Households of all EU countries, with the exception of Finland and Estonia, spent more on fishery and aquaculture products in 2020 than in 2019.

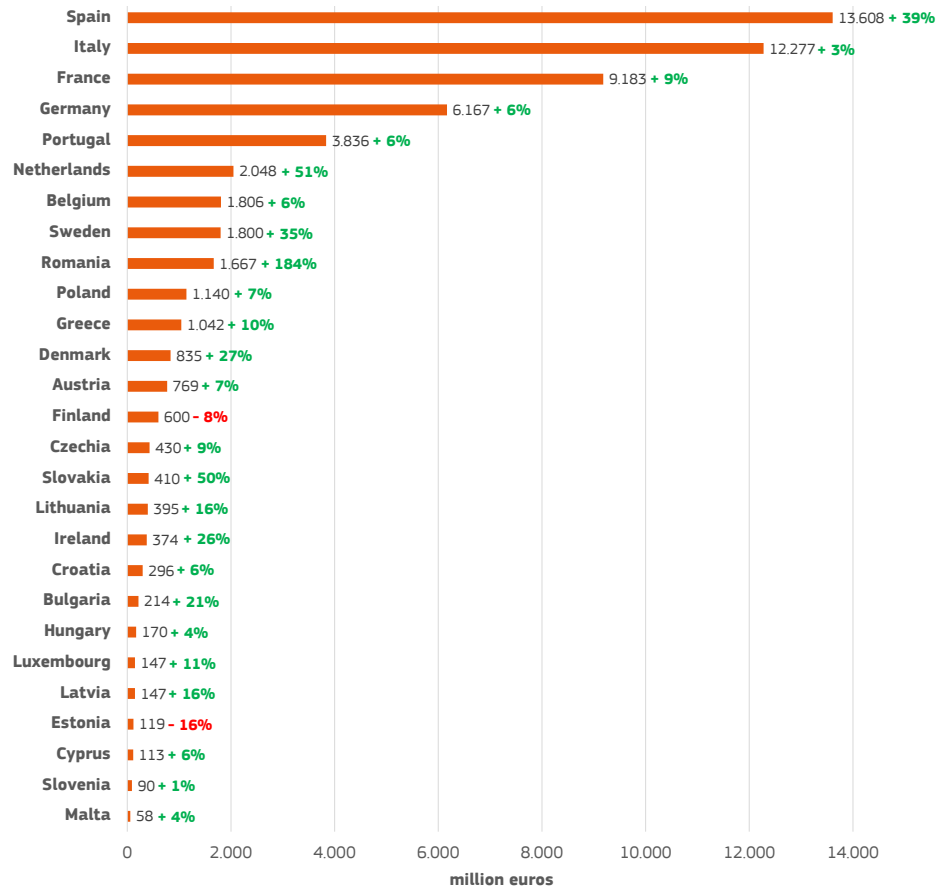
In absolute terms, Spain recorded the highest increase of total expenditure, rising 39%, from EUR 9,8 billion to EUR 13,6 billion, which also made it the EU country with the highest total expenditure on fish.

⁴⁶ In this report, value and price variations for periods longer than 5 years are analysed by deflating values using the GDP deflator (base=2015); for shorter periods, nominal value and price variations are analysed.

CHART 18
HOUSEHOLD NOMINAL
EXPENDITURE ON
FISHERY AND
AQUACULTURE
PRODUCTS IN 2020 AND
% VARIATION 2020/2019
(out-of-home
consumption is excluded)

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

*In 2020, Spain
became the first
ranked in the EU for
total household
expenditure on fish.*

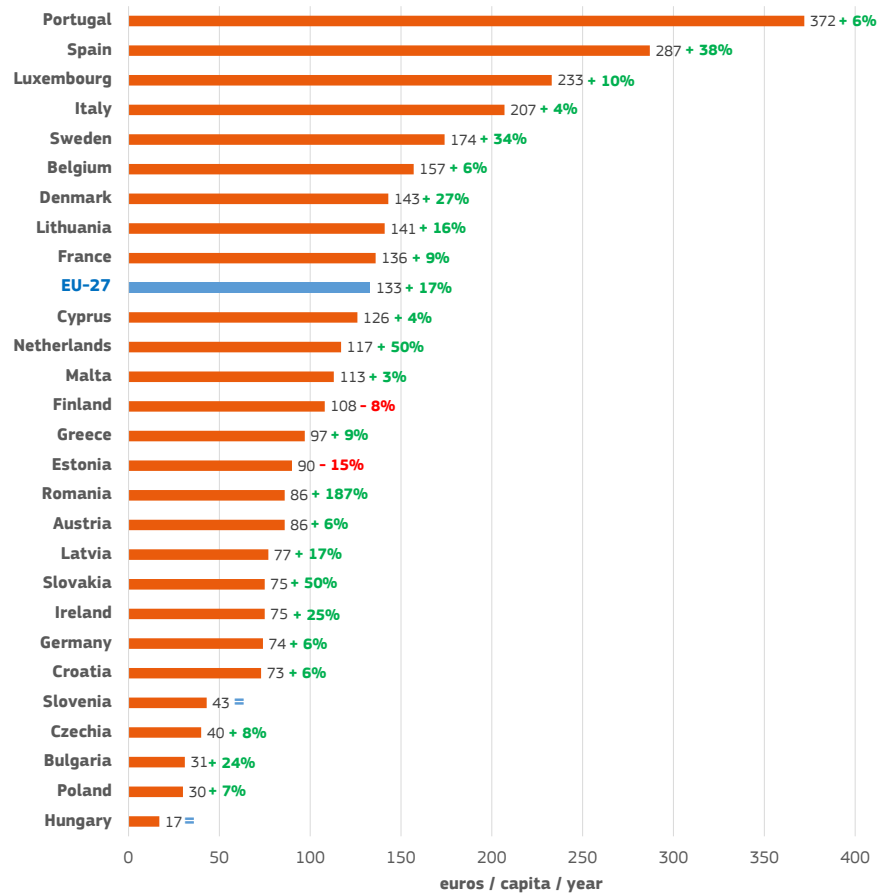


Spain also had the highest increase in per capita expenditure in absolute terms, with a growth of EUR 79 from 2019 to 2020 (from EUR 208 to EUR 287).

However, the EUR 371 spent by individuals in Portugal, historically the largest EU consumers of fishery and aquaculture products, was almost triple the EU-27 average of EUR 133.

CHART 19
PER CAPITA HOUSEHOLD
NOMINAL EXPENDITURE
ON FISHERY AND
AQUACULTURE
PRODUCTS IN 2020 AND
% VARIATION 2020/2019
(out-of-home
consumption is excluded)

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



FISHERY AND
AQUACULTURE
PRODUCTS VS.
MEAT AND FOOD IN
GENERAL

In all EU countries, expenditure on fishery and aquaculture products is lower than expenditure for meat. This is also the case when it comes to volumes consumed⁴⁷. On average, EU households spend around one quarter of the amount spent on meat for purchasing fishery and aquaculture products. In 2020, they spent EUR 222 billion on meat and EUR 59,7 billion on fish.

Of all the Member States, the ratio between the two categories is most balanced in Portugal. In 2020, of the total amount Portuguese households spent for fish and meat, fish accounted for 45% while meat accounted for 55%.

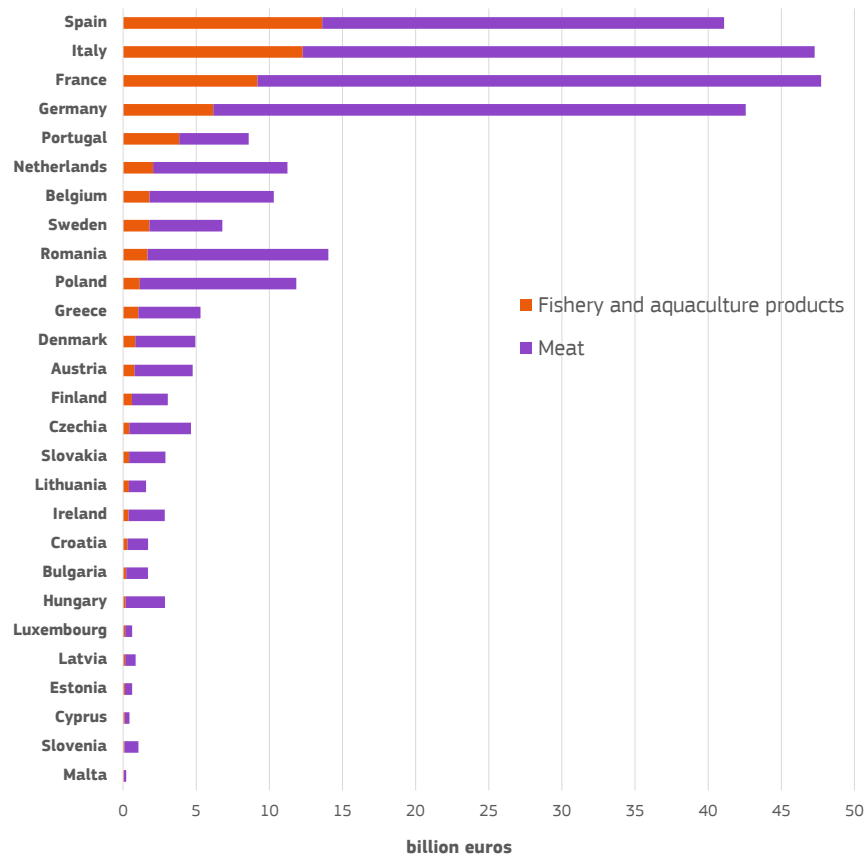
The greatest imbalances were seen in Hungary, which spent 6% for fishery and aquaculture products, and Czechia and Slovenia, where households spent 9% of the total for fish.

In the four countries with highest consumption of fish – namely Spain, Italy, France and Germany – different habits were observed. In Spain, the amount households spent on fish was only half the amount they spent on meat. In Italy, the expenditure on fish was one third the expenditure on meat. In France, households spent less than one fourth on fish compared with meat and in Germany, it was around one sixth.

⁴⁷ This is confirmed by OECD (link: https://stats.oecd.org/viewhtml.aspx?datasetcode=HIGH_AGLINK_2019&lang=en#)

CHART 20
HOUSEHOLD NOMINAL EXPENDITURE ON FISHERY AND AQUACULTURE PRODUCTS VS. MEAT IN THE EU IN 2020 (out-of-home consumption is excluded)

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



During the 2011-2020-decade, consumer prices of fishery and aquaculture products increased an average of 2,3% per year, a higher growth rate than the 1,7% recorded for the prices of meat and of all food products in general⁴⁸.

Average fish prices began to grow significantly, especially in 2016, and by 2020, they were 22% higher than in 2011 in real terms. This was in line with increased prices of imported products, as the EU demand for fishery and aquaculture products is primarily met through imports. The prices of meat and food also grew during the same period, but at much lower rates.

It is also interesting to note that from 2019 to 2020, expenditure on fishery and aquaculture products grew by a remarkable 17%, which was much higher than the 2,1% inflation of prices for fishery and aquaculture products. This was not the case in 2019 when expenditure grew 1,8% from 2018, and was in line with the 1,7% inflation. This could suggest that the expenditure increase that was seen from 2018 to 2019 could have been mainly linked to inflation effects, and that EU households had indeed purchased more fishery and aquaculture products in 2020 than in 2019. This has been confirmed by Europanel, Kantar and GfK data on household consumption of fresh fish in the EU's largest consuming countries, which showed an increase of 7% in value and 4% in volume from 2019 to 2020. This increase was most likely due to the closings in the HoReCa sector due to the COVID-19 pandemic, and the consequent increase in at-home consumption.

⁴⁸ This thus includes fish and meat as well.

CHART 21
CONSUMER PRICES
INDICES
(2015=100)

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

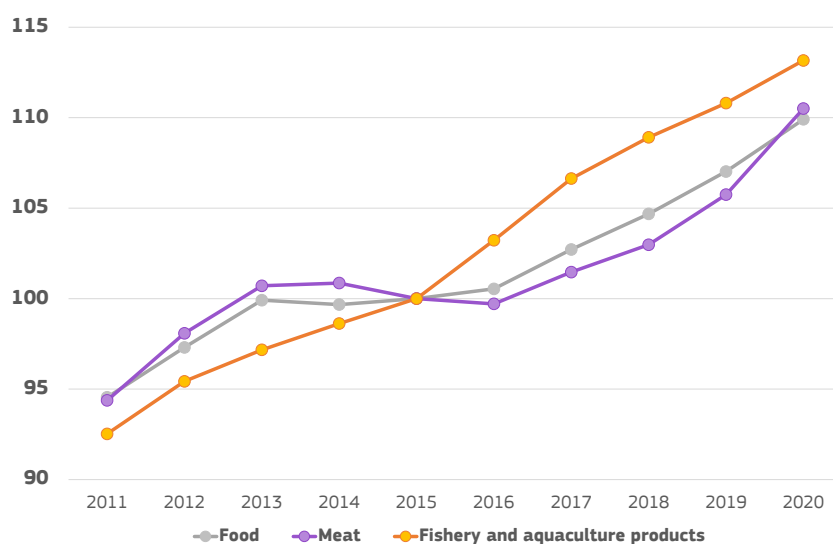


TABLE 11
YEARLY EVOLUTION OF
CONSUMER PRICES

SOURCE: EUROSTAT
 (ONLINE DATA CODE:
[PRC_FSC_IDX](#))
 HARMONISED INDEX OF
 CONSUMER PRICES
 HICP. INDEX, 2015=100.

Sector	2016	2017	2018	2019	2020	2020/2016
Food	+0,5%	+2,2%	+1,9%	+2,2%	+2,7%	+9,3%
Meat	-0,3%	+1,8%	+1,5%	+2,7%	+4,5%	+10,8%
Fishery and aquaculture products	+3,2%	+3,3%	+2,1%	+1,7%	+2,1%	+9,6%

RELEVANCE BY PRESERVATION STATE

With regard to statistics concerning household expenditure for fishery and aquaculture products, Eurostat provides “*shares of the total household final monetary consumption expenditure*”⁴⁹ for four preservation states, which are listed in Table 12.

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

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

Category	2019	2020
FOOD (Meat + FAPs + Other food)	14,483%	14,593%
Meat	3,479%	3,548%
Fishery and aquaculture products	0,902%	0,902%
<i>Fresh or chilled</i>	48%	48%
<i>Frozen</i>	20%	20%
<i>Dried, smoked or salted</i>	10%	10%
<i>Other preserved or processed and preparations</i>	22%	22%
Other food	10,102%	10,143%
OTHER GOODS AND SERVICES	85,517%	85,407%
TOTAL GOODS AND SERVICES	100%	100%

⁴⁹ Metadata are available at https://ec.europa.eu/eurostat/cache/metadata/en/prc_hicp_esms.htm.

Of all goods and services purchased by EU households, fishery and aquaculture products cover less than 1%, which amounts to between one third and one fourth of the 3,5% relevance of meat.

From 2019 to 2020, the share of expenditure on fishery and aquaculture products did not vary, while that spent on meat did, which thus contributed to an increase in the share of expenditure on food in general. The steadiness for fishery and aquaculture products was also observed at preservation state's level.

Looking at country level, the most significant changes were in Spain and Finland. In Spain, the share on fish grew from 21,9% to 22,9%, thanks to increases for all preservation categories; in Finland, it decreased from 8,0% to 6,9% mainly due to decreases for "fresh/chilled" products as well as for the category "dried, smoked or salted".

In Portugal, the country with the highest share of expenditure on fishery and aquaculture products in the EU, it decreased from 31,6% to 30,8%, largely due to the decrease seen in the category "dried, smoked or salted".

3.2 HOUSEHOLD CONSUMPTION OF FRESH FISHERY AND AQUACULTURE PRODUCTS

OVERVIEW

In 2020, household consumption of fresh fishery and aquaculture products reached 1,44 million tonnes for a value of EUR 14 billion

The household consumption⁵⁰ of fresh fishery and aquaculture products is analysed for 11 EU Member States, namely Germany, Denmark, Spain, France, Hungary, Ireland, Italy, the Netherlands, Poland, Portugal and Sweden. To be noted, it can be assumed that these are major countries in terms of fish consumption as in 2020, they accounted for 86% of the total EU expenditure on fishery and aquaculture products⁵¹.

During the five-year period under analysis (2016-2020), consumption in these countries decreased in volume up to 2018, when a slow recovery started. However, the 2020 total volumes were lower than in 2016, even if slightly, amounting to a total of 1,44 million tonnes, which was 1% or 19.856 tonnes less than five years before. At the same time, other than a temporary decrease from 2017 to 2018, the value recorded a positive trend, and by 2020, reached a five-year peak of EUR 14 billion.

In 2020, only two countries – Ireland and Italy – reported negative trends in terms of both value and volume compared 2019. All others saw increased consumption at home, which could also be linked to COVID-19 quarantine measures.

Indeed, as also analysed in § 3.3, almost all EU countries recorded a drop in out-of-home consumption of fishery and aquaculture products, accompanied by a strong growth in household consumption. This most likely has to do with the switch in demand due to the COVID-19 pandemic, as consumption through the foodservice has to a large extent been shifted to retail sales.

The ranking of the analysed countries remained stable from 2016 to 2020, with the major consumers of fresh products at home being Spain, Italy, France, Germany, Netherlands, Portugal and Poland.

Salmon was the most consumed species in six of the countries analysed, namely Denmark, France, Germany, Ireland, Netherlands and Sweden⁵². Indeed, its consumption grew at an average yearly growth rate of 9% in both volume and value during 2017-2019, and increased a sharp 23% in volume and 18% in value from 2019 to 2020. As

⁵⁰ Data analysed in this chapter originate from representative household panels that record volumes and values of every item purchased. More details can be found in the Methodological background.

⁵¹ 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.

⁵² For Hungary, total consumption is monitored without details by species.

for the other four countries – Hungary, Italy, Poland and Portugal – the top species consumed are detailed in the following paragraphs.

TABLE 13

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

Source: EUMOFA, based on Europanel, Kantar and GfK data

Member state	2016		2017		2018		2019		2020		2020 / 2019	
	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume
Denmark	158.014	10.579	161.567	10.276	183.761	11.465	199.942	12.177	225.852	13.605	13%	12%
Germany	725.836	53.041	746.633	54.150	748.654	52.768	798.808	53.700	989.045	64.349	24%	20%
Ireland	192.502	13.667	177.548	12.319	187.605	12.799	192.817	13.110	177.652	11.945	-8%	-9%
Spain	4.913.212	666.055	4.826.921	629.317	4.644.167	601.267	4.696.180	590.559	5.326.492	645.631	13%	9%
France	2.394.845	221.808	2.407.543	217.641	2.320.901	208.444	2.375.842	205.174	2.506.854	209.085	6%	2%
Italy	3.192.276	321.257	3.398.032	336.799	3.370.637	325.465	3.455.738	333.585	3.224.659	308.035	-7%	-8%
Hungary	29.015	5.931	26.154	4.839	29.440	5.326	32.635	6.085	34.710	6.316	6%	4%
Netherlands	457.029	32.448	464.200	32.068	488.919	32.338	520.569	33.307	596.039	37.100	14%	11%
Poland	317.639	62.839	308.378	57.399	294.770	51.668	297.868	48.586	310.118	48.868	4%	1%
Portugal	373.204	60.401	380.095	57.837	413.675	65.559	467.115	71.514	540.505	80.251	16%	12%
Sweden	130.002	9.400	130.425	8.996	117.650	8.803	124.172	9.310	153.627	12.385	24%	33%
Total	12.883.574	1.457.427	13.027.497	1.421.641	12.800.179	1.375.899	13.161.685	1.377.107	14.085.553	1.437.571	7%	4%

FOCUS ON THE TOP THREE CONSUMING COUNTRIES

Spain, Italy and France accounted in 2020 for more than 80% of the total volume of fresh fishery and aquaculture products consumed by households in the 11 countries analysed.

SPAIN

Spain alone covered 45% of the total volumes consumed and 38% of the total value of household consumption of fresh products in these 11 countries. In 2020, 645.631 tonnes of fresh fish were consumed by Spanish households for a total value of EUR 5,33 billion.

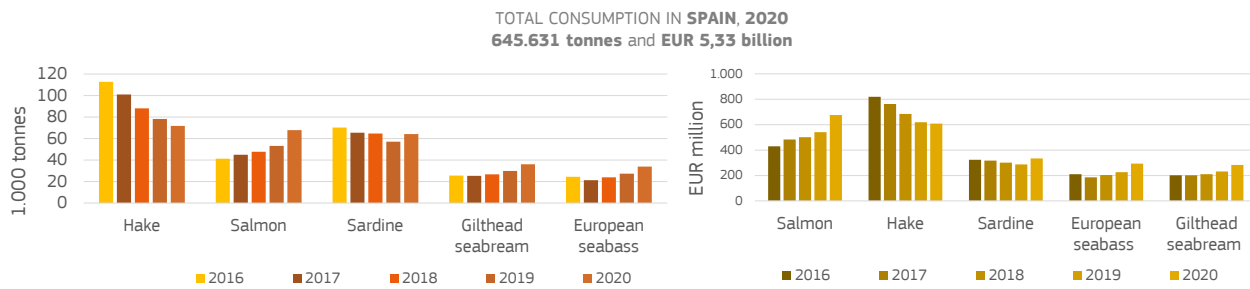
From 2017 to 2019, Spain's consumption declined in volume and value but in 2020, it recorded an increase of 9% of volume and 13% in value. Hake was the most consumed species in 2020 while the main species for value was salmon, marking the first time it had ranked above hake in the five-year period under analysis. Since 2016, consumption of hake decreased while salmon followed the opposite trend. Indeed, in 2020, consumption of salmon increased by 28% or 14.742 tonnes compared with 2019. Sardine consumption, the third most consumed species in Spain, started increasing again in 2020 after three years of decrease. Consumption of both gilthead seabream and European seabass recorded remarkable increases in 2020 in value and volume. Gilthead seabream's consumption increased by 21% in terms of volume, but this did not impact its average price which remained almost stable at 7,84 EUR/kg in 2020 compared with 7,75 EUR/kg in 2019. The same applies to European seabass, whose consumption increased by 24% and price grew a slight 5% from 8,25 EUR/kg in 2019 to 8,67 EUR/kg in 2020.

The only two fresh species that recorded decreasing prices were monk, which decreased by 5%, and salmon by 2%. As for price increases, the most notable was registered for hake, whose price increased 7%, growing from 7,90 EUR/kg to 8,46 EUR/kg.

CHART 22

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

Source: EUMOFA, based on Europanel, Kantar and GfK data



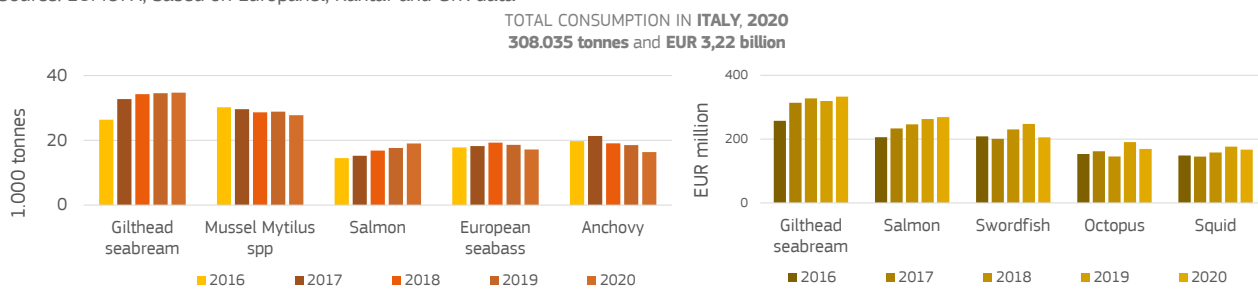
ITALY

Italy covers almost a quarter of the volume of household consumption of fresh fishery and aquaculture products recorded by the surveyed countries. The development of household consumption in Italy in the five-year period under analysis was volatile with: growth between 2016 and 2017, followed by a decrease from 2017 to 2018, then a recovery in 2019, when it registered a five-year peak in value with EUR 3,45 billion. In 2020, the trend changed again, with an 8% decrease in volume and 7% decrease in value, due to the drops registered for five of the eleven species monitored – anchovy, hake, mussel, European seabass and swordfish – which recorded their lowest volumes of the period. This decrease might be linked to a reduced supply, as logistic and transport issues have impacted products with short shelf lives, such as fresh fish. The most consumed fresh species in Italy are gilthead seabream and mussel while, in terms of value, salmon takes the place of mussel due to its higher price. Indeed, the average price of these three species is quite different – with salmon being the most expensive at 14,12 EUR/kg in 2020, followed by gilthead seabream at 9,59 EUR/kg, and mussel at 2,61 EUR/kg. In 2020, consumption of gilthead seabream and salmon reached their five-year peaks, in terms of both value and volume.

CHART 23

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

Source: EUMOFA, based on Europanel, Kantar and GfK data



FRANCE

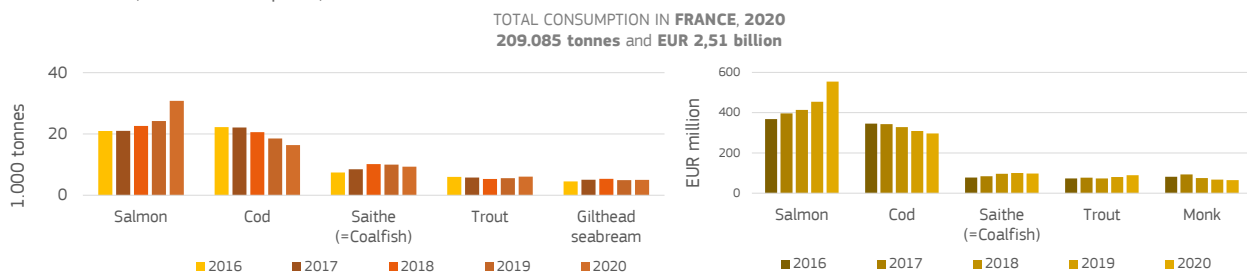
In 2020, France saw a 2% increase in consumption volume compared with the previous year, reversing the decreasing trend that had been observed from 2016 to 2019. It also saw a five-year peak in value terms. The most consumed species were salmon, cod and saithe. Since 2016, salmon consumption has continued to increase, reaching its peak of the last five years in 2020, with EUR 554 million for 30.794 tonnes. Of note, from 2016 to 2019, its annual consumption had been growing at around 5% in volume and value, but from 2019 to 2020, its volume increased by 27% and its value by 22%. Salmon was the only species that saw a price decrease from 2019 to 2020, dropping from 18,73 EUR/kg to 17,99

EUR/kg. Conversely, the volume and value of cod consumption had lowered at a regular pace since 2016, with an average annual decrease of 7% in volume and 4% in value. Overall, from 2016 to 2020, cod consumption in France decreased 26%, from 22.230 tonnes to 16.337 tonnes. In terms of price, it increased 9% from 2019, growing from 16,68 EUR/kg to 18,13 EUR/kg. Saithe consumption had exhibited a growing trend between 2016 and 2018, but it stopped in 2019 when it reversed course, initiating a decreasing trend which dragged its volume to 9.344 tonnes in 2020. Trout consumption, the fourth top consumed species in France, increased from 2019 to 2020, growing 8% in volume and 11% in value after two years of decreases. Monk consumption showed a continuous decrease during the five years analysed, while its price grew from 16,55 EUR/kg in 2016 to 18,38 EUR/kg in 2020. Gilthead seabream saw the volume and value of household consumption recover in 2020 after a 2019 decrease, and surpassed the levels registered in 2018.

CHART 24

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

Source: EUMOFA, based on Europanel, Kantar and GfK data



MAIN TRENDS IN OTHER COUNTRIES

GERMANY

Consumption in Germany took up speed in 2020. Indeed, its volume increased 20% from that recorded in 2019. In value, it showed a 24% growth of EUR 190 million from the year before. Salmon, the most consumed species, recorded a remarkable increase in 2020, reaching its highest peak of the last five years. Cod, trout and shrimps are all very important species in the German market. They all experienced an increase, with their combined consumption covering almost a quarter of the total German consumption in 2020. Shrimps' growth was a sharp 39% in volume and 43% in value, but this is a normal phenomenon for shrimps which had recorded high variations in the last years as well.

NETHERLANDS

Household consumption of fresh fishery and aquaculture products in the Netherlands sharply increased in 2020. Its value, increasing by 14% over 2019, reached EUR 596 million while its volume increased by 11% and achieved 37.099 tonnes. Consumption of salmon, cod and herring, the most important species, increased. Among them, only salmon experienced a price decrease, dropping 4% from 22,67 EUR/kg to 21,81 EUR/kg. Mussel's consumption in 2020 represented 13% of the total volumes of household consumption of fresh products in the country. Compared with 2019, its volume increased a slight 2%, while its value increased 24%. Indeed, from an average of 3,38 EUR/kg observed between 2016 and 2019, the price reached 4,06 EUR/kg in 2020. As concerns mackerel, its value grew during the last five years while volumes consumed started growing again only in 2020, after the decrease recorded from 2018 to 2019.

PORTUGAL Household consumption of fresh fishery and aquaculture products has been growing since 2018, and in 2020, it reached EUR 540 million for 80.251 tonnes.

Gilthead seabream's consumption, which represented 14% of the total Portuguese consumption in 2020, increased sharply. From 2019 to 2020, its volume increased 28%, growing 8.539 tonnes to 10.949 tonnes, and its value increased 40%, reaching EUR 68 million. Its average price increased accordingly, growing 9%, from 5,69 EUR/kg to 6,20 EUR/kg.

POLAND In 2020, household consumption of fresh fishery and aquaculture products increased both 9% in volume and 11% in value. The most consumed species – mackerel and salmon – together covered 44% of the total volume and 53% of value.

IRELAND Between 2017 and 2019, Irish consumption recorded an increasing trend in terms of volume and value. Conversely, in 2020, volume decreased 9% from 2019, and value by 8%. Indeed, all species monitored were consumed less. The most remarkable drops concerned cod and hake, each showing a 13% decrease.

DENMARK Danish consumption of fresh fishery and aquaculture products kept increasing in 2020 as it had in the previous four years. In 2020, its consumption accounted for EUR 225 million for 13.605 tonnes. Salmon, the main consumed species, alone covered 36% of total volumes. The price of salmon in Denmark is one of the highest among the countries surveyed, as it reached 23,06 EUR/kg in 2020. Compared with 2019, the greatest increase in terms of value was a 39% increase recorded for mackerel, which was the third most consumed species in 2020. The price of cod increased by 11%, from 15,35 EUR/kg in 2019 to 17,33 EUR/kg in 2020.

SWEDEN The Swedish household consumption of fresh fishery and aquaculture products increased sharply in 2020, with its 33% increase in volume and 24% increase in value leading to five-year peaks. Compared to 2019, all species monitored, except halibut, reported increased value in 2020. Salmon, the top species, recorded however a price decrease of 8%, dropping from 11,97 EUR/kg in 2019 to 10,98 EUR/kg in 2020; herring price increased a notable 19%, from 6,52 EUR/kg to 7,78 EUR/kg.

HUNGARY Household consumption of fresh fishery and aquaculture products continued the growing trend it has been following since 2016. In 2020, it reached a new peak with a value of EUR 34 million for 6.316 tonnes.

3.3 RETAIL SALES AND OUT-OF-HOME CONSUMPTION

The fishery and aquaculture industry supplies fish and seafood to consumers through different sale channels: retail, which mostly includes fishmongers and large-scale retailers (LSR); foodservice, which includes catering, restaurants and take-away sales; and institutional channels, which include schools, canteens, hospitals and prisons. Foodservice and institutional channels are referred to as “out-of-home consumption”⁵³.

This section of “The EU fish market” analyses retail sales and out-of-home consumption of unprocessed⁵⁴ fishery and aquaculture products in the top-five EU consuming countries, namely Germany, Spain, France, Italy, Poland⁵⁵, and in the UK. In addition, it analyses the out-of-home consumption of processed⁵⁶ products through the foodservice in all EU countries.

UNPROCESSED PRODUCTS: SALES BY CHANNEL

Total sales of unprocessed products through all channels under analysis – retail + foodservice + institutional channels – are highest in Spain, where they amounted to almost 940.000 tonnes in 2020, which was 9% less than in 2019. Spain is followed at a distance by Germany, where sales decreased 3% from 2019 to 2020, to total more than 646.000 tonnes, and Italy, where they decreased 5% to just above 500.000 tonnes. Poland comes next with almost 338.000 tonnes in 2020, almost unchanged compared with 2019. In France, sales dropped by 12% from 2019 to 2020 reaching around 307.500 tonnes. The UK saw a 9% decrease, totalling slightly less than 180.000 tonnes in 2020.

In all five countries surveyed, retail is the main sales channel for unprocessed fishery and aquaculture products. On the other hand, when it comes to out-of-home consumption (including take-away sales), as one can expect, the foodservice (catering + restaurants + take-away) covers much larger shares than institutional channels. During 2020, due to the COVID-19 pandemic and lockdown measures implemented by national governments, the share of retail sales of unprocessed products increased significantly compared with 2019 at the expense of foodservice. Among the countries analysed, the UK saw the biggest change, increasing from a 69% retail share in 2019 to 82% in 2020. Spain also saw significant changes with its retail sales share rising from 77% in 2019 to 85% in 2020. In France, the increase was from 72% to 82%, in Germany it was from 72% to 77%, and in Italy it was from 80% to 87%.

⁵³ Out-of-home consumption data are collected from Euromonitor international (<https://www.euromonitor.com/>). For more details, see the Methodological background.

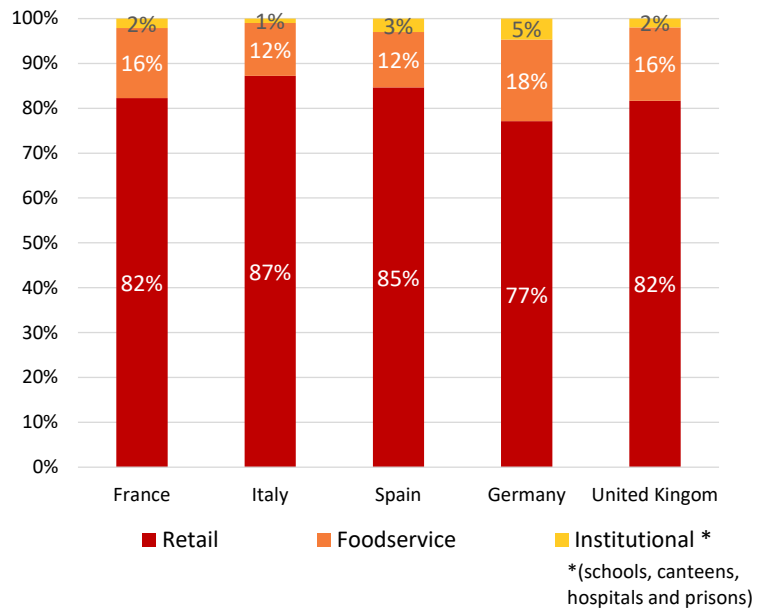
⁵⁴ Unprocessed products are defined as the aggregation of fresh, chilled and frozen finfish, crustaceans, molluscs and cephalopods, packaged and unpackaged. For more details, see the Methodological background.

⁵⁵ For Poland, no detail is available in terms of sale channel.

⁵⁶ Processed products are defined as the aggregation of shelf-stable, chilled processed and frozen finfish, crustaceans, molluscs and cephalopods. For more details, see the Methodological background.

CHART 25
SALES OF UNPROCESSED FISHERY AND AQUACULTURE PRODUCTS BY CHANNEL IN 2020 (% OF TOTAL VOLUME)

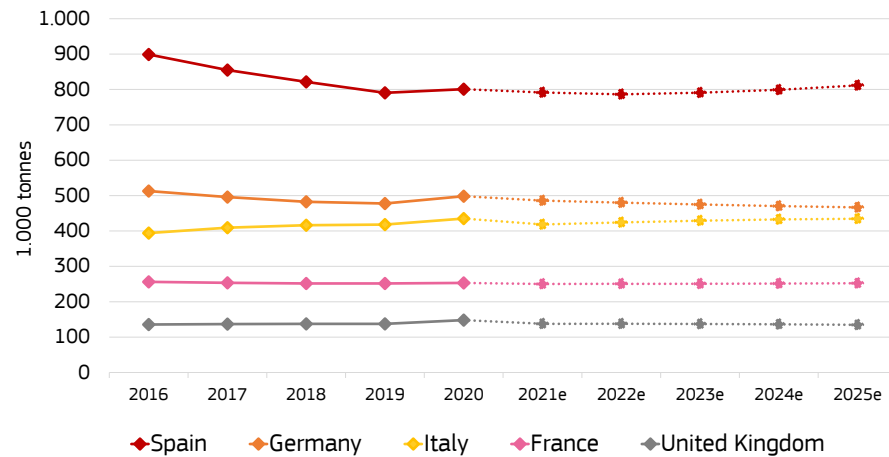
Source: Euromonitor International, Fresh Food, 2021



Spain has the highest sales of unprocessed fishery and aquaculture products through the retail channel. In 2020, sales were just above 800.000 tonnes, recording a very slight increase compared with 2019, the year with the lowest sales of the 15-year period under analysis. According to Euromonitor estimates⁵⁷, retail sales in Spain will start to show a more significant recovery only in 2025. In other countries under analysis, retail sales also increased from 2019 to 2020, especially in the UK which saw an 8% increase, with sales expected to remain stable for the next five years.

CHART 26
RETAIL SALES OF UNPROCESSED FISHERY AND AQUACULTURE PRODUCTS

Source: Euromonitor International, Fresh Food, 2021

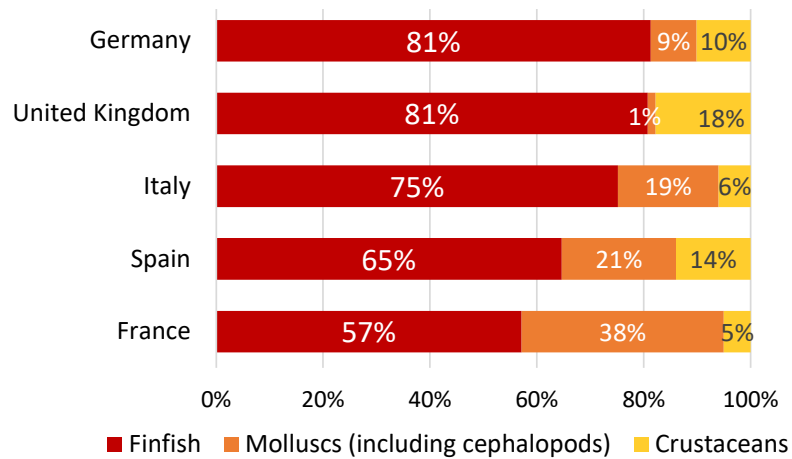


Finfish have a pivotal role in the retail channel of all countries surveyed, followed at distance by crustaceans and molluscs (cephalopods included). The latter group of products plays a more notable role in the southern Member States: cephalopods and mussels in Spain, oysters and mussels in France, and clams, mussels and cephalopods in Italy. Crustaceans on the other hand cover relatively low shares. In absolute terms, Spain registered the highest retail sales of crustaceans, reaching more than 110.000 tonnes in 2020.

⁵⁷ Euromonitor International blends statistical modelling with local market observations and judgment-based predictions. Euromonitor analysts firstly identify factors driving the growth in the past: both hard/macro drivers (demographics, GDP, taxation, inflation, population etc.) and soft drivers (category growth trends, product life cycle, consumer lifestyles, price, manufacturer perspective, weather, regulation etc.). Combined with their knowledge of the market, Euromonitor then speaks to the industry players about these factors along with gauging the potential for new factors to arise. Finally, the analysts further gather information about projected sales of major players in the next five years and/or projected forecasts of industry growth, and begin to generate a consensus estimate of industry growth in the forecast period.

CHART 27
 UNPROCESSED FISHERY
 AND AQUACULTURE
 PRODUCTS SOLD
 THROUGH THE RETAIL
 CHANNEL IN 2020,
 SHARES OF TOTAL
 VOLUME

Source: Euromonitor
 International, Fresh Food, 2021



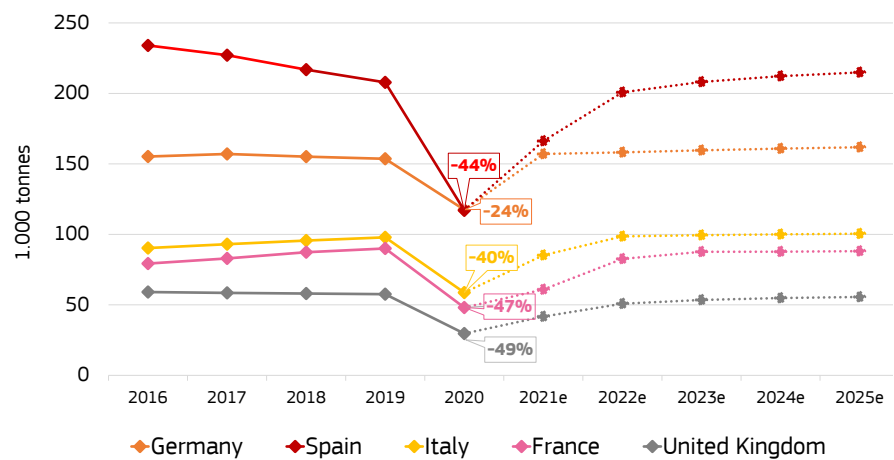
**CONSUMPTION
 THROUGH THE
 FOODSERVICE**

The effects of the COVID-19 pandemic are quite apparent when looking at 2020 data on out-of-home consumption.

When it comes to unprocessed products, almost all countries analysed saw sales through catering and restaurants halved when compared with 2019. Germany experienced a less significant – yet notable – drop, with a one-quarter decrease. According to Euromonitor’s estimates, Germany will be the only country among those analysed to have fully recovered in 2021, while Spain and Italy will have to wait until 2022-2023, and estimates for France and the UK are even less encouraging.

CHART 28
 CONSUMPTION OF
 UNPROCESSED FISHERY
 AND AQUACULTURE
 PRODUCTS THROUGH THE
 FOODSERVICE. %
 VARIATIONS ARE FOR
 2020 VS. 2019

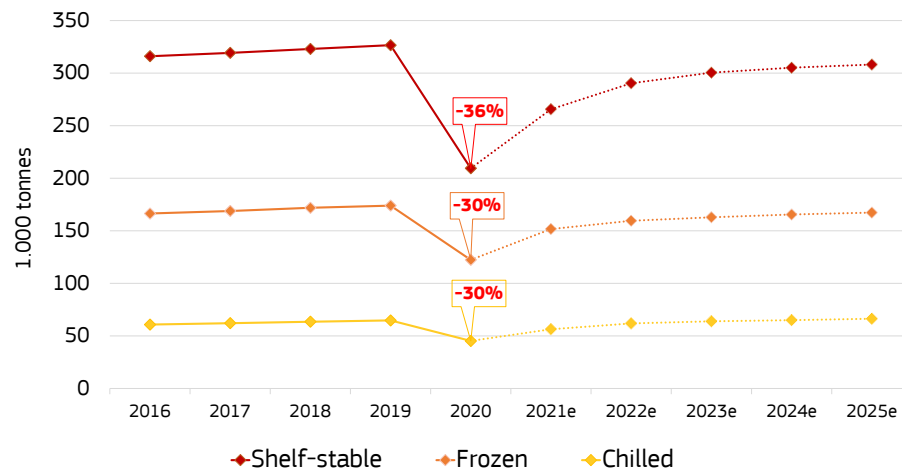
Source: Euromonitor
 International, Fresh Food, 2021



As regards processed products, the most significant decreases from 2019 to 2020 were registered in the largest countries, which were also the ones with restaurants closed for longer periods⁵⁸. Among most relevant EU consuming countries, France, Spain and Portugal showed the worst drops. In Spain and Portugal, according to Euromonitor estimates, consumption should be back at the pre-pandemic level in 2024, and estimates for France show that a recovery will start in 2022 but, consumption will not have reached the pre-pandemic level even by 2025. In Sweden, where restaurants were kept open the whole spring of 2020 and up to the end of June, consumption decreased by circa 15%, but is expected to recover in 2021.

⁵⁸ For more details, see <https://www.ecdc.europa.eu/en/publications-data/download-data-response-measures-covid-19>. It should be noted that regulations concerning response measures to COVID-19 evolve rapidly and are heterogeneous. For example, the closure of restaurants might be implemented in different ways depending on the specific situation of each country or even region.

CHART 29
 EU⁵⁹ CONSUMPTION OF PROCESSED FISHERY AND AQUACULTURE PRODUCTS THROUGH THE FOODSERVICE BY CATEGORY. % VARIATIONS ARE FOR 2020 VS. 2019
 Source: Euromonitor International, Packaged Food, 2021



Shelf-stable products⁶⁰ have the highest consumption through the foodservice, followed by frozen and chilled products. Nevertheless, shelf-stable products' relative share of total processed fishery and aquaculture products varies a lot among countries. In 2020, it ranged from 5% in Bulgaria, where frozen products are preferred, to 81% in Spain.

The consumption of shelf-stable products through the foodservice is highest in Germany where, in 2020, it totalled over 110.500 tonnes, which was one third less than in 2019. Spain ranks second with almost 60.000 tonnes sold in 2020, which was half the amount it reached in 2019. It is estimated that consumption in Spain will be back at its pre-COVID level in 2023-2024, while in Germany, estimates for up to year 2025 are still below 140.000 tonnes. Other countries that saw consumption of shelf-stable products halved were France, Portugal and Bulgaria; all of which also recorded halved consumption of chilled processed products.

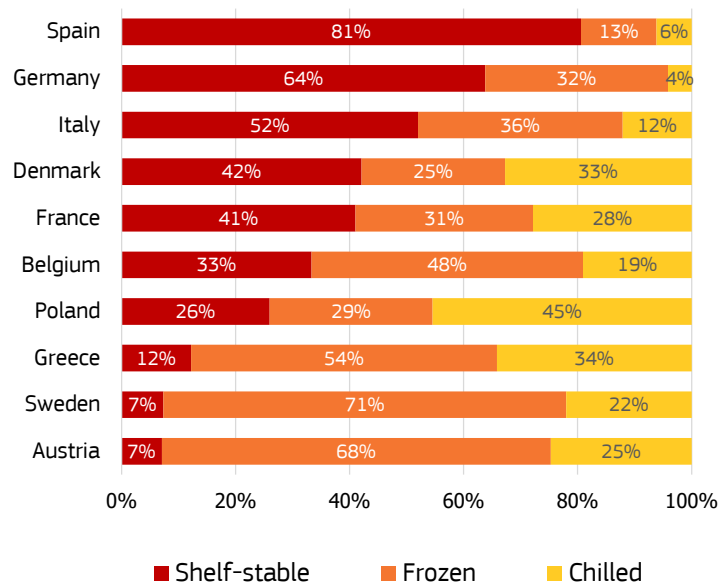
Germany is also the main consuming Member State when it comes to frozen processed products. In 2020, more than 55.000 tonnes were sold through the foodservice, which was 30% less than in 2019. Sales are not expected to come back to pre-COVID levels of around 80.000 tonnes in the near future. Germany is followed at a distance by Sweden, which consumed around 10.000 tonnes of frozen processed products, just 15% less than the previous year. The most important drops of consumption of frozen products were registered by Spain and Portugal, which saw volumes dropping by half. As for chilled processed products, Germany, France and Spain are the main EU consuming countries, with volumes sold in 2020 higher than 6.000 tonnes in each. While Germany registered a decrease of around 30% compared with 2019, consumption halved in France and Spain, but is expected to come back to pre-COVID levels already in 2022.

⁵⁹ The UK is excluded from the EU aggregate each year.

⁶⁰ Shelf-stable products include products typically sold in cans, glass jars or aluminium/retort packaging and usually preserved in oil, brine, salt water or with a sauce. Pickled products sold ambient are also included.

CHART 30
 EU CONSUMPTION OF
 PROCESSED FISHERY AND
 AQUACULTURE PRODUCTS
 THROUGH THE
 FOODSERVICE IN TOP-10
 EU COUNTRIES BY
 CATEGORY IN 2020,
 SHARES IN VOLUME
 (% OF TOTAL)

Source: Euromonitor
 International, Packaged Food,
 2021



3.4 THE ORGANIC SEGMENT

Organic products represent a niche market in the EU. This section focuses on the top-four EU consuming countries, namely Germany, Spain, France, Italy, as well as the UK, due to its leading role in European production of organic salmon and as a major supplier of the EU market.

On average in these five countries, of the 2020 total consumption of unprocessed⁶¹ fishery and aquaculture products through retail, foodservice and institutional channels, around 1,5% was organic. More in detail, the coverage was less than 0,5% in Italy and Spain, around 2% in France, and over 2,5% in Germany and the UK. According to Euromonitor estimates, these shares are going to increase in each of these countries, and by 2025, the average share will be higher than 2%.

By comparing the development of consumption of all fishery and aquaculture products with that of organic products in particular, it emerges that for organic products, the average decrease from 2019 to 2020 in the five countries analysed was less significant and the expected increase in the next years is higher. This leads to conclude that consumption of organic products suffered less from the COVID-19 outbreak than other products.

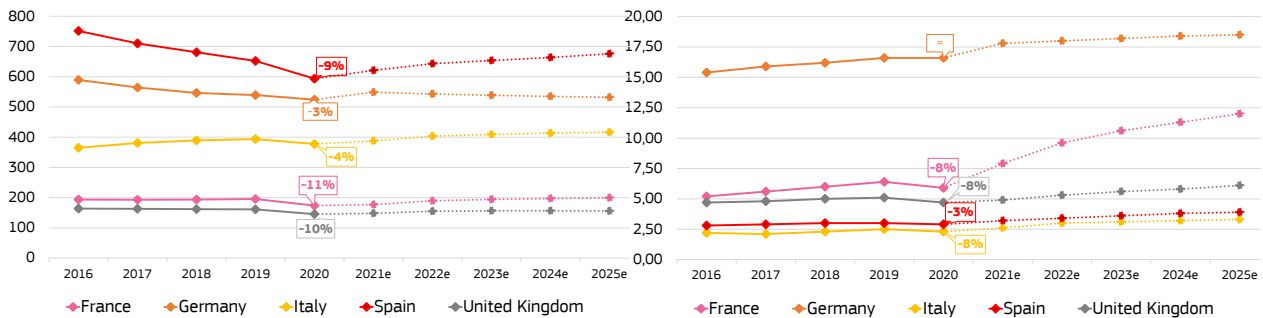
In Germany, consumption of these products does not seem to have suffered significantly from the effects of COVID-19 outbreak, as it was stable at more than 16.500 tonnes between 2019 and 2020. On the other hand, slight decreases were observed in other countries analysed, but it is expected that by 2021, they will have fully recovered.

⁶¹ It should be underlined that the most important organic species in these countries are salmon and trout, and to a lesser extent tropical shrimps and mussel, which are for a large share marketed as processed products (such as smoked salmon, smoked trout, cooked shrimp, etc.), so not included in the data analysed in this report.

CHART 31

**CONSUMPTION OF UNPROCESSED PRODUCTS THROUGH RETAIL, FOODSERVICE AND INSTITUTIONAL CHANNELS: TOTAL FISHERY AND AQUACULTURE PRODUCTS (LEFT) AND ORGANIC PRODUCTS (RIGHT).
 VOLUMES IN 1.000 TONNES**

Source: Euromonitor International, Fresh Food, 2021



On the production side, it is worth noting that according to Eurostat⁶², total organic production of aquaculture products in the EU was over 85.000 tonnes of live weight. This excludes Germany, for which 2019 data are confidential, and Italy, for which data for 2019 were not available at the time of writing. To note, both countries are relevant producers, as their combined production of organic aquatic organisms covered almost one quarter of the EU total in 2018.

With the UK leaving the EU on 1 January 2021, EU production of organic salmon, the most important organic fish species produced and consumed in the EU, fell by approximately 25%⁶³. In order to meet growing demand, huge efforts must be made by EU Member States, Ireland in particular, to increase production.

The COVID-19 pandemic had a negative impact on organic salmon market prices. From a high price level in the first quarter of 2020, price trended down and fell steeply in the last quarter of the year affected by a new COVID-19 related closedown of the foodservice sector.

In March 2021, the European Commission launched a new action plan with the objective of boosting organic aquaculture in Europe⁶⁴. The plan puts forward actions structured around three axes: boosting consumption while maintaining consumer trust, increasing production, and further improving the sustainability of the sector. In order to increase organic aquaculture production in the EU, licencing issues must be solved and space must be regulated for aquaculture production. In other European countries, such as Norway and the UK, the interest in organic salmon production is increasing as producers aim at becoming more sustainable. It is expected that organic salmon production will increase in the UK and Norway in the upcoming years.

⁶² Dataset name [org_aqtspec], link <https://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>

⁶³ The latest data/estimate available for organic salmon production is from 2019. Based on data from Scottish Government (data for UK) and inputs from stakeholders in Ireland, UK organic salmon production in 2019 was approx. 25% of EU total.

⁶⁴ https://ec.europa.eu/info/food-farming-fisheries/farming/organic-farming/organic-action-plan_en

3.5 EU QUALITY SCHEMES: GEOGRAPHICAL INDICATIONS AND TRADITIONAL SPECIALITIES

There are 65 names registered under EU quality schemes in the seafood sector in 2021⁶⁵. Two schemes refer to Geographical Indications (GIs), namely the Protected Designations of Origin (PDOs) and Protected Geographical Indications (PGIs), and one refers to traditional aspects, namely the Traditional Specialities Guaranteed (TSG). More than two-thirds (45) of the names are PGIs, about one-quarter (17) are PDOs and 6% (3) are TSGs⁶⁶.

The number of GIs largely increased over the last decade, growing from 24 PDOs and PGIs in 2011 to 62 in 2021. Even the pace of registration has increased over the last couple of years, with 9 new PGI and 3 PDO names registered during 2020–2021. The 12 new GIs include:

- four GIs from Hungary – all for farmed products, including one PDO and three PGIs that cover carp, brown trout and pike-perch⁶⁷;
- four PGIs from China – cover mussel, clam, Japanese seabass and crayfish^{68,69};
- one Italian PDO – the “Colatura di alici di Cetara” covers salted anchovy;
- one Croatian PDO – the “Malostonska kamenica” covers oyster;
- one Belgian PGI – the “Escavèche de Chimay” covers a cold preparation of cooked fish;
- one Romanian PGI – the “Salată cu icre de știucă de Tulcea” covers a cream prepared with roes from pike and other Danube Delta fish.

The GIs listed above are the first ones registered in the seafood sectors of Hungary, Croatia, and Belgium.

Among the 62 GIs registered in 2021, 44 of them (68%) originated from EU MS while 21 (32%) originated from non-EU countries. The applications of the three TSGs originated from EU MS. The Member State with the largest number of names registered are Germany, France, Italy, Spain and Hungary with 4 to 7 names registered each. They are followed by Romania with 3 names; Czechia and Finland, which both have 2 names; and Belgium, Croatia, Greece, Ireland, Latvia, the Netherlands, Poland, Portugal, and Sweden, which each have one name. In non-EU countries, 14 of the registered names come from the UK, followed by China with 5, and Norway and Vietnam with 1 name each.

Among the 65 current denominations, 49 (75%) cover finfish, 14 (22%) cover molluscs, and 2 (3%) cover crustacean. Of these 65 denominations, 30 (46%) refer to marine species, 25 (38%) refer to freshwater species, and 9 (14%) refer to migratory species whose life cycles alternate between the marine environment and fresh water. One GI – the Belgian PGI “Escavèche de Chimay” – encompasses both marine and freshwater fish.

The main species covered by GIs and TSGs include carp with 12 products, notably in Germany and Hungary; mussels with 6 products in France, Italy, Spain, the UK and

⁶⁵ Source: EU register eAmbrosia, September 2021 - <https://ec.europa.eu/info/food-farming-fisheries/food-safety-and-quality/certification/quality-labels/geographical-indications-register/>

⁶⁶ PDOs and PGIs also refer to non-EU names.

⁶⁷ The four Hungarian names registered are PDO “Akasztói szikiponty” (carp), PGI “Szilvásváradai pisztráng” (brown trout), PGI “Szegedi tükörponty” (carp), and PGI “Balatoni hal” (carp and pike-perch).

⁶⁸ The four Chinese PGIs registered in 2021 are “Shengsi Yi Bei” (mussel), “Donggang Da Huang Xian” (clam), “Tongjiang Lu Yu” (Japanese sea bass), and “Qianjiang Long Xia” (crayfish).

⁶⁹ The four Chinese GIs have been registered in the context of an EU-China agreement on the mutual recognition 200 names which entered in force in March 2021 (100 EU names and 100 Chinese names) - https://ec.europa.eu/info/news/eu-china-agreement-protecting-geographical-indications-enters-force-2021-mar-01_en.

China; salmon with 5 products, of which 4 are in the UK and 1 is in Ireland; anchovy and oyster with 4 products each; and trout, tuna and vendace with 3 products each.

TABLE 14
QUALITY SCHEMES
REGARDING FISHERIES
AND AQUACULTURE
PRODUCTS REGISTERED
UP TO SEPTEMBER 2021
 Source: eAmbrosia, DG AGRI

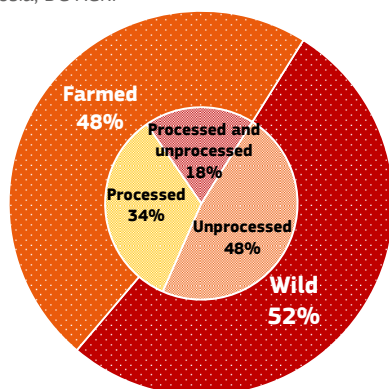
Country	Protected Designations of Origin (PDO)		Protected Geographical Indications (PGI)		Traditional Specialties Guaranteed (TSG)		TOTAL
	Number	Species concerned	Number	Species concerned	Number	Species concerned	
Germany			7	Carp (5 PGIs), Herring, Trout			7
France	1	Mussel	4	Oyster, Anchovy, Scallop, Whelk	1	Mussel	6
Italy	3	Mussel, Tench, Anchovy	3	Trout, Arctic char, Anchovy			6
Spain	1	Mussel	4	Tuna (mojama) (2 PGIs), Tuna, Mackerel			5
Hungary	1	Carp	3	Brown trout, Carp (2 PGIs), Pike-Perch			4
Romania			3	Carp, Pontic shad, other Danube delta species (roes)			3
Czechia	1	Carp	1	Carp			2
Finland	1	Vendace	1	Vendace			2
Belgium			1	Several species			1
Croatia	1	Oyster					1
Greece	1	Grey mullet (roes)					1
Ireland			1	Salmon			1
Latvia			1	Lamprey			1
Netherlands					1	Herring	1
Poland	1	Carp					1
Portugal					1	Cod	1
Sweden	1	Vendace (roes)					1
China			5	Freshwater crayfish (2 PGIs), Mussel, Clam, Japanese seabass			5
Norway			1	Cod			1
United Kingdom	4	Pollan, Mussel, Oyster, Scallop	10	Salmon (4 PGIs), Sea trout, Eel, Sardine, Cod, Haddock, Oyster			14
Vietnam	1	Anchovy (sauce)					1
TOTAL	17		45		3		65

More than half (52%) of the products covered by GIs/TSGs are wild-caught products consisting mainly of anchovy, cod, tuna and vendace; 48% are farmed products consisting mainly of carp, shellfish and salmon⁷⁰. About half (48%) of the names cover unprocessed products, and 34% cover processed products. For example, this includes TSG “Hollandse maatjesharing/Hollandse Nieuwe/Holländischer Matjes” which is a brined and dry-salted herring registered by Dutch producers. Further, 18% of the names cover both processed and unprocessed products⁷¹, such as the Hungarian PGI “Szegedi tükörponty”, which covers live and filleted carp.

CHART 32

TYPES OF PRODUCTS UNDER EU QUALITY SCHEMES IN THE SEAFOOD SECTOR (SEPTEMBER 2021)

Source: eAmbrosia, DG AGRI



	Unprocessed	Processed	Processed and unprocessed	Total
Wild	11	18	5	34
Farmed	20	4*	7	31
Total	31	22	12	65

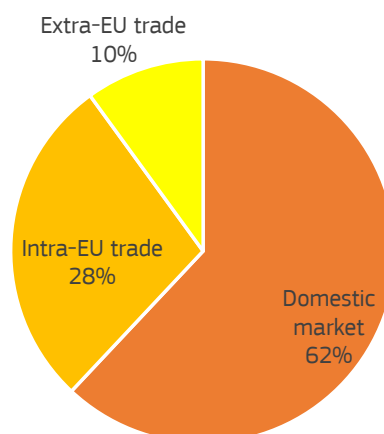
*The PGI “London Cure Smoked Salmon” (2017, the United Kingdom) is based on both wild caught and farmed products.

The sales of fish, molluscs and crustaceans under GI/TSG was estimated to reach 246.709 tonnes and EUR 1,42 billion in 2017 at EU-28 level^{72,73}. This accounted for about 4% of the sales value of the EU-28 seafood sector⁷⁴. As for the sales value, the domestic market accounted for 62% with a value of EUR 0,88 billion, followed by intra-EU trade which reached 28% with a value of EUR 0,4 billion, and extra-EU trade which reported 10% with a value of EUR 0,14 billion.

CHART 33

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

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



⁷⁰ This includes two GIs which cover both farmed and wild fish.

⁷¹ Processed products cover filleted, smoked, dried, salted or preserved products, as well as other types of preparations (for instance fish roes or fish-based products). Unprocessed products may be live, fresh (gutted or not) or frozen.

⁷² Source: Study on economic value of EU quality schemes, geographical indications (GIs) and traditional specialties guaranteed (TSGs), AND International for DG AGRI, 2019 - <https://op.europa.eu/en/publication-detail/-/publication/a7281794-7ebe-11ea-aea8-01aa75ed71a1> and country fiches - <https://op.europa.eu/fr/publication-detail/-/publication/73ad3872-6ce3-11eb-aeb5-01aa75ed71a1/language-fr>

⁷³ This covers the 43 GIs/TSGs registered at EU-28 level before 2017.

⁷⁴ Based on EUROSTAT and EUMOFA data, sales value of the fishery and aquaculture sector at EU-28 level can be estimated between EUR 28 billion (processing and preserving activities only) and EUR 40 billion (processing and preserving activities + landings + aquaculture; this is however an overestimate with double counts).

4/ IMPORT - EXPORT⁷⁵

From 2019 to 2020, total EU trade flows of fishery and aquaculture products were stable but their value fell by 6%.

During the 2011–2020 decade, the total value of EU trade flows⁷⁶ of fishery and aquaculture products increased at a compound annual growth rate of 3%. This included imports and exports between the EU and the rest of the world, as well as exchanges between EU Member States. Compared with 10 years before, the value in 2020 was 26% higher in real terms⁷⁷, while compared with one year before, 2020 total trade flows were stable in volume but recorded a 6% decrease in value.

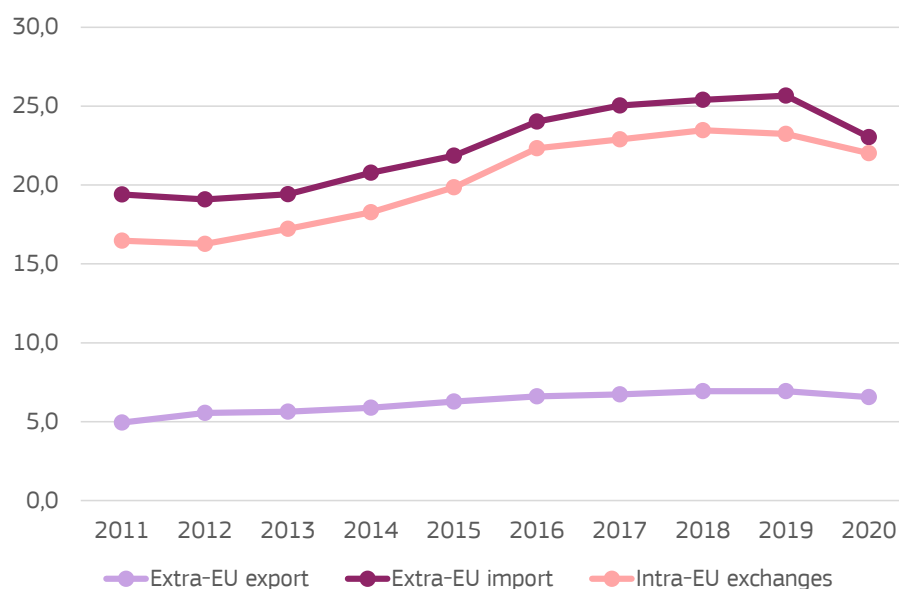
As extra-EU imports covered 43% of all fishery and aquaculture products traded both within the EU and with third countries, they were the main drivers of the overall decrease of total trade flows from 2019 to 2020, accounting for almost two thirds of the drop. Indeed, imports of high-value species decreased more than those of low-value species, because they were mainly destined for the HoReCa sector, which had been highly impacted by the consequences of the COVID-19 pandemic. Intra-EU exchanges followed the same trend as extra-EU imports, as they largely consist of northern Member States exporting products originating from Norway and Iceland – mostly salmon and cod – to other EU countries.

Extra-EU exports play a far less important role, which makes the EU a net importer. They followed an upward value trend in the decade, growing 33% in real terms from 2011 to 2020.

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

CHART 34
 EU TRADE FLOWS
 OF FISHERY AND
 AQUACULTURE
 PRODUCTS, IN VALUE
 (EUR BILLION)

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#)). Values are deflated by using the GDP deflator (base=2015).



⁷⁵ In line with Eurostat's guidelines on the production and dissemination of statistical data by Commission services after the UK withdrawal from the EU, since the most recent reference period is year 2020, UK is excluded from the EU aggregations of each year. This means that UK is dealt with as country of origin/destination of EU-27 imports and exports. In addition, EU data has included Croatia since 2013, which is when it became an EU Member state.

⁷⁶ Sum of extra-EU imports, extra-EU exports and intra-EU exchanges. Intra-EU exchanges are based on intra-EU exports. For more details, please refer to the Methodological background.

⁷⁷ In this report, value and price variations for periods longer than five years are analysed by deflating values using the GDP deflator (base=2015). For shorter periods, nominal value and price variations are analysed.

CHART 35

MOST RELEVANT EXTRA-EU TRADE FLOWS IN 2020, IN NOMINAL VALUE (EUR BILLION)

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#)).

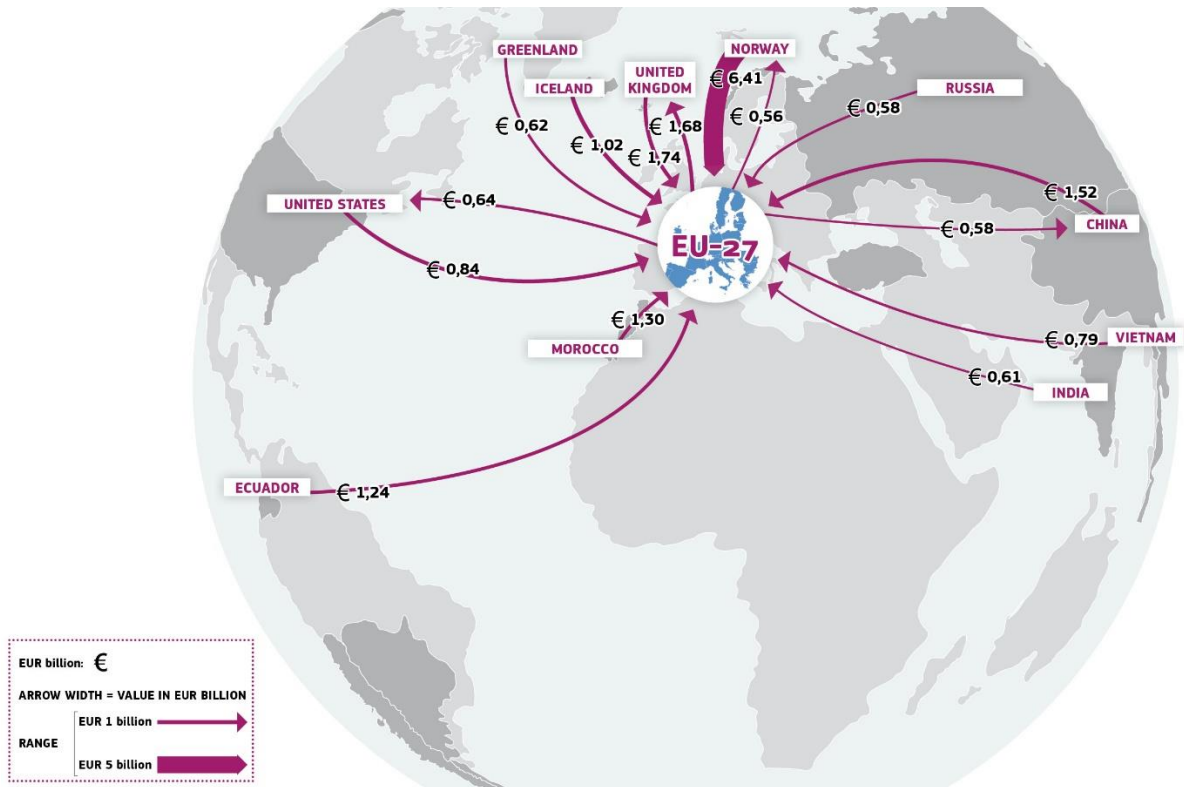
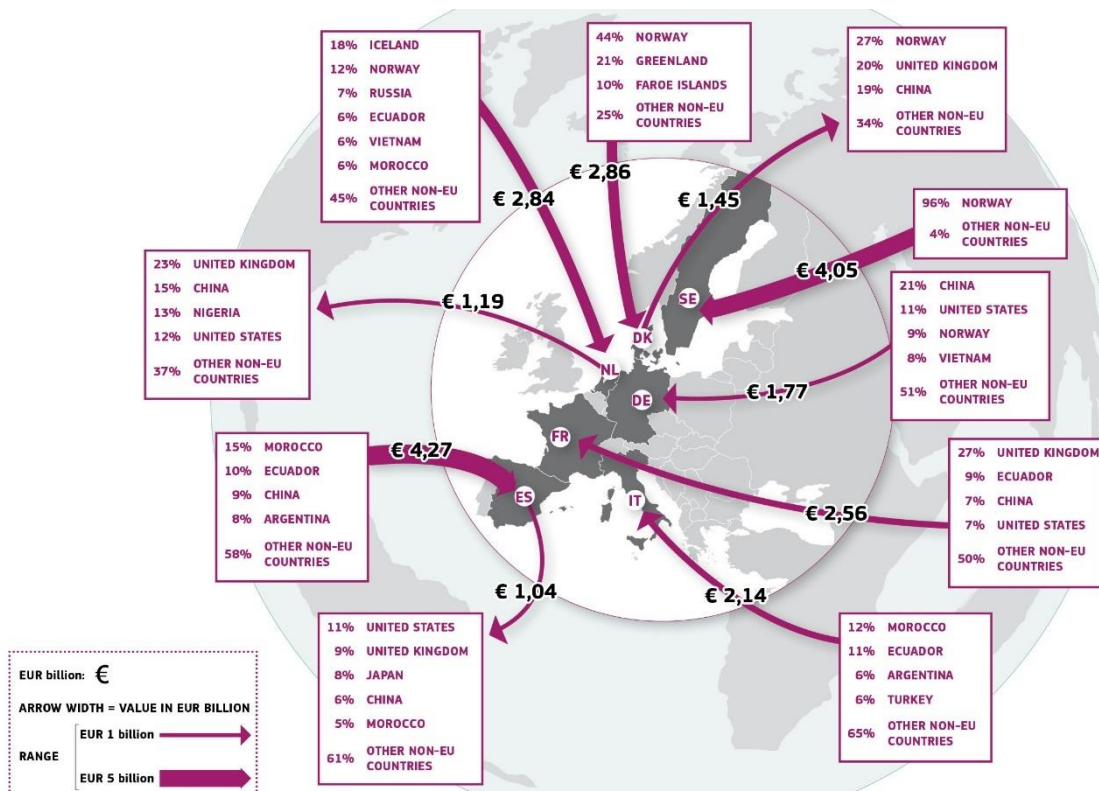


CHART 36

MOST RELEVANT EXTRA-EU TRADE FLOWS BY MEMBER STATE IN 2020, IN NOMINAL VALUE (EUR BILLION)

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#)).



4.1 EXTRA-EU TRADE BALANCE

Due to decreased imports, the extra-EU trade balance⁷⁸ deficit in 2020 was 10% or EUR 2 billion less than 2019. However, viewed in the longer 2011-to-2020 perspective, the deficit had grown by 14% in real terms.

Among the EU countries, almost all of those with the highest deficit (> EUR 1 billion) saw an improved situation from 2019 to 2020. The exception was the Netherlands, which is one of the major entry points for high-value products originating from outside the EU and destined for the internal market.

TABLE 15
 TRADE BALANCE FOR
 FISHERY AND
 AQUACULTURE
 PRODUCTS OF THE EU
 AND MAIN EU NET
 IMPORTERS
 (NOMINAL VALUE IN
 EUR BILLION)
 Source: EUMOFA elaboration of
 Eurostat-COMEXT data
 (online data code: [DS-575274](#)).

	TRADE BALANCE 2019	TRADE BALANCE 2020	VARIATION 2020-2019
EU-27	-19,25	-17,24	+2,01
Sweden	-3,88	-3,66	+0,22
Spain	-3,80	-3,23	+0,57
France	-2,34	-2,05	+0,29
Italy	-2,15	-1,91	+0,24
Netherlands	-1,61	-1,65	-0,04
Denmark	-1,61	-1,41	+0,20
Germany	-1,40	-1,25	+0,15

Despite the decrease in extra-EU imports, the EU remains the world's largest importer of fishery and aquaculture products. By comparison, looking at the two main importers that rank second and third after the EU, the US deficit was stable from 2019 to 2020, while an improvement of the trade balance was seen in Japan, mainly driven by its drop in imports from China. For a more detailed comparative analysis of EU trade and the trade of other main players in the world, see Chapter 1.3.

TABLE 16
 TRADE BALANCE FOR
 FISHERY AND
 AQUACULTURE
 PRODUCTS OF MAJOR
 NET IMPORTERS
 (NOMINAL VALUE IN
 EUR BILLION)
 Source: EUMOFA elaboration of
 Eurostat-COMEXT
 (online data code: [DS-575274](#))
 and Global Trade Atlas - IHS
 Markit data.

	TRADE BALANCE 2019	TRADE BALANCE 2020	VARIATION 2020-2019
European Union	-19,25	-17,24	+2,01
United States	-13,86	-13,89	-0,03
Japan	-11,95	-10,31	+1,64

⁷⁸ Extra-EU exports *minus* extra-EU imports.

The deficit for frozen products accounted for almost half of the total deficit (namely, 47%), amounting to EUR 8,07 billion. Fresh products followed, with a deficit of EUR 6,05 billion equalling 35% of the total, and finally, the prepared-preserved product category had a deficit amounting to EUR 2,44 billion or 14% of the total deficit. Compared with 2019, the trade deficit decreased for all three major preservation categories.

CHART 37

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

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#)). Values are deflated by using the GDP deflator (base=2015).



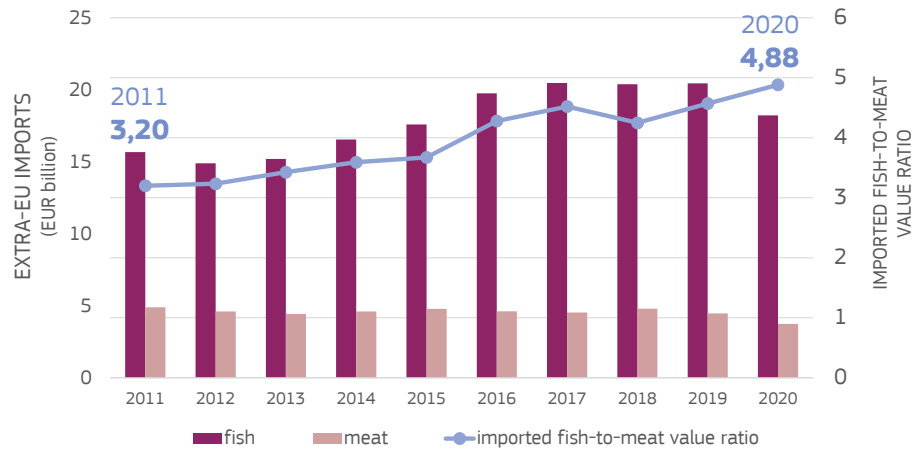
4.2 COMPARISON BETWEEN IMPORTS OF FISHERY AND AQUACULTURE PRODUCTS AND MEAT

In 2020, the combined value of EU imports of agri-food, and fishery and aquaculture products totalled EUR 142,53 billion⁷⁹. Of this, fish accounted for 14% and meat for 3%⁸⁰. The EU is a net importer of fishery and aquaculture products, while it is a net exporter of meat. Chart 38 compares the values of imports of fish and meat from 2011 to 2020, excluding prepared and non-edible products. The chart's blue line represents the evolution of the ratio between the value of imports of fish and meat. In 2020, as shown, the ratio rose to 4,88, meaning that the value of imported fish was almost five times higher than the value of imported meat. The upward trend since 2018 has been due to the value of meat imports dropping more than the value of fish imports.

⁷⁹ This total amount includes extra-EU imports of the items referring to fishery and aquaculture products monitored by EUMOFA (list by CN-8 code available at the link <http://www.eumofa.eu/documents/20178/24415/Metadata+2+-+DM+-+Annex+4+Corr+CN8-CG-MCS+%282002+-+2014%29.pdf/ae431f8e-9246-4c3a-a143-2b740a860291>) and extra-EU imports of agri-food products (source: DG AGRI).

⁸⁰ For the sake of clarity, the comparison refers to "Fish" (which includes all items reported under chapter "03 - Fish and crustaceans, molluscs and other aquatic invertebrates" of the Combined Nomenclature commodities) and "Meat" (which includes all items reported under chapter "02 - Meat and edible meat offal") of Section I "Live animals; animal products" of the Combined Nomenclature commodities.

CHART 38
 EXTRA-EU IMPORTS
 TREND AND RATIO OF
 IMPORTED FISH VS. MEAT,
 IN VALUE (EUR BILLION)
 Source: EUMOFA elaboration of
 Eurostat-COMEXT
 (online data code: [DS-575274](#))
 and DG AGRI data.
 Values are deflated by using the
 GDP deflator (base=2015).



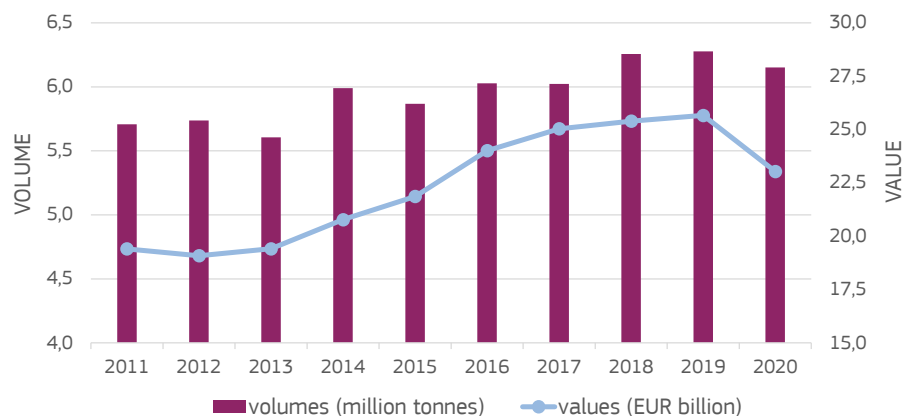
4.3 EXTRA-EU IMPORTS

In 2020, extra-EU imports of fishery and aquaculture products totalled 6,15 million tonnes worth EUR 24,21 billion. Compared with 2019, they decreased by 9% in value for a loss of EUR 2,30 billion, and by 2% in volume, corresponding to a decrease of more than 125.500 tonnes. Nonetheless, imports of some of the major species – including salmon, warmwater shrimps and Alaska pollock – increased.

On a longer perspective, when comparing 2011 with 2020, total imports rose by 8% or 445.124 tonnes in volume and by 19% or EUR 3,63 billion in value in real terms.

As mentioned above, values decreased more than volumes from 2019 to 2020 because of the more significant decrease of high-value species mainly destined for the HoReCa sector, which was included in the shutdowns initiated to control the spread of COVID-19.

CHART 39
 EXTRA-EU IMPORTS OF
 FISHERY AND
 AQUACULTURE
 PRODUCTS
 Source: EUMOFA elaboration of
 Eurostat-COMEXT data
 (online data code: [DS-575274](#)).
 Values are deflated by using the
 GDP deflator (base=2015).



More than one quarter of extra-EU imports originates from Norway, followed at a distance by the UK which covers 7% of the total values and volumes. Salmon, by far the main species imported in the EU, accounts for 16% of total extra-EU imports in volume and 25% in value in 2020 with Norway and the UK as its main countries of origin.

In volume terms, cod comes after salmon among most imported species, with again Norway as the main supplier and, to a lesser extent, Iceland and Russia. Among most valued species, on the other hand, shrimps come after salmon, and more specifically warmwater shrimps (frozen shrimps of the genus *Penaeus*), as well as miscellaneous

shrimps and prawns⁸¹ other than Pandalidae, *Crangon*, deep-water rose shrimps (*Parapenaeus longirostris*) and *Penaeus*. Ecuador, Vietnam and India are their main countries of origin.

Imports from China are largely constituted by frozen fillets of Alaska pollock, while imports from Morocco are more diversified: sardine and fishmeal cover the largest shares in volume but most of their value is represented by octopus and squid with the latter largely originating from the Falkland Islands.

Skipjack tuna is also among top-valued species imported in the EU, with Ecuador as its largest supplier. To be noted that these imports to a large extent consist of tuna caught by the EU fleet, landed in Ecuador for processing and then re-imported in the EU.

Chart 42 illustrates the trend over the last five years of the average import prices of some of the top valued main commercial species imported in the EU. The most significant change from 2019 to 2020 concerns salmon: against a 4% volume increase, which led to a decade peak of these imports, its average price decreased by 12% to reach 5,73 EUR/kg, its lowest level of the last five years.

CHART 40
 TOP EXTRA-EU
 COUNTRIES OF ORIGIN IN
 2020 (IN VALUE)
 Source: EUMOFA elaboration of
 Eurostat-COMEXT data
 (online data code: [DS-575274](#))

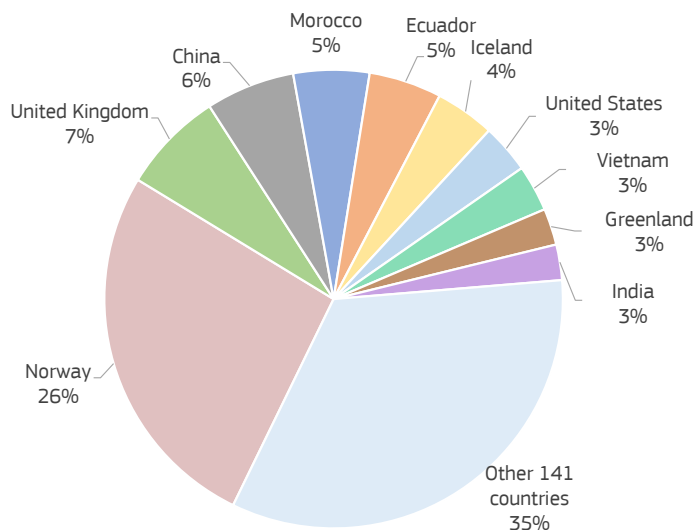
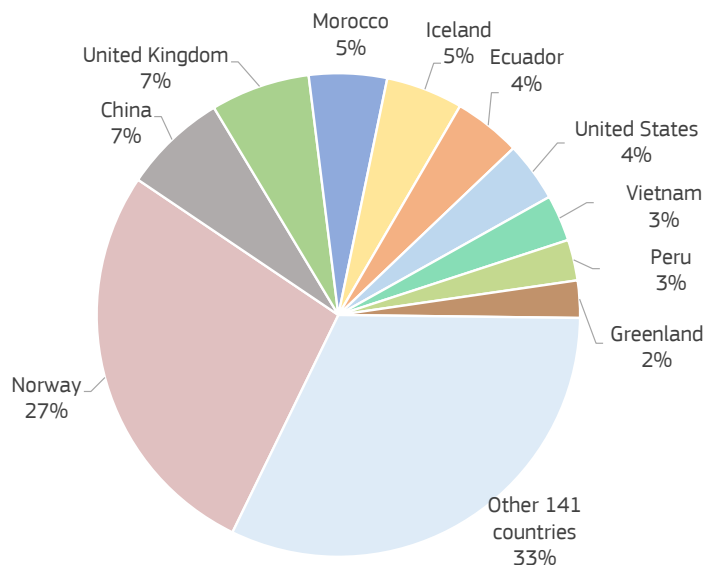


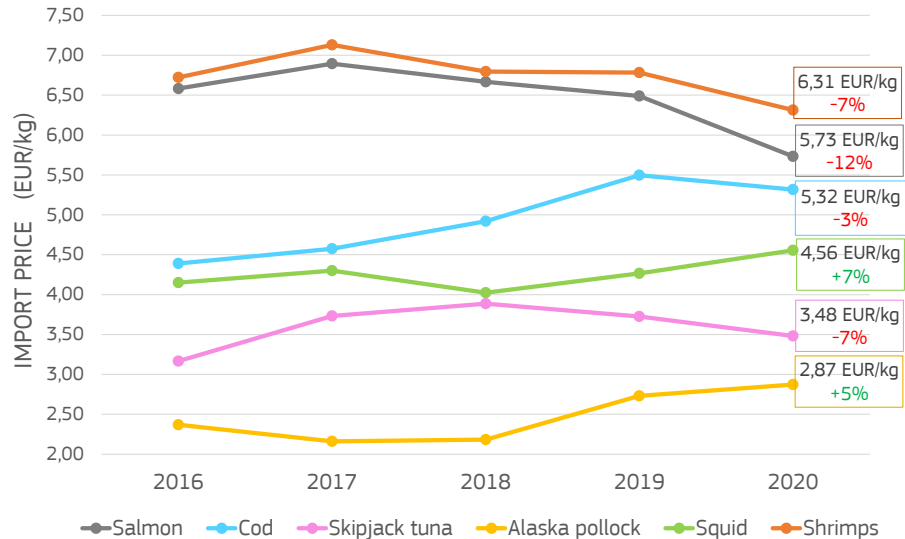
CHART 41
 TOP EXTRA-EU
 COUNTRIES OF ORIGIN IN
 2020 (IN VOLUME)
 Source: EUMOFA elaboration of
 Eurostat-COMEXT data
 (online data code: [DS-575274](#))



⁸¹ No detail is available in terms of species.

CHART 42
 NOMINAL PRICES OF
 SOME OF THE TOP
 VALUED MAIN
 COMMERCIAL SPECIES
 IMPORTED IN THE EU
 AND % VARIATIONS
 2020/2019

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#))

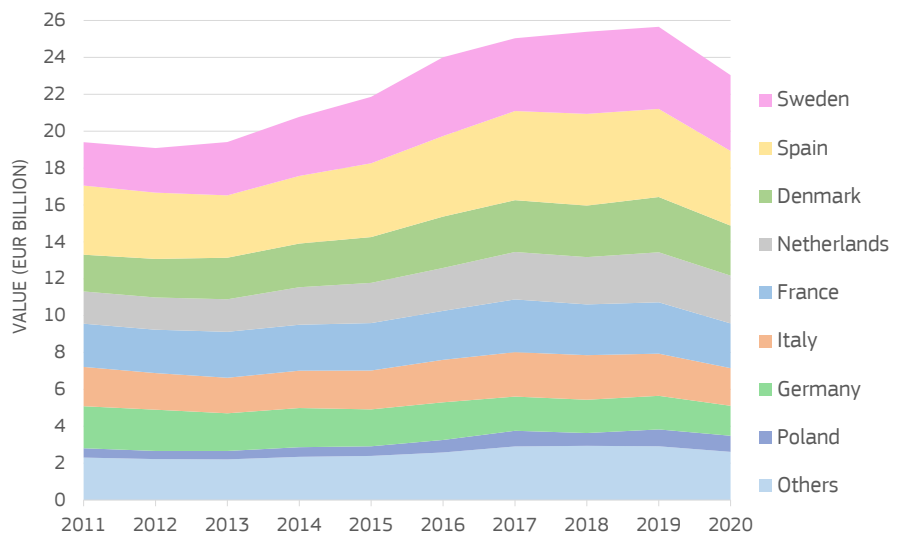


As a premise, it is important to underline that while imports are reported as such by Eurostat-COMEXT according to flows recorded by national customs, in most cases the EU Member States are not the actual final destinations. Rather, these “importers” are “points of entry” for the fisheries and aquaculture products imported to the EU, which are then traded within the internal market⁸².

Bearing this in mind, the top-five EU “importers” are Sweden, Spain, Denmark, the Netherlands and France. The precise amounts of the main EU importing Member States are in charts 44 and 45. The only increases observed from 2019 to 2020 were those of Sweden, where imports grew 6% in volume (but decreased 6% in value), due mainly to the increased imports of salmon, and the Netherlands, which saw volume increase 3% (but value decrease 2%). In the case of the Netherlands, its imports of skipjack tuna and salmon increased, but still registered an overall value decrease of imports, largely due to lower imports of cod.

CHART 43
 VALUE OF EXTRA-EU
 IMPORTS
 PER MEMBER STATE
 (EUR BILLION)

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#)). Values are deflated by using the GDP deflator (base=2015).



⁸² This phenomenon is known as “the Rotterdam effect”.

CHART 44

**NOMINAL VALUE OF
 EXTRA-EU IMPORTS BY
 MEMBER STATE IN 2020
 AND % VARIATION
 2020/2019**

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#))

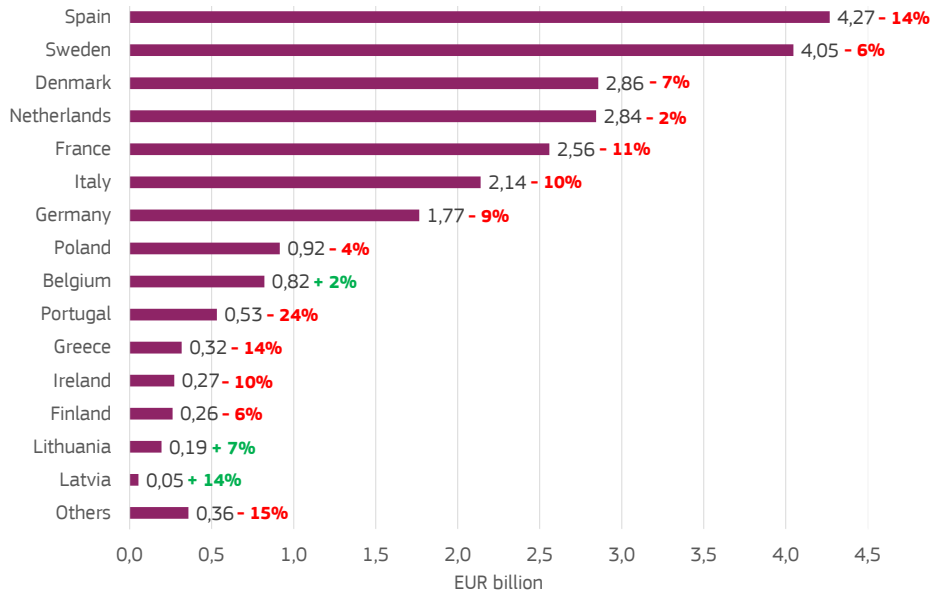
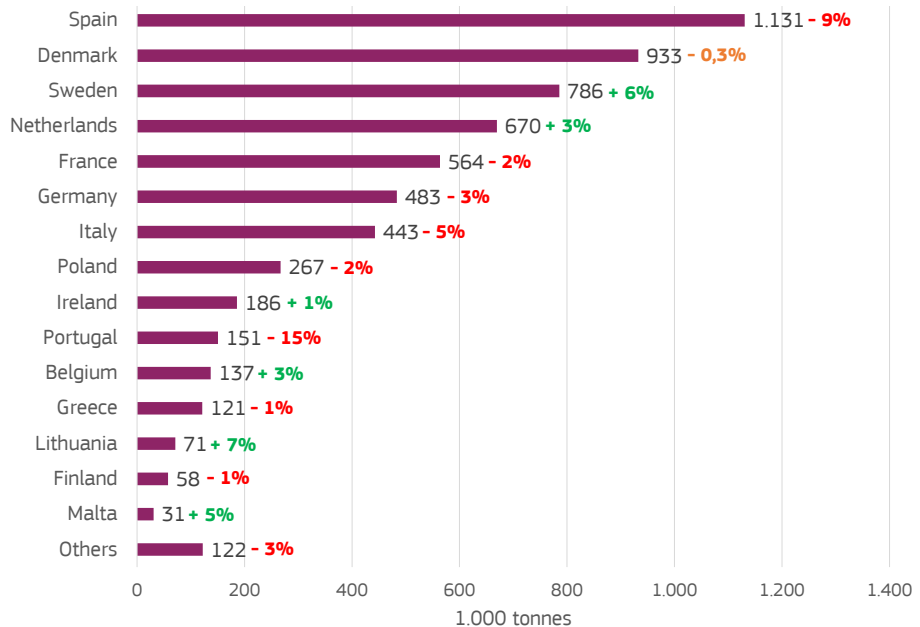


CHART 45

**VOLUME OF EXTRA-EU
 IMPORTS BY MEMBER
 STATE IN 2020 AND %
 VARIATION 2020/2019**

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#))



4.3.1 ANALYSIS BY MAIN SPECIES

SALMONIDS

Salmon, the main species imported in the EU, accounted for 17% of total volume of extra-EU imports of fishery and aquaculture products in 2020, and one quarter of the total in value terms. Among imports of salmonids, which also include trout and other salmonid species, salmon represented 97% of the total in both volume and value.

SALMON

In 2020, salmon imports reached a 10-year peak, with a 4% increase from 2019 and surpassed 1 million tonnes for the first time. However, the average price fell 12% from 2019, dropping to 5,73 EUR/kg, its lowest level since 2015. The corresponding decrease of the total value of these imports was 8%, representing a drop of more than EUR 500 million. A contributing factor for the decrease in unit value was related to exchange rates. A significant strengthening of the Euro that began in March 2020 made the salmon imported from European producers (non-EU) less expensive. Also, main

changes in sales channels in reaction to the pandemic impacted prices, as a higher share of salmon sales went to retailers and, generally, the retail segment pays less than the foodservice segment.

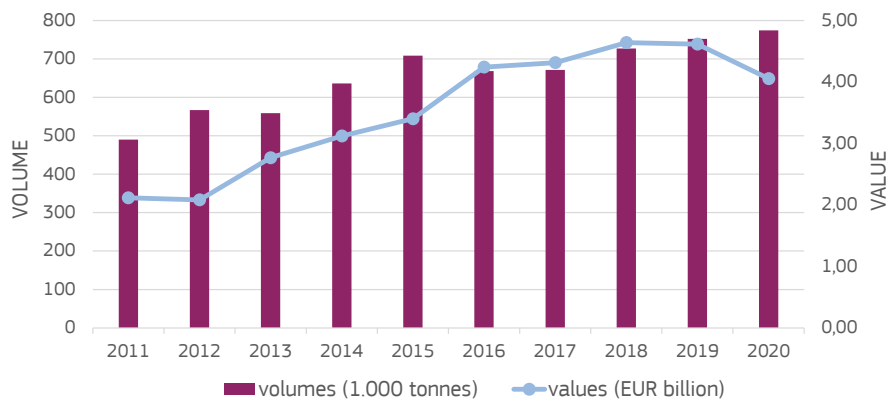
Imports of salmon mainly consist of fresh whole products originating from Norway, amounting to 774.098 tonnes worth EUR 4,09 billion in 2020, with neighbouring Sweden as the first point of entry.

From 2011 to 2019, fresh whole salmon imports from Norway had been increasing at a yearly average growth rate of 6% in volume and 11% in value. In addition to the drop in value during 2019-2020, another issue worth mentioning is the price hike that began in 2016. Until 2015, the average import price had been around 4,50 EUR/kg, but from 2016 to 2019, it averaged 6,30 EUR/kg. The 2015 to 2016 increase was impacted by a 40.000-tonne drop in imports linked to production decreases. The decreases were related to treatments for outbreaks of sea lice – an infestation that impacts farmed salmon, leading to higher mortality, poorer growth, lower harvest weights of specimens and lower harvest volumes. The price increase could also be related to the slight decrease of harvest volumes in the UK and Ireland from 2015 to 2016.

CHART 46

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

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#)). Values are deflated by using the GDP deflator (base=2015).



CRUSTACEANS

EU imports of crustaceans had been almost stable from 2018 to 2019, but they reached 598.310 tonnes in 2020 – their lowest volume since 2015. In value, they totalled EUR 4,03 billion, which represented an 8% drop from 2019 and the lowest value since 2013.

Shrimps represent more than 90% of total volumes and values of crustacean imports in the EU. They mostly include warmwater shrimps and miscellaneous shrimps and prawns⁸³ not related to *Pandalidae*, *Crangon*, deep-water rose shrimps "*Parapenaeus longirostris*" and "*Penaeus*".

The value drop of crustacean imports was linked to the decreased import prices of all crustacean species, including species other than shrimps. For example, the import price of lobster *Homarus* and Norway lobster fell by 8% and 11%, respectively. However, being the most imported products of this category, shrimps drove the overall trend. The most significant price decreases were drops of 37% for imports of shrimp *Crangon* from the UK, 12% for warmwater shrimps from Ecuador, and 14% for miscellaneous shrimps⁸⁴ from Greenland. According to Seafish, a UK-focused research organization, the drop in prices for UK crustaceans was due to the COVID-19 lockdown, which led to foodservice segment vanishing and reduced demand from the main export markets.

⁸³ No detail is available in terms of species.

⁸⁴ *Ibidem*.

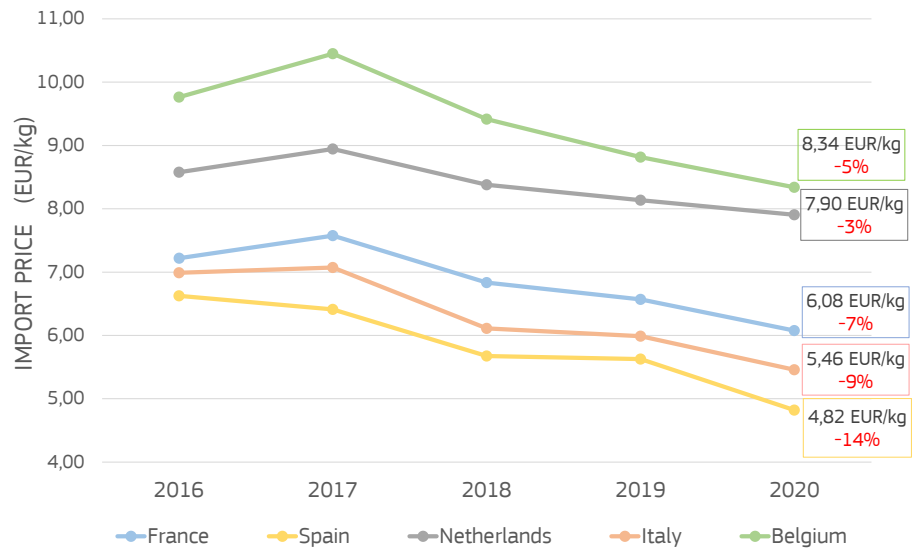
WARMWATER SHRIMPS

Warmwater shrimps imported in the EU consist of frozen shrimps of the genus *Penaeus*. In 2020, their imports amounted to 269.643 tonnes, 6% more than in 2019 and a decade peak, while at the same time, their average import price fell 7% to 6,32 EUR/kg, the lowest level since 2012.

46% of EU imports of warmwater shrimps came from Ecuador, followed by Vietnam and India, which together accounted for another 20%. Imports from Ecuador, mainly destined for Spain, France and Italy, drove the overall value drop, as their average price fell to 5,12 EUR/kg. This was their lowest price since 2012, and represented a 12% drop from 2019 against an 11% volume increase.

To be noted that shrimps from Vietnam and India, which are mostly destined for the Netherlands and Belgium⁸⁵, have higher prices than those from Ecuador. Indeed, Ecuador only produces white leg shrimp (*Penaeus vannamei*), while India and Vietnam also export the higher-value giant tiger shrimp (*Penaeus monodon*). In addition, most of the shrimps exported from Ecuador are head-on-shell (HOSO), while the majority of shrimps exported from India are peeled.

CHART 47
 NOMINAL IMPORT PRICES
 OF WARMWATER
 SHRIMPS IN THE TOP FIVE
 EU IMPORTERS AND %
 VARIATIONS 2020/2019
 Source: EUMOFA elaboration of
 Eurostat-COMEXT data
 (online data code: [DS-575274](#))



MISCELLANEOUS SHRIMPS

In 2020, EU imports of shrimps and prawns⁸⁶ not related to *Pandalidae*, *Crangon*, deep-water rose shrimps "*Parapenaeus longirostris*" and "*Penaeus*", totalled 203.508 tonnes and EUR 1,43 billion. This represented their lowest amounts in both volume and value in seven years. From 2019 to 2020, volumes fell by 8% and the average price decreased by 4% to reach 7,03 EUR/kg. Consequently, the total value of these imports fell by 11%.

The downward trend was mainly driven by the decrease in imports and in the average prices of frozen wild-caught red shrimps (*Pleoticus muelleri*) from Argentina to Spain – with volume dropping 17% to 43.835 tonnes from 2019, and the price dropping 4% to 5,60 EUR/kg.

⁸⁵ The Netherlands and Belgium might not be the final destinations. Indeed, Rotterdam (NL) and Antwerp (BE) are important ports for landings of frozen seafood from Far East suppliers, and these ports act as "hubs" for shrimps arriving in the EU, so the "actual" destinations might be other countries.
⁸⁶ No detail is available in terms of species.

GROUNDFISH

In 2020, groundfish imported in the EU totalled 1,14 million tonnes with a value of EUR 4,22 billion. Cod and Alaska pollock are by far the main species imported within this category, as well as two of the EU's most imported fishery and aquaculture products.

COD In 2020, extra-EU imports of cod fell to 404.056 tonnes, the lowest volume since 2013, and 7% or 29.635 tonnes below the 2019 import volume. Their value also dropped from 2019, decreasing 10% and reaching EUR 2,15 billion.

Of cod imports, 35% of the volume originates in Norway, 20% from Russia, another 20% from Iceland, and 10% from China. Those from Norway and Iceland are more diversified, comprising similar shares of fresh and frozen products, as well as salted and dried products, while imports from Russia and China largely include frozen products.

With the exception of Iceland, imports from all major suppliers dropped from 2019 to 2020, as did import prices. The most significant change concerned imports from China, which dropped 20% in both volume and value – from more than 50.000 tonnes in 2019 to just above 40.000 tonnes in 2020, and from EUR 264 million to EUR 211 million, although with a certain stability in terms of price which decreased only 1%, from 5,20 EUR/kg to 5,15 EUR/kg. The decrease was observed in all major importers of cod from China, especially Germany. As China is a processor of cod, lower imports from China must be seen in relation to the reduction in Chinese imports of cod in 2020 from all suppliers. Another significant drop from 2019 was registered by Portugal's imports of cod originating from Russia, which almost halved in both volume and value – decreasing from 21.700 tonnes to 12.741 tonnes and from EUR 88 million to EUR 47 million. Their import price also decreased, dropping 8% to 3,72 EUR/kg.

ALASKA POLLOCK In 2020, almost half of EU imports of Alaska pollock came from China, while 37% of the total originated in the United States. Russia followed at a distance, covering 16% of the total. Germany was the main EU destination of all these main origin countries.

This species, mainly imported in the form of frozen fillets, was one of the few extra-EU imports that did not register a decrease from 2019 to 2020. It reached 277.599 tonnes, an amount in line with the previous year, but also registered a 5% value increase. The average import price reached a 10-year peak at 2,87 EUR/kg, which in turn led to a total value peak of EUR 798 million.

TUNA AND TUNA-LIKE SPECIES

This group includes tuna species and swordfish. In total, imports of tunas and swordfish from extra-EU countries reached 724.095 tonnes in 2020, with a value of EUR 2,70 billion.

They consist almost entirely of processed tuna, of which 30% is frozen and 70% includes prepared-preserved products (mainly canned). In terms of species, skipjack tuna accounted for more than half, followed by yellowfin tuna which accounted for one third. To be noted that these imports mainly consist of tuna caught and landed by the Spanish and French fleets in remote places close to the fishing areas of Ecuador, Mauritius, Seychelles and Mexico, Côte d'Ivoire, and Ghana, processed in those countries, and then re-imported into the EU as prepared-preserved products.

SKIPJACK TUNA Almost all skipjack tuna imported in the EU is imported as prepared-preserved products. Its main importers are Spain, the Netherlands and Germany, followed by Italy and France.

Ecuador, by far the main origin country, provides the EU with one third of all extra-EU imports of prepared-preserved skipjack tuna. This amounted to 110.042 tonnes in 2020,

imported at an average price of 3,72 EUR/kg which represented decreases of 6% in volume and 7% in price compared with 2019. However, total extra-EU imports achieved their decade peak in 2020, due to increased imports from China, which grew by 63% or 16.746 tonnes from 2019, reaching 43.333 tonnes. The average import price from China was 3,24 EUR/kg, in line with supplies from Ecuador and other main suppliers. For example, from the Philippines, it was 3,60 EUR/kg for 34.249 tonnes; from Mauritius, it was 3,75 EUR/kg for 22.401 tonnes; and from Papua New Guinea, it was 3,59 EUR/kg for 35.638 tonnes.

YELLOWFIN TUNA Extra-EU imports of yellowfin tuna are balanced among frozen products which accounted for 53% of total volumes in 2020, and prepared-preserved products which accounted for 46%, with the remaining 1% being imported fresh. For frozen products, Spain prevails among importing countries and is also responsible for further dispatches within the EU. Imports of prepared-preserved products are more diversified in terms of destinations, with Italy, France and Spain as the largest importers. Imports of frozen yellowfin tuna reached a decade peak of 122.871 tonnes in 2020. The Philippines was the main supplier, selling 20.148 tonnes at 2,29 EUR/kg, which represented a 149% boost in volume terms from 2019 while there was a certain steadiness in terms of price. Mexico and South Korea followed with 14.669 tonnes and 11.010 tonnes, respectively, with Mexico registering a 22% decrease from 2019 while South Korea registered a 246% increase. Their average prices were in line with imports from the Philippines, with 2,35 EUR/kg from Mexico and 2,30 EUR/kg from South Korea. When it comes to prepared-preserved yellowfin tuna, the main countries of origin in 2020 were the Seychelles (22.910 tonnes sold at 5,73 EUR/kg), Ecuador (18.822 tonnes at 5,01 EUR/kg), Mauritius (10.889 tonnes at 7,01 EUR/kg), Côte d'Ivoire (9.391 tonnes at 5,11 EUR/kg), and Papua New Guinea (9.548 tonnes at 4,97 EUR/kg). The most significant changes from 2019 were from Mauritius and the Seychelles, which reported increases of 24% and 13% respectively.

NON-FOOD USE PRODUCTS Extra-EU imports of non-food use products in 2020 totalled 824.720 tonnes worth EUR 897 million, which represented decreases of 1% in volume and 4% in value from 2019. The products included equal shares of fishmeal and fish oil, which together accounted for around one quarter of the 2020 imports in this category, as well as other products not destined for human consumption, such as fish waste and seaweed.

FISHMEAL In 2020, the EU imported 229.271 tonnes of fishmeal, marking an 8% decrease from 2019. It was imported at an average price of 1.296 EUR/tonne, which was 5% lower than in 2019. Its major suppliers are Morocco and Peru, with Peru almost entirely exporting fishmeal to Germany. Imports from both Morocco and Peru increased compared with 2019, while the average import price decreased. The overall decrease of extra-EU imports of fishmeal was in fact driven by lower supplies from the United States and Mauritania.

Germany, the largest EU importer of fishmeal, imported 74.784 tonnes in 2020. It can be considered a major “entry point” to the EU market, primarily due to the logistics, including its harbour with overseas routes and trading traditions. Germany is also a hub for the further distribution of fishmeal, primarily for the aquafeed segment.

After Germany comes Denmark, another important dealer of animal feed mainly supplied by Norway, with 44.608 tonnes imported in 2020. Spain and Greece also import significant amounts of fishmeal – with Spain importing 40.222 tonnes and Greece importing 35.423 tonnes, which they use in their aquaculture industry.

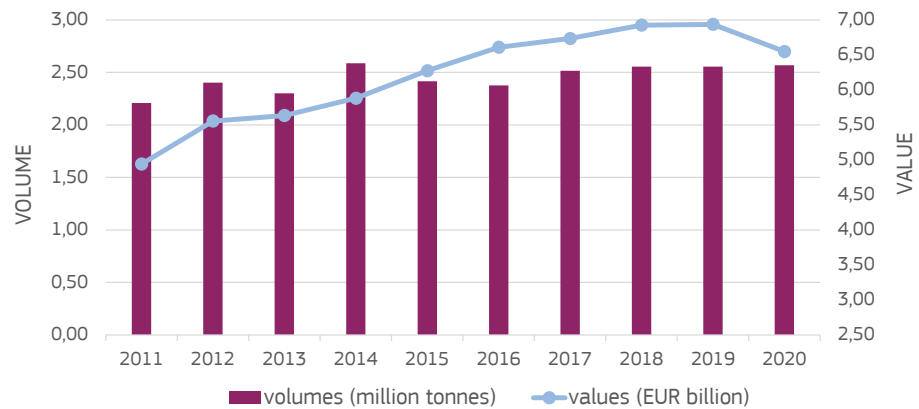
FISH OIL Most EU supplies of fish oil originate from Norway. In 2020, imports of Norwegian origin totalled 72.343 tonnes and were sold at 1.234 EUR/tonne. This represented a 35% increase in volume and a 10% increase in price from 2019. Denmark received most of these imports, followed at a distance by Greece.

4.4 EXTRA-EU EXPORTS

In 2020, EU exports of fishery and aquaculture products to third countries reached a six-year peak of 2,21 million tonnes, showing a growth of 151.241 tonnes or 6% with respect to 2015. If compared with 10 years before, the growth was almost 360.000 tonnes or 16%. From 2019 to 2020, the increase was less significant, amounting to 1% or 12.774 tonnes.

In value terms, they totalled EUR 6,96 billion, which represented a 4% drop of more than EUR 290 million from 2019. Yet, the 2020 value was 33% higher in real terms if compared with 10 years before.

CHART 48
EXTRA-EU EXPORTS OF FISHERY AND AQUACULTURE PRODUCTS
 Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#)). Values are deflated by using the GDP deflator (base=2015).



The EU mainly exports herring, blue whiting, fishmeal and fish oil not destined for human consumption, mackerel, skipjack tuna and salmon. To be noted, as mentioned above, that EU exports of tuna mainly comprise tunas caught by the Spanish and French fleets in remote places. The catches are processed there, and then imported in the EU as prepared-preserved products or frozen loins. In both cases, these landings are also recorded as exports.

Although it is not one of the most exported species, cod accounted for most of the overall value decrease of extra-EU exports from 2019 to 2020, as a consequence of decreased exports to China and the UK. While the UK remained the top destination of EU exports, China and the US switched places with the US becoming the second and China the third ranked destination. In addition to decreased exports of cod to China, this was also due to exports of salmon to the US registering an increase.

Fish oil and fishmeal are mostly exported to Norway, while Nigeria is among the top three destinations in volume terms thanks its receiving exports of mackerel, blue whiting and herring. Herring also has Egypt and Ukraine among its main destinations.

CHART 49
TOP EXTRA-EU COUNTRIES OF DESTINATION IN 2020 (IN VALUE)

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#))

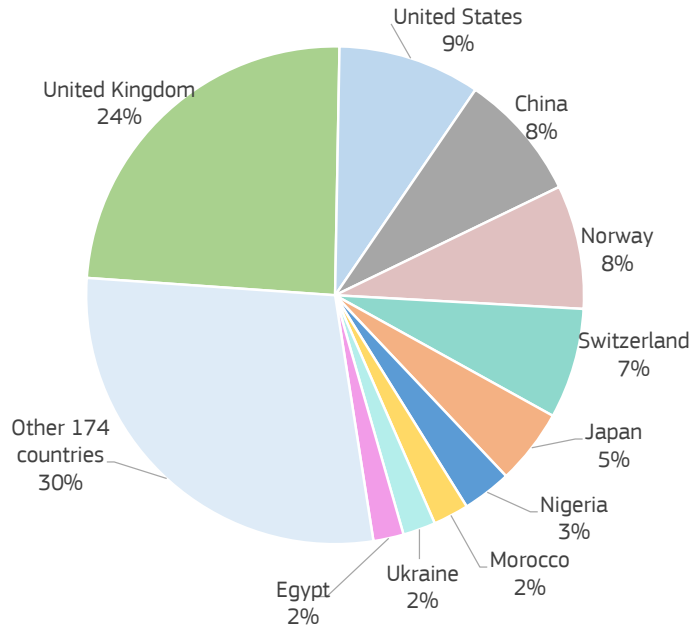


CHART 50
TOP EXTRA-EU COUNTRIES OF DESTINATION IN 2020 (IN VOLUME)

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#))

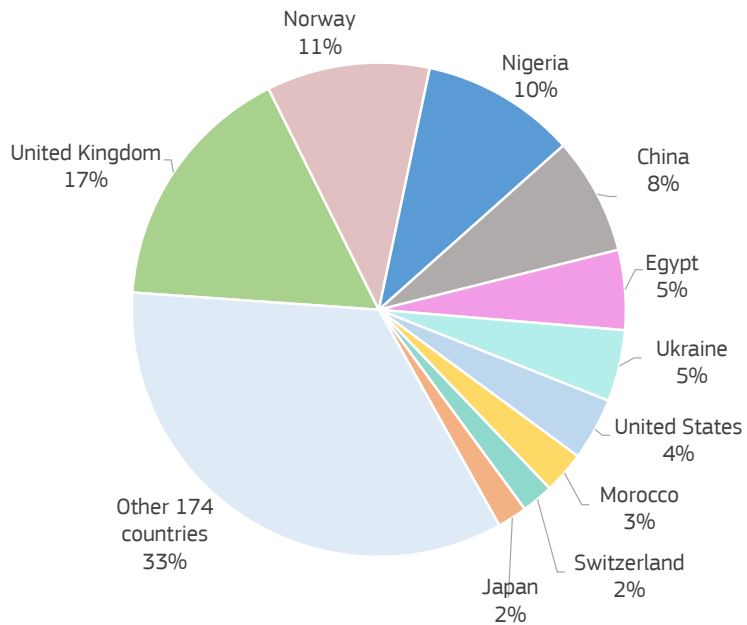


CHART 51
VALUE OF EXTRA-EU EXPORTS PER MEMBER STATE (EUR BILLION)

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#)). Values are deflated by using the GDP deflator (base=2015).

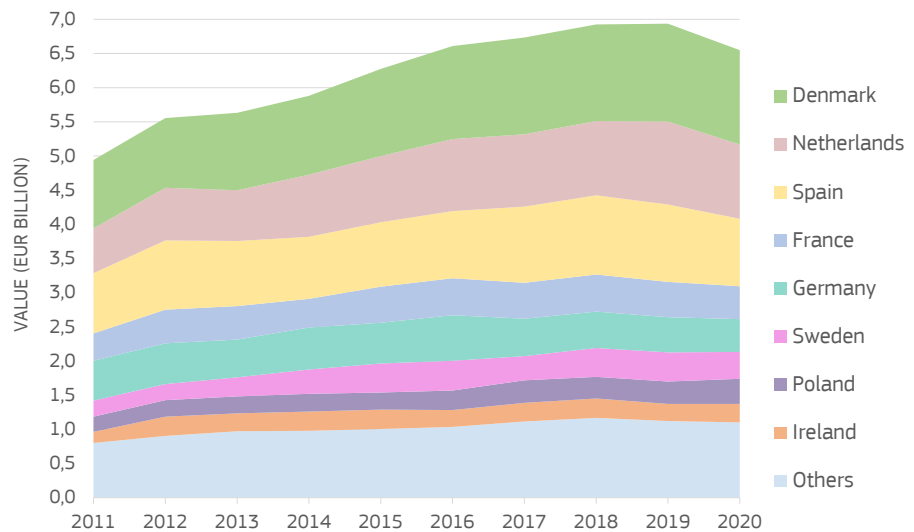


CHART 52

NOMINAL VALUE OF EXTRA-EU EXPORTS BY MEMBER STATE IN 2020 AND % VARIATION 2020/2019

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#))

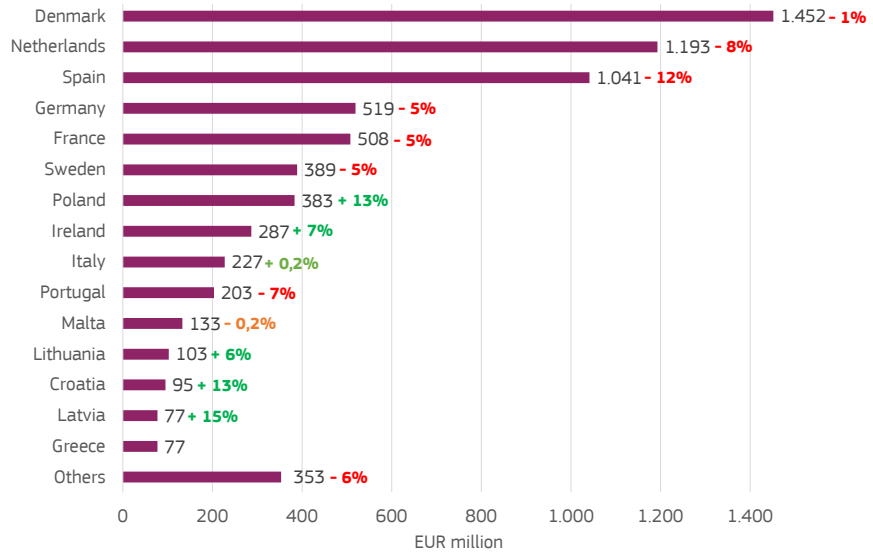
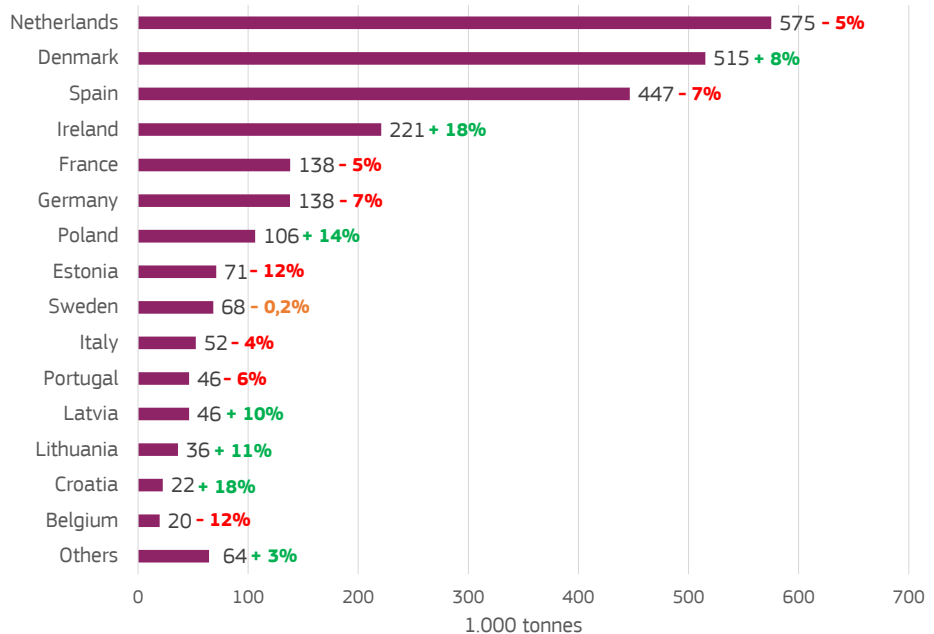


CHART 53

VOLUME OF EXTRA-EU EXPORTS BY MEMBER STATE IN 2020 AND % VARIATION 2020/2019

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#))



4.4.1 ANALYSIS BY MAIN SPECIES

SALMONIDS

Salmon is by far the most valued species exported by the EU. Among salmonids, which also include trout and other salmonid species, it represented 93% of the total value of extra-EU exports of salmonids in 2020.

SALMON

Extra-EU exports of salmon amounted to 135.759 tonnes in 2020, almost in line with the previous two years. In value terms, after achieving a peak in 2018 at EUR 1,16 billion, they started to decrease in 2019 and continued the declining trend in 2020 during which they dropped to EUR 1,11 billion (-3% from 2019).

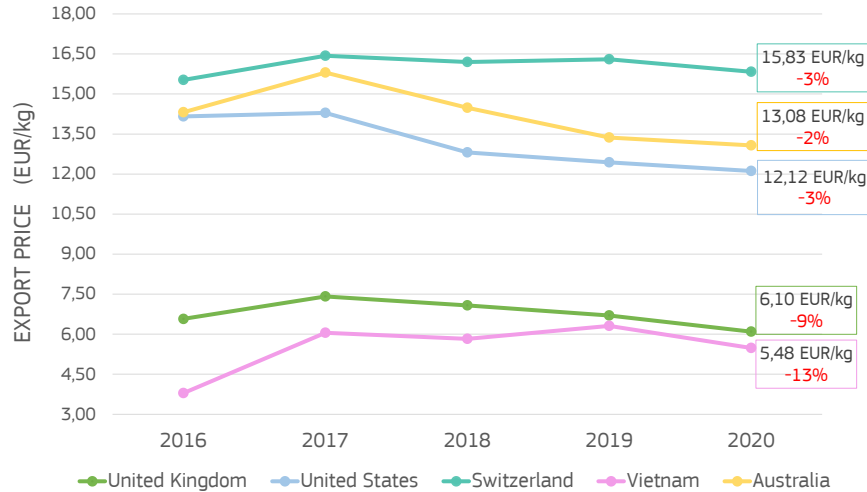
The decrease from 2019 to 2020 was linked to a 4% reduction in the average export price, which moved from 8,51 EUR/kg to 8,19 EUR/kg. This was driven by decreased prices of exports from the major EU exporters of salmon – Sweden, Denmark, Poland, the Netherlands and Germany.

Chart 54 show the five-year trend of the average price of salmon exported to main extra-EU destinations. Of note, the highest price is seen for Switzerland, where salmon

is mainly exported as fresh and smoked fillets. Although there are no data on the topic, a possible explanation could be that exports of salmon to Switzerland largely consist of special quality grade salmon such as *Label Rouge* and organic. Exports to Australia, which ranks second in terms of price, largely consist of high value salmon products such as smoked salmon. Vietnam, which ranks lowest, mainly receives frozen fillets.

CHART 54
NOMINAL EXPORT PRICES OF SALMON TO TOP 5 EXTRA-EU DESTINATIONS AND % VARIATIONS 2020/2019

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#))



SMALL PELAGICS

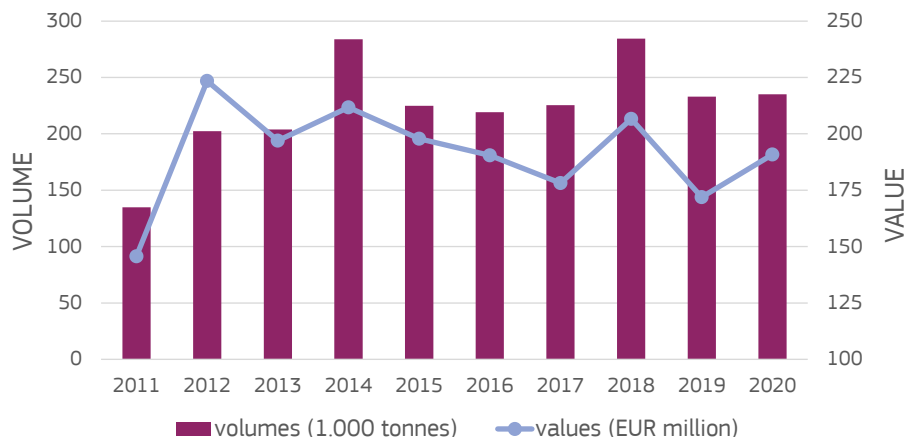
In 2020, EU exports of small pelagics to third countries amounted to 628.319 tonnes and EUR 870 million. Two main commercial species in this group, namely herring and mackerel, accounted for 16% of the total volume of all fishery and aquaculture products exported by the EU, with herring responsible for 9% and mackerel for 7%.

HERRING

After the peak registered in 2018, which was also a record year for EU catches of herring, exports dropped in 2019, but then showed slight signs of recovery in 2020, with volumes increasing by 1% from the previous year to reach 234.974 tonnes. As for value, their overall nominal value in 2020, EUR 208 million, represented a significant improvement, as the increase from 2019 to 2020 was by 13% or EUR 24 million. This was driven by increased export prices from the Netherlands, by far the major EU supplier of herring to third countries, which reached 0,85 EUR/kg in 2020, with a 7% increase from 2019.

CHART 55
HERRING EXPORTED FROM THE EU TO THIRD COUNTRIES

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#)). Values are deflated by using the GDP deflator (base=2015).

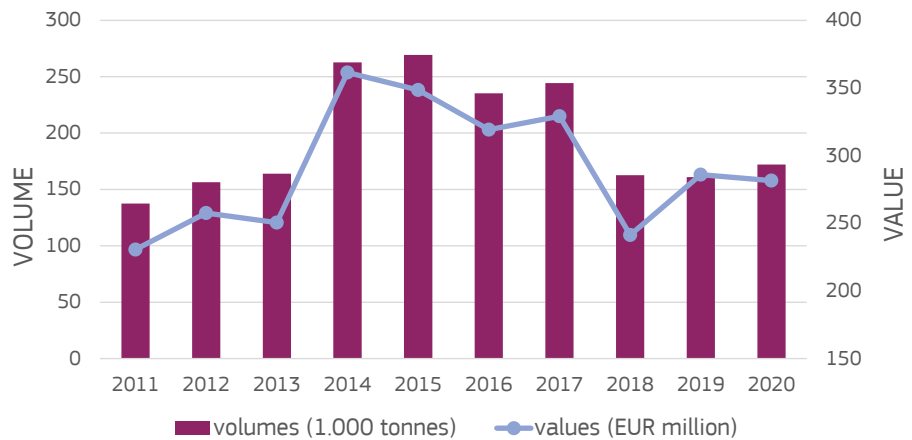


MACKEREL

Extra-EU exports of mackerel plummeted from 2017 to 2018, as did EU catches. After two years of steadiness, from 2019 to 2020 they grew by 7% and reached 172.016 tonnes. At the same time, their value followed a different trend. A value boost was observed from 2018 to 2019, thanks to increased export prices from all major exporters – the Netherlands, Ireland, Denmark and Spain. Then, in 2020, Spain,

Denmark and Ireland had drops in export prices of 24%, 10% and 5%, respectively, which offset a Netherlands's 6% increase, and caused the overall value of mackerel exports to register a slight decline. On average, mackerel was exported at 1,75 EUR/kg in 2020.

CHART 56
MACKEREL EXPORTED FROM THE EU TO THIRD COUNTRIES
 Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#)). Values are deflated by using the GDP deflator (base=2015)



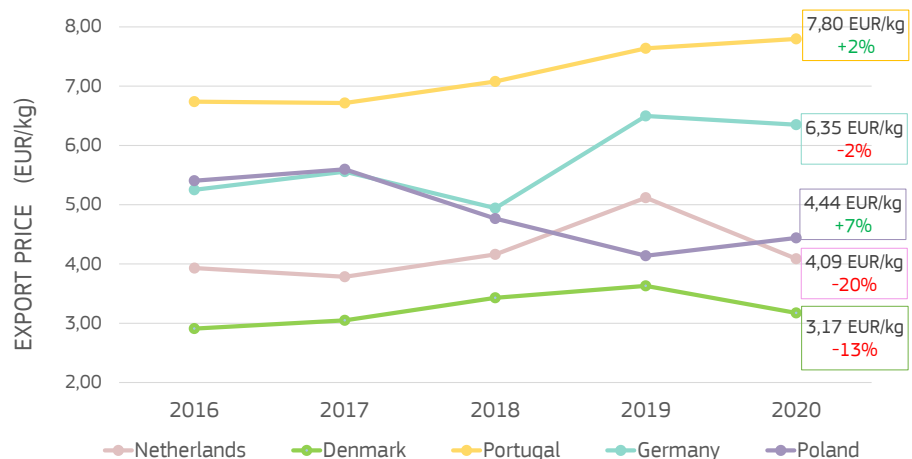
GROUND FISH

In 2020, extra-EU exports of groundfish species totalled 384.251 tonnes and EUR 730 million. Cod exports accounted for almost half of the total value and 18% of the total volumes, while blue whiting prevailed in volume terms. It covered 54% of the total and was second to cod in value, with 17% of the total.

COD

Exports of cod decreased by 18% from 2019, reaching 69.631 tonnes in 2020, which was around 7.500 tonnes below their decade average. The drop was driven by decreased exports of frozen cod fillets from the Netherlands to the UK. With a 27% drop from 2019, the value touched one of the lowest levels in seven years at EUR 340 million. The value decrease was again due to decreased volumes and prices of exports from the Netherlands, as well as from Germany. Of note, the decrease in the export price from Denmark, which is another important EU exporter of cod, did not have a major impact on the overall value of extra-EU exports of this species, as the country also recorded a volume increase.

CHART 57
NOMINAL EXPORT PRICES OF COD FROM MAIN EU EXPORTERS AND % VARIATIONS 2020/2019
 Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#))



BLUE WHITING

In 2020, extra-EU exports of blue whiting had a slight 3% decrease from the 10-year peak they had reached in 2019, dropping to 209.110 tonnes. Their value followed the same trend, reaching EUR 124 million after a 3% decrease from the peak touched in 2019.

Since more than 80% of extra-EU exports of blue whiting originates from the Netherlands, the overall trend was driven by Dutch exports and, more specifically, by Dutch exports of frozen blue whiting to Nigeria. These were exported at an average price of 0,63 EUR/kg in 2020, in line with the price observed in 2019.

NON-FOOD USE PRODUCTS

Of all fishery and aquaculture products exported by the EU, those not destined for human consumption accounted for 20% in 2020, and their value covered 11% of the total. These corresponded to 500.848 tonnes worth EUR 734 million.

FISHMEAL

Extra-EU exports of fishmeal totalled 184.705 tonnes worth EUR 276 million, which represented increases of 8% in volume and 3% in value from 2019. Denmark is responsible for the largest part of these exports, with 130.227 tonnes exported in 2020 and a value of EUR 191 million. Danish exports, mainly destined for Norway and the UK, drove the overall trend: the most important increase concerned exports to the UK which grew by 70% from 2019, and reached a decade peak of 26.371 tonnes. These were sold at 1.481 EUR/tonne, the highest price registered in the ten-year period analysed. Exports from Denmark to Norway also increased from 2019 to 2020, although to a lesser extent: with a 13% volume increase, they reached 62.011 tonnes but sold at 1.467 EUR/tonne, which meant a 9% price decrease.

FISH OIL

Fish oil exports in 2020 were the highest of the ten-year period analysed. With a 10% increase from 2019, they totalled 174.565 tonnes. They registered a value of EUR 323 million, which was also a decade peak. Denmark, the largest EU exporter, drove the general trend by increasing exports to Norway, the major destination. These exports achieved a 10-year volume and value peak in 2020, at 116.359 tonnes and EUR 204 million. They also registered a 10-year price peak – as the export price grew by 18% from 2019 to 2020 reaching 1.751 EUR/tonne.

4.5 INTRA-EU TRADE

In 2020, intra-EU trade⁸⁷ amounted to 5,62 million tonnes and EUR 23,25 billion. In volume terms, this represented a 1% or 54.336-tonne drop from 2019 which was linked to the decrease observed for extra-EU imports. Indeed, exchanges within the EU largely consist of exports of products originally imported from third countries⁸⁸, such as salmon, cod, shrimps and tuna. The 15 flows with the highest value at country and main commercial species levels in 2020 are shown in Chart 59. To note that in 2020, the combined value of intra-EU exchanges of salmon and cod accounted for almost 40% of the total value of intra-EU trade flows of fishery and aquaculture products.

⁸⁷ Intra-EU trade analysis is based on intra-EU exports only, due to the fact that intra-EU imports and intra-EU exports should coincide. For more details, please refer to the Methodological background.

⁸⁸ It has to be underlined that despite "exports" are reported as such by Eurostat-COMEXT according to flows recorded by national customs, in most cases the northern EU Member States are not the actual exporters but rather countries through which products are transported.

CHART 58

INTRA-EU TRADE OF FISHERY AND AQUACULTURE PRODUCTS

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#)). Values are deflated by using the GDP deflator (base=2015).

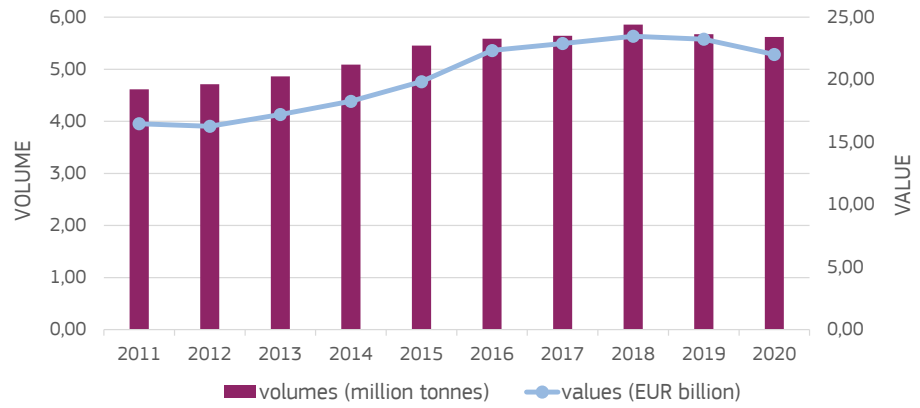


CHART 59

TOP 15 FLOWS OF FISHERY AND AQUACULTURE PRODUCTS WITHIN THE EU IN 2020 (IN NOMINAL VALUE)

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#))

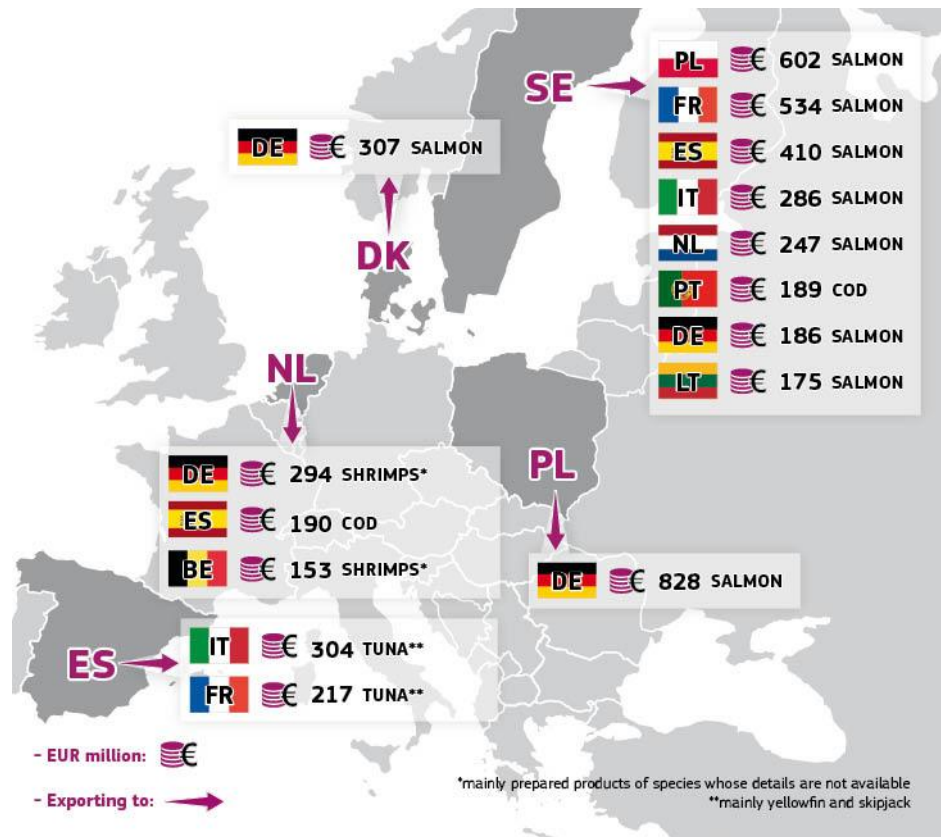


CHART 60

VALUE OF INTRA-EU EXPORTS PER MEMBER STATE (EUR BILLION)

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#)). Values are deflated by using the GDP deflator (base=2015).

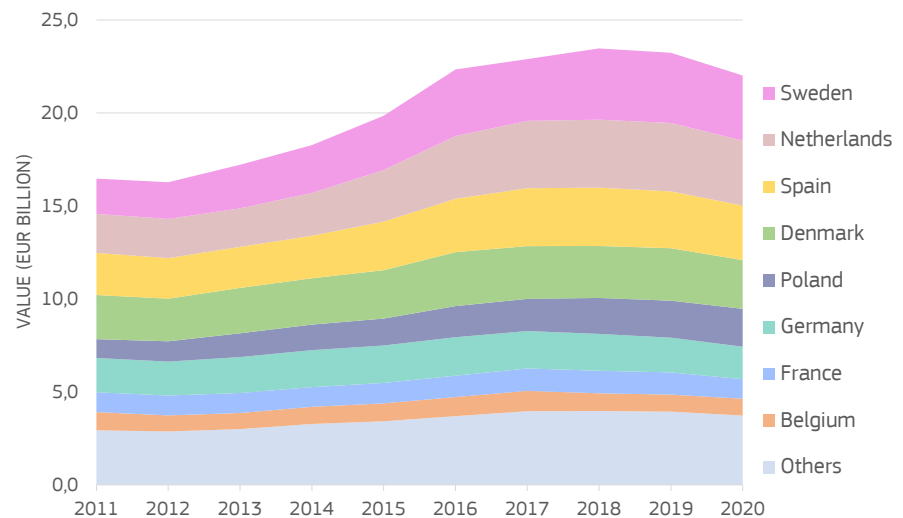


CHART 61
 NOMINAL VALUE OF
 INTRA-EU EXPORTS BY
 MEMBER STATE IN 2020
 AND % VARIATION
 2020/2019

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#))

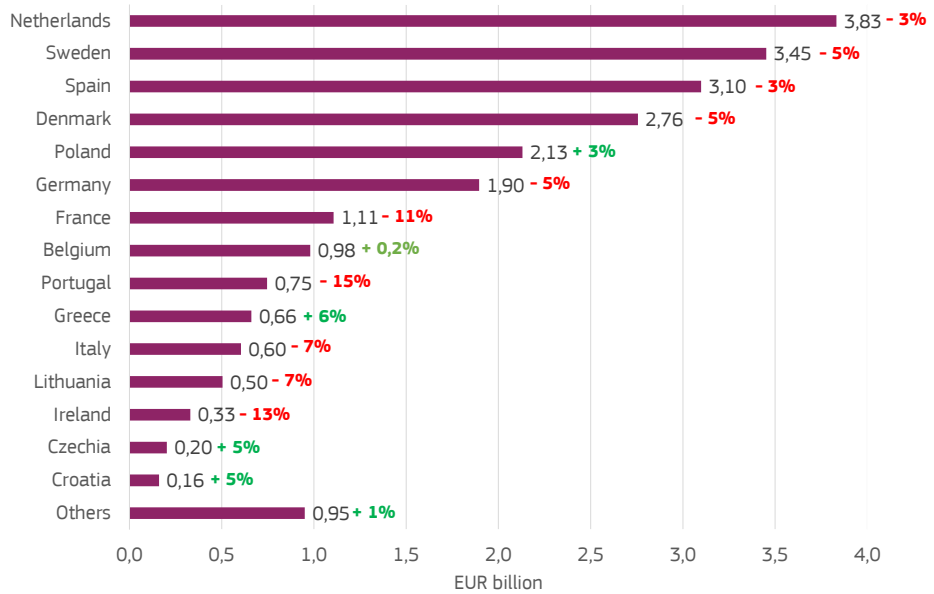
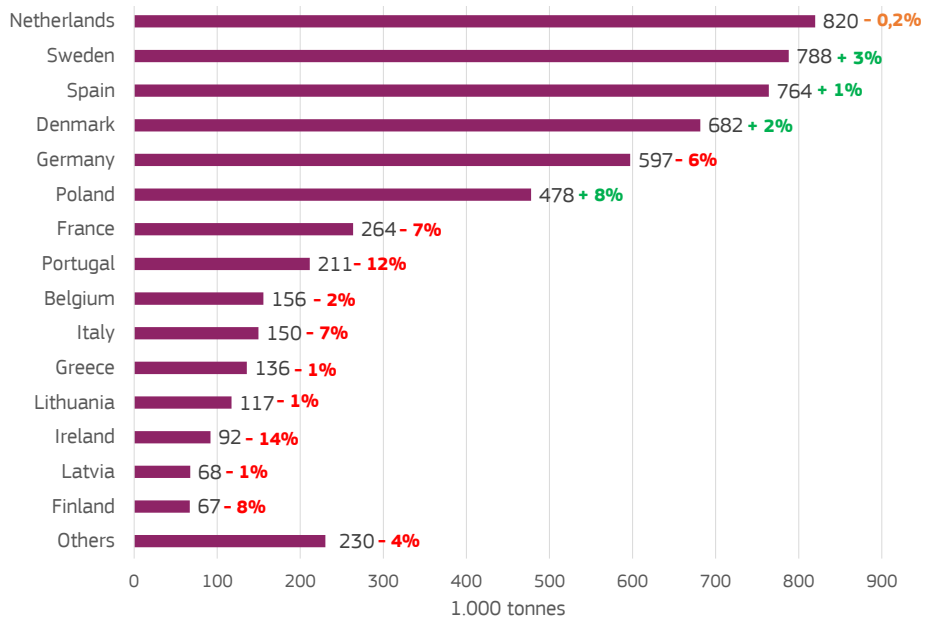


CHART 62
 VOLUME OF INTRA-EU
 EXPORTS BY MEMBER
 STATE IN 2020 AND %
 VARIATION 2020/2019

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#))



4.5.1 ANALYSIS BY MAIN SPECIES

SALMONIDS

Exports of salmon prevail in the intra-EU trade of fishery and aquaculture products⁸⁹. In 2020, with 933.498 tonnes and EUR 6,77 billion, intra-EU exchanges of salmon accounted for 29% of the total value and 17% of the total volume.

Among salmonids, which also include trout and other salmonid species, salmon represented 93% of total volume and 91% of total value.

SALMON

More than 80% of the intra-EU exports of salmon came from three Member States in 2020, according to Eurostat-COMEXT: Sweden, Denmark and Poland – with Sweden's 485.184 tonnes accounting for more than half of the total; Denmark's 167.922 tonnes accounting for 18%; and Poland's 105.883 tonnes accounting for 11%. Since Poland has a thriving smoking industry, which is mainly fed by salmon from Norway, its exports mainly include smoked products and, to a lesser extent, fresh products. Exports from other Member States, on the other hand, consist almost entirely of fresh products.

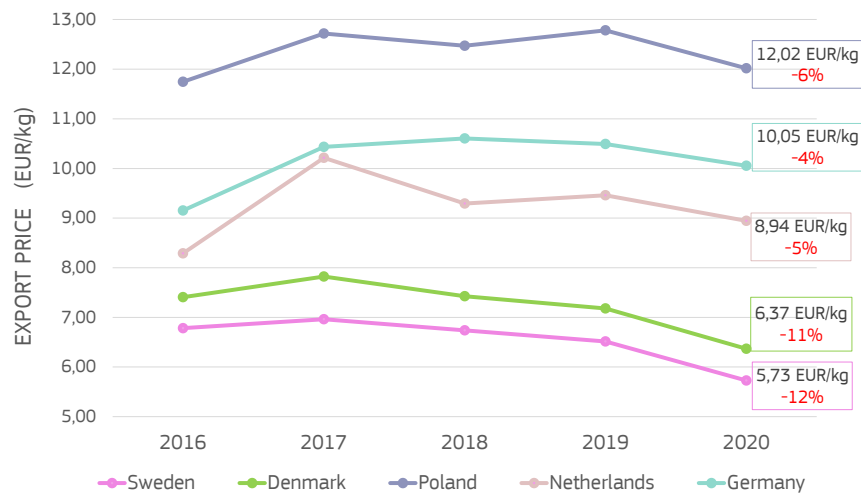
⁸⁹ *Ibidem*.

In line with extra-EU imports of salmon, all three major EU “dealers” of salmon within the internal market registered increased exports from 2019 to 2020, thus leading to a decade peak of salmon exchanges in the EU. The Netherlands and Germany, which follow at a distance, also registered increases in volume terms.

On the other hand, the overall value of intra-EU trade of salmon decreased 2% dropping by almost EUR 150 million from 2019, due to decreased export prices from the major suppliers.

CHART 63
 NOMINAL PRICES OF SALMON IN THE INTRA-EU TRADE BY THE TOP EXPORTERS AND % VARIATIONS 2020/2019

Source: EUMOFA elaboration of Eurostat-COMEXT data (online data code: [DS-575274](#))



GROUND FISH

In 2020, groundfish traded in the EU amounted to 765.385 tonnes, a 2% volume decrease from 2019. They also dropped 2% in value, reaching EUR 3,29 billion. Cod, by far the main groundfish species traded in the EU, drove the overall trend for this category.

COD Cod is the second most valued species among all fishery and aquaculture products traded in the EU⁹⁰. In 2020, 334.056 tonnes of cod with a value of EUR 2,02 billion were exported by EU countries to other Member States. This represented a 2% value decrease of EUR 47 million from 2019, but a volume decrease of a mere 0,3%, or less than 1.150 tonnes. This was despite the 7% fall recorded by extra-EU imports of this species which had seen volume decrease from 433.691 tonnes to 404.056 tonnes. The Netherlands traded one third of the total in 2020, equal to 114.196 tonnes and a 2% increase from 2019. These exports mainly include frozen cod to Spain and Portugal, which in 2020 were sold in Spain at an average prices of 4,47 EUR/kg, a 2% increase from 2019, and at 3,09 EUR/kg in Portugal, which was a 16% increase from 2019. Denmark and Sweden followed at a distance as main cod traders within the EU, with 68.477 tonnes and 56.212 tonnes, respectively, exported in 2020. Both countries were almost in line with their exports in 2019.

Exports from Denmark mostly include fresh products, mainly destined for the Netherlands and France. Those for the Netherlands sold at 4,66 EUR/kg in 2020, 4% less than in 2019. Those for France sold at 9,10 EUR/kg in 2020, an increase of 0,5% from 2019. Exports to France also include significant amounts of fillets, thus explaining the higher prices compared with exports destined for the Netherlands.

Sweden exports of cod are almost exclusively destined for Portugal, where it is mainly sold as dried and salted products, at average prices of 8,63 EUR/kg and 6,06 EUR/kg, respectively, in 2020 – both slightly lower than in 2019.

⁹⁰ *Ibidem*.

5/ LANDINGS IN THE EU

5.1 OVERVIEW

TOTAL EU

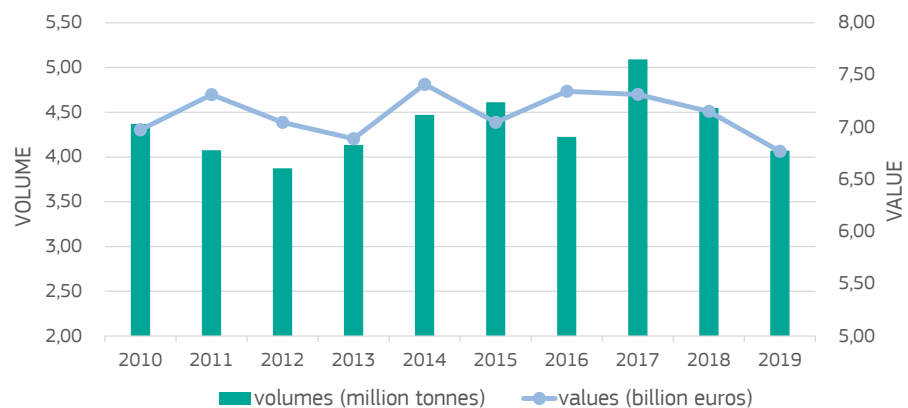
Data on landings in the EU⁹¹ cover the initial unloading of any fisheries products from a fishing vessel in each EU Member State⁹². This includes landings of species not destined for human consumption and seaweed.

In 2019, landings totalled 4,07 million tonnes with a value of EUR 6,91 billion. Compared with 2018, this represented a volume decrease of 10% or 477.224 tonnes, and a value decline of 4% or EUR 288 million. The downward trend began in 2018, when the volume and the value decreased by 11% and 1%, respectively, from 2017. With respect to 2010⁹³, 2019 landings were 7% or 300.715 tonnes lower in volume and 3% or EUR 205 million lower in value in real terms.

CHART 64

TOTAL LANDINGS IN THE EU

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



From 2018 to 2019, landings of several of the most landed main commercial species in the EU dropped, as can be seen in chart 65.

The main reduction concerned landings of sandeels in Denmark destined for industrial use – the same species that contributed to the boost recorded from 2016 to 2017. Landings of these species rose from 45.944 tonnes and EUR 16 million in 2016 to 402.030 tonnes and EUR 62 million in 2017. In 2018, they dropped to 195.777 tonnes and EUR 44 million, while in 2019 they totalled 122.218 tonnes and EUR 32 million. It should be noted that within EUMOFA, sandeel does not constitute a “main commercial species” because of its limited market, but falls under the aggregation “other groundfish”⁹⁴.

In addition, EU landings of herring and blue whiting also saw significant drops, due to lower landings of frozen herring in the Netherlands and fresh blue whiting in Denmark.

The overall landings decrease from 2018 to 2019 was driven by a drop of sandeel landings in Denmark.

⁹¹ In line with the approach adopted by EUMOFA following BREXIT, the United Kingdom is considered part of the EU till 2019 and its data until that year are available in all tables, charts and analyses at EU level. In addition, EU data include Croatia since 2013, date of the EU’s enlargement to this country.

⁹² Data regarding landings do not refer to landlocked countries (Czechia, Luxembourg, Hungary, Austria and Slovakia). The data analysed in this report cover products landed by vessels of EU Member States, Canada, Faroe Islands, Greenland, Kosovo, Iceland, Norway and the UK. As regards Denmark, the analyses in this chapter are not detailed by vessel nationality, as this information is confidential within Eurostat.

⁹³ In this report, value and price variations for periods longer than 5 years are analysed by deflating values using the GDP deflator (base=2015); for shorter periods, nominal value and price variations are analysed.

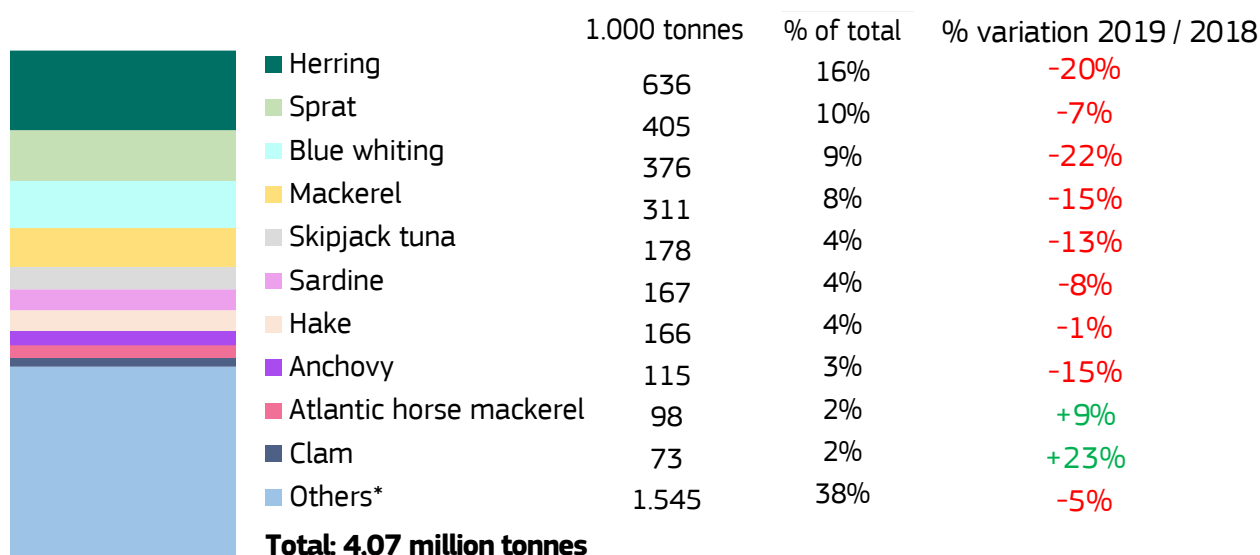
⁹⁴ The correlation table used for harmonizing data on fish species landed in the EU to the EUMOFA standards is available at the link http://www.eumofa.eu/documents/20178/24415/Metadata+2+-+DM+-+Annex+3+Corr+of+MCS_CG_ERS.PDF/1615c124-b21b-4bff-880d-a1057f88563d.

The value decrease of EU landings was mainly due to decreased values of shrimps' landings, which was driven by a decrease in both volume and price of shrimp *Crangon* spp. in the Netherlands.

CHART 65

MOST IMPORTANT MAIN COMMERCIAL SPECIES LANDED IN THE EU VOLUME IN 2019, % OF TOTAL AND % VARIATIONS 2019 / 2018

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

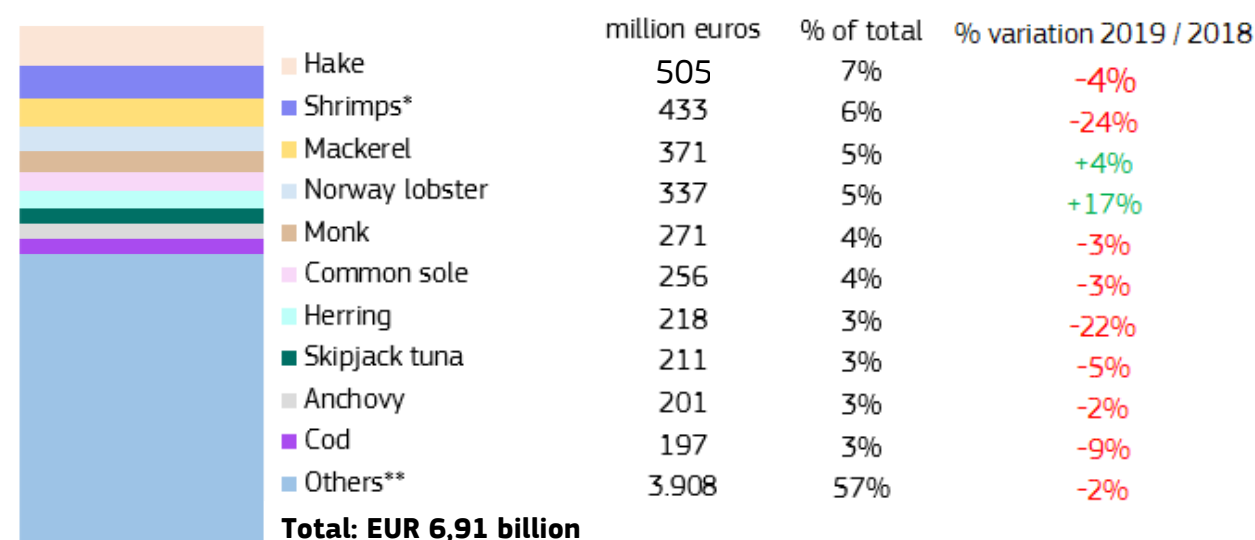


*Others largely include the EUMOFA aggregation "other groundfish" – mainly comprising sandeels that covered alone 8% of total volumes landed.

CHART 66

MOST IMPORTANT MAIN COMMERCIAL SPECIES LANDED IN THE EU NOMINAL VALUE IN 2019, % OF TOTAL AND % VARIATIONS 2019 / 2018

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



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

**Among other main commercial species, the ones with the highest landing value in 2019 were cod, clam and octopus, each covering 3% of the total.

TABLE 17
AVERAGE NOMINAL
PRICES AT LANDING
STAGE OF TOP-20 MAIN
COMMERCIAL SPECIES IN
THE EU (EUR/KG)

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

Main commercial species	2015	2016	2017	2018	2019	2019/2018	2019/2015
Anchovy	1,55	1,68	1,67	1,50	1,75	17%	13%
Atlantic horse mackerel	0,77	0,77	0,88	0,96	0,90	-6%	17%
Blue whiting	0,35	0,34	0,23	0,27	0,30	12%	-12%
Clam	2,41	2,96	3,18	2,84	2,70	-5%	12%
Cod	2,34	2,47	2,69	3,18	3,41	7%	46%
Crab	1,95	1,85	2,14	2,61	2,66	2%	36%
European plaice	1,52	1,69	1,86	2,49	2,42	-3%	59%
Haddock	2,09	1,89	1,99	1,94	2,00	3%	-4%
Hake	3,28	3,22	3,23	3,14	3,05	-3%	-7%
Herring	0,40	0,53	0,37	0,35	0,34	-3%	-15%
Mackerel	0,77	0,89	0,88	0,97	1,19	22%	55%
Monk	5,07	4,91	4,62	5,21	5,27	1%	4%
Mussel Mytilus spp.	0,43	0,53	0,25	0,23	0,28	22%	-35%
Norway lobster	8,38	8,35	7,72	8,15	7,88	-3%	-6%
Sardine	0,94	0,82	0,81	0,93	0,95	2%	1%
Scallop	2,52	2,66	2,71	2,69	2,62	-3%	4%
Shrimp Crangon spp.	3,63	7,28	7,69	3,78	2,88	-24%	-21%
Seaweed and other algae	0,07	0,07	0,08	0,09	0,07	-22%	=
Skipjack tuna	0,99	1,02	1,11	1,08	1,18	9%	19%
Sprat (=Brisling)	0,25	0,27	0,20	0,22	0,24	9%	-4%
Yellowfin tuna	3,26	4,11	4,09	1,93	2,12	10%	-35%

BY MEMBER STATE

In 2019, the highest landed volumes were recorded in Denmark, where landings mainly consisted of herring and sprat, and in Spain, where almost all EU landings of skipjack tuna take place. Landings in Spain also registered the highest value, mainly due to hake and to both skipjack and yellowfin tuna.

From 2018 to 2019, the most important volume decreases were seen in Denmark, which registered a fall of 20% or 213.694 tonnes due to blue whiting; the Netherlands, which recorded a drop of 17% or 92.849 tonnes due to herring; and Spain, which had a reduction of 7% or 58.378 tonnes because of mackerel.

As for value changes, the Netherlands and Germany registered noticeable decreases: the Netherlands saw value drop by 23% or EUR 135 million because of herring, while Germany's dropped by 33% or EUR 53 million due to shrimp *Crangon* spp.

CHART 67
VOLUMES OF LANDED PRODUCTS IN MAIN EU COUNTRIES IN 2019 AND % VARIATIONS 2019 / 2018

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

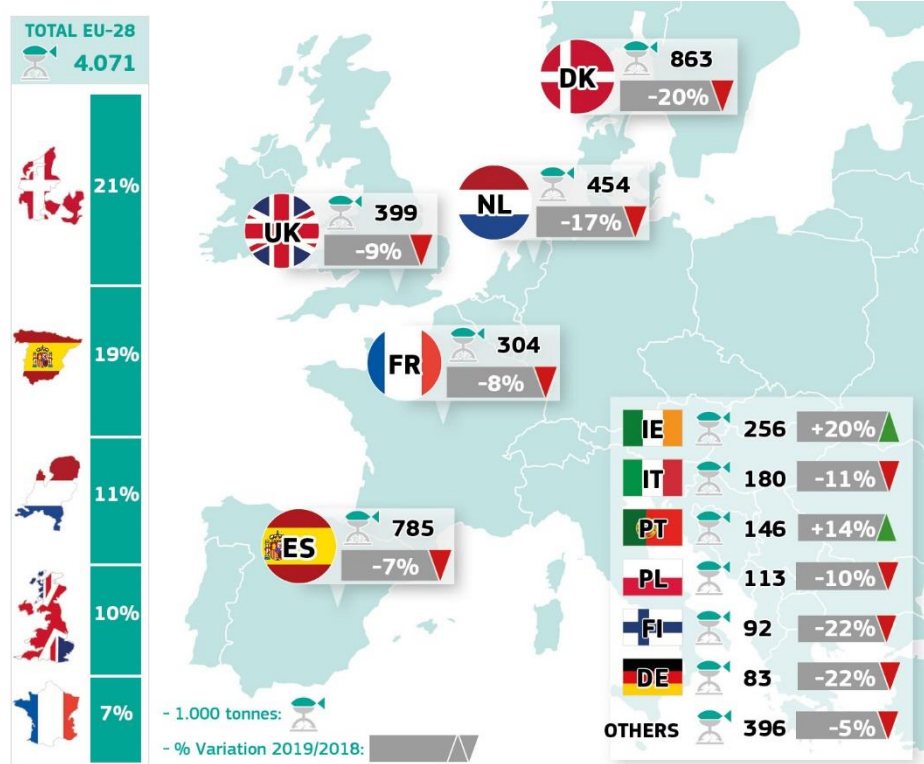
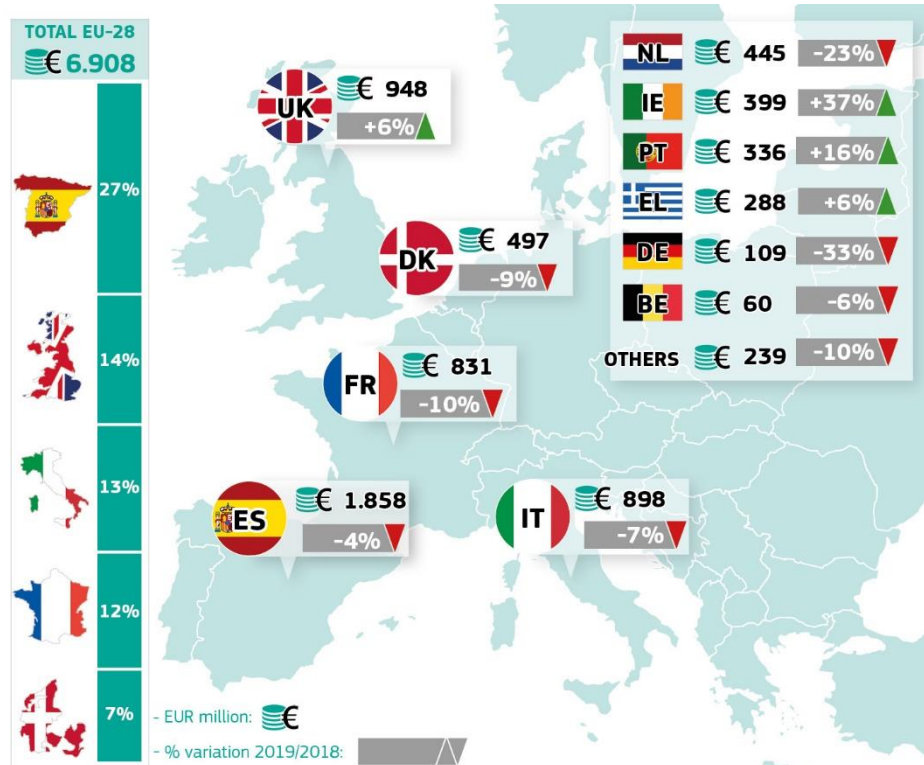


CHART 68
NOMINAL VALUES OF LANDED PRODUCTS IN MAIN EU COUNTRIES IN 2019 AND % VARIATIONS 2019 / 2018

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



5.2 ANALYSIS BY MAIN SPECIES

SMALL PELAGICS

In 2019, the landings of small pelagics in the EU amounted to 1,08 million tonnes. This was 258.288 tonnes or 13% lower than 2018, and 380.505 tonnes or 17% lower than the 10-year peak registered in 2015. Their value of EUR 1,18 billion represented a 4% or EUR 49 million decline from 2018. Compared with 10 years before, the volume decreased by 305.608 tonnes or 16%, and the value in real terms decreased by EUR 310 million or 21%.

Five of the small pelagics' main commercial species, namely herring, sprat, mackerel, sardine and anchovy, together accounted for 40% of total landed volumes in 2019.

HERRING

In 2019, herring, the most landed main commercial species in the EU, totalled 635.869 tonnes, thus accounting for 16% of total volumes. Compared with the 10-year peak of 2018, this represented a drop of 20% or 156.589 tonnes. With an average landing price of 0,34 EUR/kg, herring's total landing value dropped to EUR 217 million, 22% less than the previous year. In real terms, this was the second lowest amount ever registered for landings of this species in the EU.

Almost 30% of herring volumes were landed in Denmark, 22% in the Netherlands and 12% in Finland, with most of the rest landed in other northern EU Member States. Denmark and the Netherlands drove the overall decrease in herring landings in the EU in 2019. Compared with 2018, landings in Denmark declined by 16%, from 220.024 tonnes to 185.238 tonnes, while landings in the Netherlands dropped by 22%, from 179.244 tonnes to 139.249 tonnes. To be noted that from 2018 to 2019, both countries saw their herring quotas in the North-East Atlantic cut by around 40%. Herring in Denmark was mainly landed by Danish and Swedish vessels, which together accounted for 72% of total Danish landings, while in the Netherlands, herring was mainly landed by the national and German fleets, which together covered 88% of the total Dutch volume.

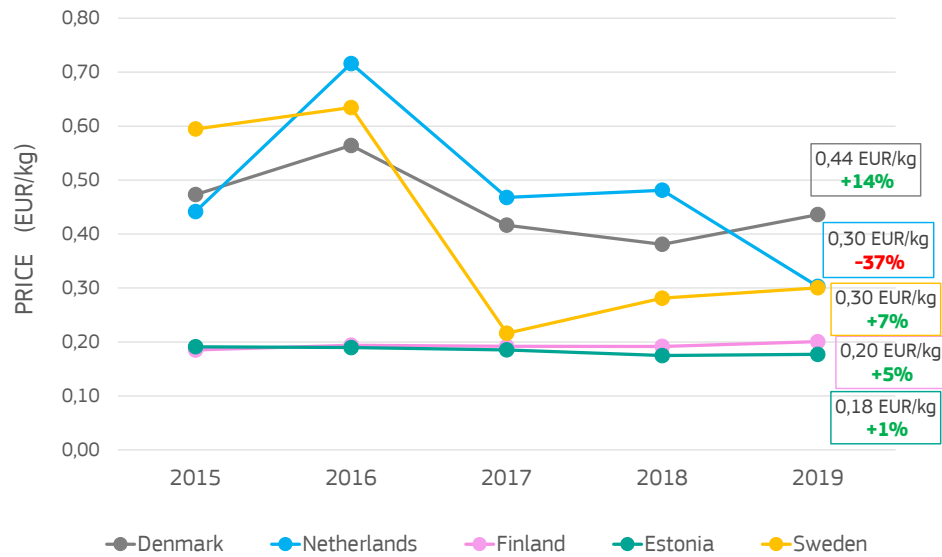
As for the value trend, many countries recorded significant decreases in 2019, the most significant being the Netherlands and Sweden, with falls of 51% and 36%, respectively. In almost all countries, the price of herring at landing stage increased from 2018, which meant that value variations were mainly due to volume drops. The only exception was the Netherlands, where the average price decreased by 37%, from 0,48 EUR/kg to 0,30 EUR/kg.

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

Due to drops in Denmark and the Netherlands, landings of herring, still the most landed main commercial species in the EU, decreased by 20% from 2018 to 2019.

CHART 69
AVERAGE NOMINAL PRICES OF HERRING LANDED IN MAIN EU MEMBER STATES (EUR/KG)

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



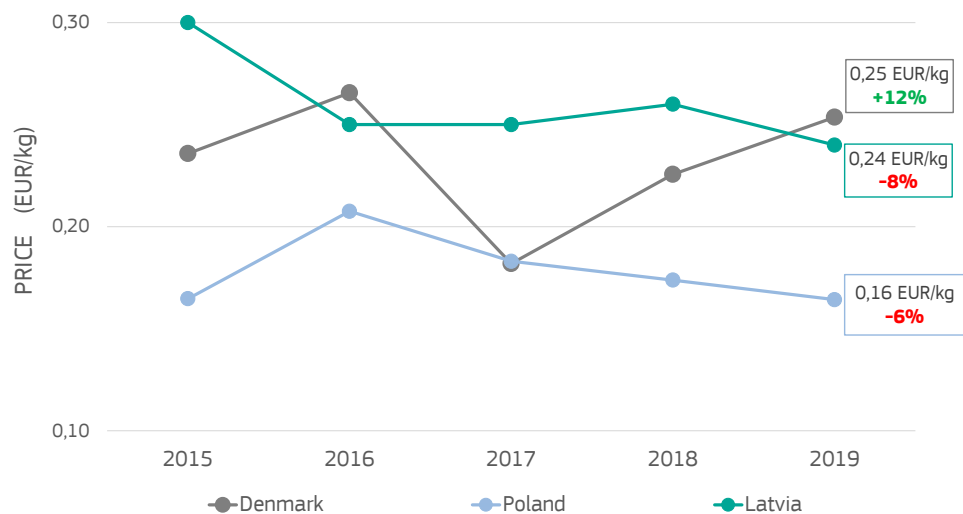
SPRAT The landings of sprat in the EU amounted to 404.982 tonnes and EUR 96 million in 2019. Compared with 2018, the volume declined by 7% and touched the lowest level since 2015. The value remained almost unchanged, while the average price increased by 7% from 0,22 EUR/kg to 0,24 EUR/kg.

Denmark, by far the main landing country of this species, accounted for 85% of EU volume in 2019, mainly consisting of products destined for the fishmeal industry. From 2018, the volumes landed decreased by 12%, from 267.990 tonnes to 235.529 tonnes. Nevertheless, the value, which amounted to EUR 60 million in 2019, did not vary, as the average price increased by 12%. It should be noted that all of Denmark's sprat quotas – in both the North-East Atlantic, and Baltic Sea – decreased by more than four times from 2018 to 2019.

Poland and Latvia followed far behind. Compared with 2018, the volume of sprat landings in Poland declined by 7% in 2019, from 56.311 tonnes to 52.475 tonnes, and the value decreased by 12%, from EUR 10 million to EUR 9 million. In Latvia, sprat landings grew a slight 2% in volume, from 38.866 tonnes to 39.557 tonnes, but declined by 6% in value, from EUR 10 million to EUR 9 million. In both countries, sprat quotas remained quite stable from 2018 to 2019.

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

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



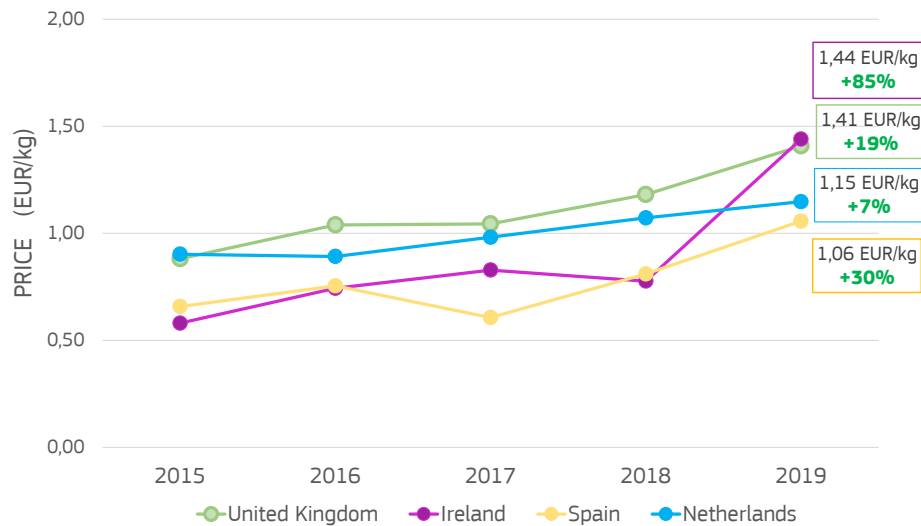
MACKEREL In 2019, the landings of mackerel in the EU totalled 311.460 tonnes worth EUR 371 million. Compared with 2018, this was a 15% drop in volume and a 4% increase in value.

Almost one-quarter of mackerel was landed in the United Kingdom, where 72.152 tonnes in 2019 represented a 24% drop from 2018, as well as the lowest level of the last 10 years. This was linked to a 20% decrease of UK quotas in the North-East Atlantic. Of the UK landings of mackerel, 84% originated from national vessels, while the rest was from other northern EU Member States' fleets. The United Kingdom also recorded a 19% price increase, from 1,18 EUR/kg in 2018 to 1,41 EUR/kg in 2019. However, due to the volume drop, the total value decreased by 9%, reaching EUR 102 million.

Other countries also contributed to the overall trend of mackerel landings at EU level. Ireland, Spain and the Netherlands, which accounted for 47% of the total in 2019, all recorded significant drops in volume compared with 2018. The most remarkable variation was recorded in Spain, which had a 33% volume drop, from 77.110 tonnes in 2018 to 51.425 tonnes in 2019. This volume decrease was accompanied by a 30% price growth, which resulted in value decreasing by only 13%, from EUR 62 million to EUR 54 million.

CHART 71
AVERAGE NOMINAL
PRICES OF MACKEREL
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.



SARDINE In 2019, the landings of sardine in the EU continued the downward trend started in 2017. Compared with 2018, they decreased 8% in volume to 166.689 tonnes, and 6% in value to EUR 156 million. The average price increased by 2%, from 0,93 EUR/kg to 0,95 EUR/kg.

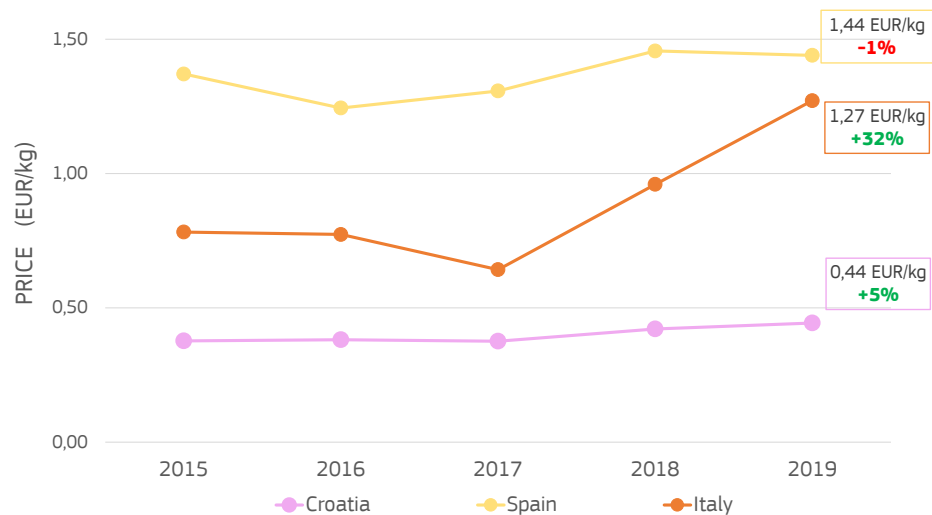
With landings totalling 45.186 tonnes with a value of EUR 20 million, Croatia covered 27% of total EU in volume and 13% in value. Compared with 2018, this represented a 3% reduction in volume and a 3% increase in value.

The EU decrease was also driven by other countries, namely Spain and Italy, which rank second and third among the EU Member States landing sardine.

In 2019, landings of sardine in Spain totalled 25.650 tonnes and were sold at an average price of 1,44 EUR/kg. From 2018 to 2019, volumes and values dropped by 16% and 17%, respectively: the volume decreased from 30.445 tonnes to 25.650 tonnes and the value from EUR 44 million to EUR 37 million. As for Italy, its sardine landings totalled 24.067 tonnes in 2019, thus dropping 10% or 2.802 tonnes from the previous year. Due to a 32% price growth, from 0,69 EUR/kg to 1,27 EUR/kg, the value increased significantly to EUR 31 million, which was 19% or EUR 5 million higher than in 2018.

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

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



ANCHOVY

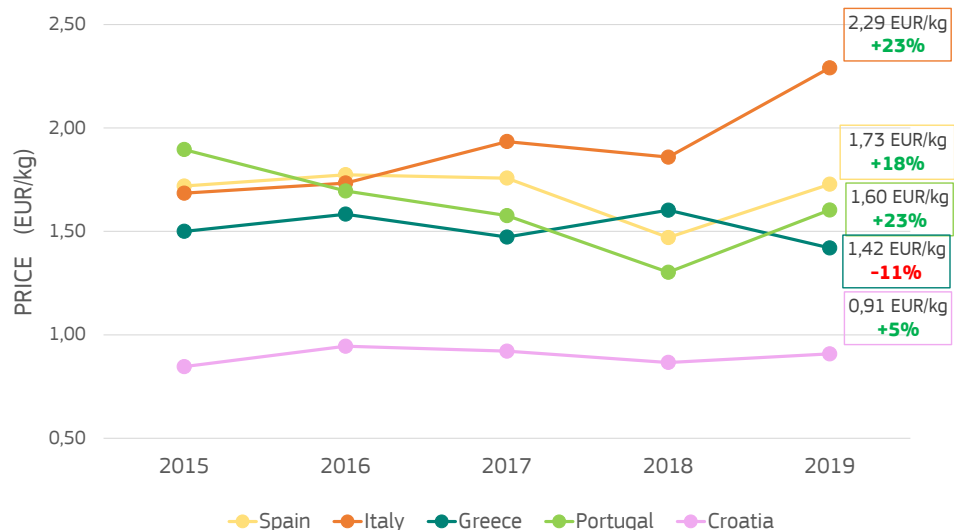
After reaching a 10-year peak reached in 2018, the 2019 landings of anchovy in the EU decreased by 15% and totalled 114.794 tonnes. In the same time period, the average landing price increased by 16%, from 1,50 EUR/kg to 1,75 EUR/kg, thus causing total value to decrease by only 2%, to EUR 201 million.

The EU trend was led by Spain, the main EU country where anchovy is landed, which accounted for 42% of total volumes in 2019. Compared with 2018, Spain's landings volume dropped by 20%, from 59.502 tonnes to 47.776 tonnes, and its value decreased by 7%, from EUR 85 million to EUR 79 million. The downward trend in volume from 2018 to 2019 was linked to an almost 30% drop in the Spanish quotas for the North-East Atlantic.

The other main EU countries for landings of anchovy – Italy, Greece, Portugal and Croatia – together contributed 55% of total volume in 2019. While Greece and Portugal reported increases in both volume and value from 2018, Italy and Croatia had opposite trends. In particular, despite a 5% price increase, Croatia suffered a remarkable 40% drop in volume, from 13.251 tonnes to 7.993 tonnes, and a 37% fall in value, from EUR 11 million to EUR 7 million.

CHART 73
AVERAGE NOMINAL PRICES OF ANCHOVY LANDED IN MAIN EU MEMBER STATES (EUR/KG)

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



GROUND FISH

After reaching a peak in 2017, the landings of groundfish in the EU suffered a significant drop in 2018. The downward trend continued in 2019, when the total volume of 897.524 tonnes represented a 17% or 187.816-tonne decrease from the previous year. Nevertheless, in the same period, the total value amounted to EUR 1,22 billion, almost unchanged from 2018.

As in the previous years, the evolution of groundfish landings in the EU in volume terms was linked to sandeel landings, which saw a peak in 2017 but then a dramatic fall in 2018. In 2019, they dropped by 38% in volume, from 198.777 tonnes to 122.218 tonnes, and by 28% in value, from EUR 44 million to EUR 32 million. The fall was mainly due to decreased landings in Denmark.

BLUE WHITING

Blue whiting is the most landed groundfish species in the EU. In 2019, it accounted for 42% of total volume of this commodity group, followed by hake and cod, which accounted for shares of 19% and 16%, respectively.

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

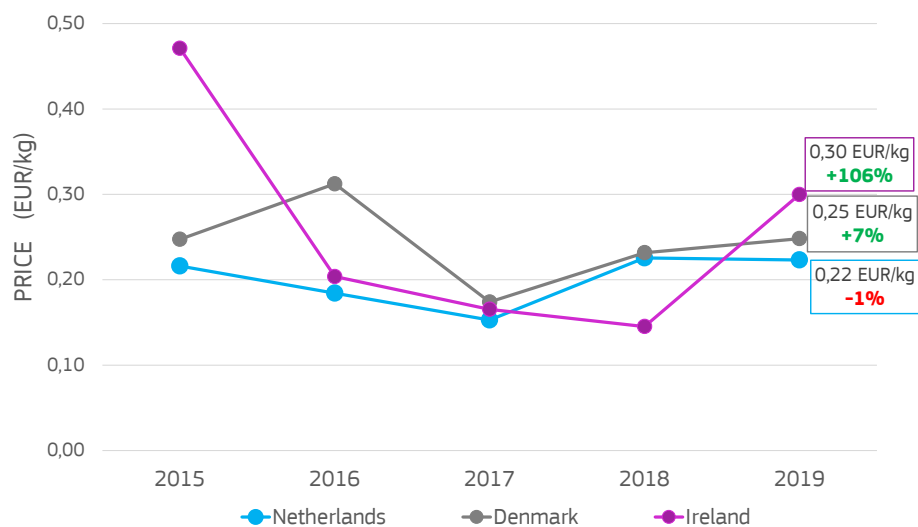
After the peak touched in 2018, the landings of blue whiting in the EU dropped by 22% in 2019, reaching 376.023 tonnes. In value terms, they totalled EUR 114 million, which represented a 12% decrease from 2018. If looking at decade changes, this represented a 246% increase in volume and 62% increase in value in real terms compared with 2010, when blue whiting landings in the EU had amounted to 108.812 tonnes worth almost EUR 58 million in real terms. As for the average price, it increased by only 3% from 2010, and by 12% from 2018 to 2019, rising from 0,27 EUR/kg to 0,30 EUR/kg.

The downward trend in volume was driven by the Netherlands and Denmark, which in 2019 covered almost 70% of EU blue whiting landings. Compared with 2018, landings in the Netherlands decreased by 11%, from 150.025 tonnes to 132.968 tonnes, while those in Denmark dropped by 44%, from 223.474 tonnes to 124.667 tonnes. This was linked to the fact that, from 2018 to 2019, both countries had lower blue whiting quotas in all fishing areas of the North Atlantic. To be noted that the Netherlands and Denmark also reported decreases of 12% and 40%, respectively, in value: the Netherlands dropped from EUR 34 million to EUR 30 million, while Denmark fell from EUR 52 million to EUR 31 million.

Over the last 10 years, blue whiting's landings in the EU grew by 246% in volume and by 62% in real value.

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

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



HAKE

In 2019, the 165.971-tonne volume of hake landings in the EU was 1% lower than in 2018. The average price declined 3%, from 3,14 EUR/kg to 3,05 EUR/kg, thus the total value of hake landings dropped by 4%, to EUR 505 million. In terms of volume, European hake (*Merluccius merluccius*) accounted for 64% of the total, followed by Argentine hake (*Merluccius hubbsi*), with 31%. Benguela hake (*Merluccius polli*), Senegalese hake (*Merluccius senegalensis*) and Cape hakes (*Merluccius capensis*, *M. paradox.*) accounted for the rest.

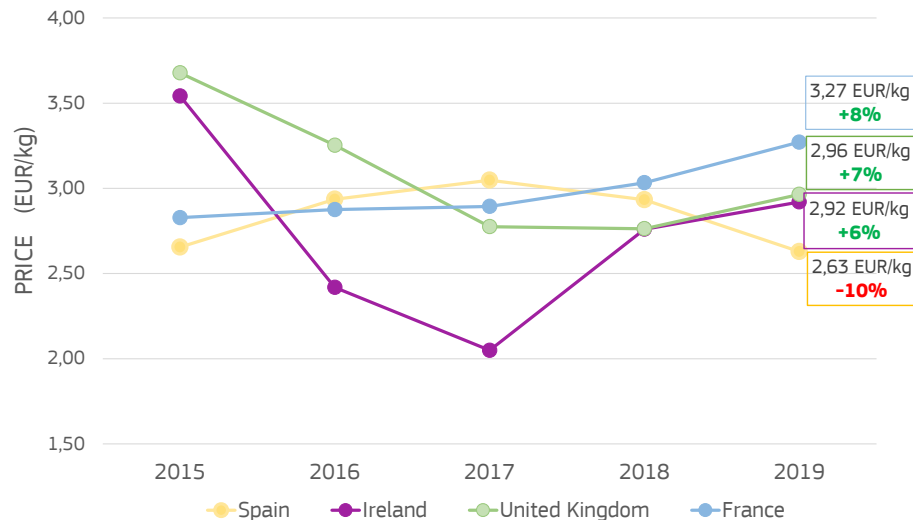
Spain accounts for more than 60% of total landings of hake in the EU and is the Member State reporting the highest volumes and values. In 2019, it totalled 103.721 tonnes – a 10-year peak – and EUR 273 million, which represented an increase of 6% in volume and a decline of 5% in value from 2018. Ireland, which ranked second, landed 16.150 tonnes in 2019 which was a 3% volume decrease from 2018, but at the same time, the value increased 3%, reaching EUR 47 million.

It is worth noting that Spain, Portugal and the Netherlands are the only countries where European hake (*Merluccius merluccius*) is not the only hake species landed. Indeed, the upward trend recorded in Spain in 2019 was due to the landings of Argentine hake (*Merluccius hubbsi*), which had a volume increase of 23% from 2018.

CHART 75

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

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



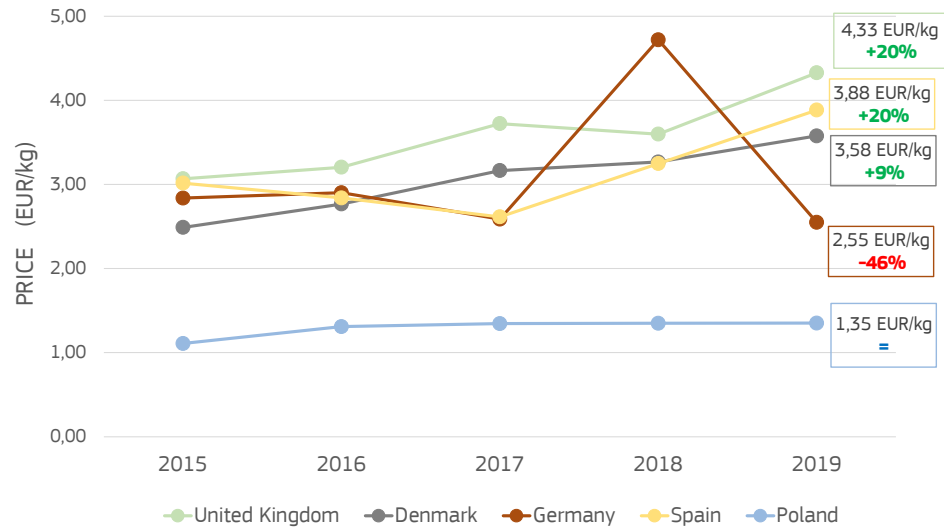
COD

In 2019, the landings of cod in the EU amounted to 57.776 tonnes worth EUR 197 million. This was a decrease of 15% in volume and 9% in value from 2018, as well as the lowest level of the last 10 years in both volume and real value. The average price increased by 7% from 2018 to 2019, rising from 3,18 EUR/kg to 3,41 EUR/kg, but if looking at the real term prices, there was a 52% increase from 2010 to 2019.

Landings were the largest in the UK, followed by Denmark, Germany, Spain and Poland. Among them, Poland drove the overall downward trend, since both its volume and value decreased by around 50% compared with 2018 – dropping from 8.659 tonnes to 4.391 tonnes and from EUR 12 million to EUR 6 million. On the other hand, Germany experienced the highest price decrease, which made the value of its cod landings drop by 26%, from EUR 36 million to EUR 27 million, even if its volume had increased by 37%, from 7.271 tonnes to 9.975 tonnes.

CHART 76
AVERAGE NOMINAL PRICES OF COD LANDED IN MAIN EU MEMBER STATES (EUR/KG)

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



CRUSTACEANS

In 2019, the landings of crustaceans in the EU totalled 164.980 tonnes worth EUR 1,05 billion. Compared with the 10-year peak touched in 2018, volumes decreased by 10%, or 17.634 tonnes, and values decreased by 8%, or EUR 88 million.

SHRIMPS

Shrimps are the highest valued product landed in the EU. After the 10-year peak reached in 2018, in 2019 they dropped in both volume and value: volume totalled 57.614 tonnes, which was a 29% or 2.447-tonne decrease from the previous year, and value amounted to EUR 433 million, which was 24% or 139 million lower than in 2018. The main EU countries where shrimps were landed vary depending on the species.

Crangon shrimp was mainly landed in the Netherlands, where it totalled 14.016 tonnes worth EUR 39 million. From 2018, landed volumes dropped by 42%, while values more than halved, thus driving an EU-level decrease of 45% in volume and 58% in value. It is worth noting that, compared with 2018, in 2019 the landing price of this species significantly decreased in all of the main landing countries.

Other types of coldwater shrimps were mainly landed in Denmark and Sweden. Compared with 2018, Denmark's landings increased by 16% in volume and by 7% in value, thus totalling 1.730 tonnes worth 9 million. Sweden dropped to its lowest point in 10 years, reaching 1.090 tonnes valued at almost EUR 13 million, for a decline of 17% in volume and 4% in value.

Italy and Spain, the two main landing countries for deep-water rose shrimps, covered 75% of total landed volumes in 2019. Compared with 2018, Italy's volume decreased 8%, from 9.827 tonnes to 9.011 tonnes, and value increased 9%, from EUR 57 million to EUR 62 million. In the same period, Spain's volume increased 12%, from 4.583 tonnes to 5.145 tonnes, and value grew 20%, from EUR 38 million to EUR 46 million. Italy was also the main landing country for warmwater shrimps, namely Caramote prawns (*Penaeus kerathurus*). In 2019, it reported landings of 1.301 tonnes worth EUR 20 million for this species, corresponding to drops of 22% in volume and 19% in value from 2018.

As for "miscellaneous shrimps", this group mainly includes giant red shrimp (*Aristaeomorpha foliacea*), blue and red shrimp (*Aristeus antennatus*), and striped red shrimp (*Aristeus varidens*). Italy and Spain together accounted for around 92% of all these shrimps' landings recorded in the EU in 2019, both in volume and value. While landings in Italy mainly included giant red shrimp, those in Spain mainly comprised striped red shrimps, and blue and red shrimps.

In Italy, landings of “miscellaneous shrimps” amounted to 3.989 tonnes worth EUR 87 million, which represented a 6% decrease in volume and a 1% increase in value compared with 2018. Conversely, Spain landed 3.183 tonnes worth EUR 68 million, dropping 32% in volume and 39% in value from 2018.

CHART 77

LANDINGS OF SHRIMPS IN THE EU IN 2019

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.

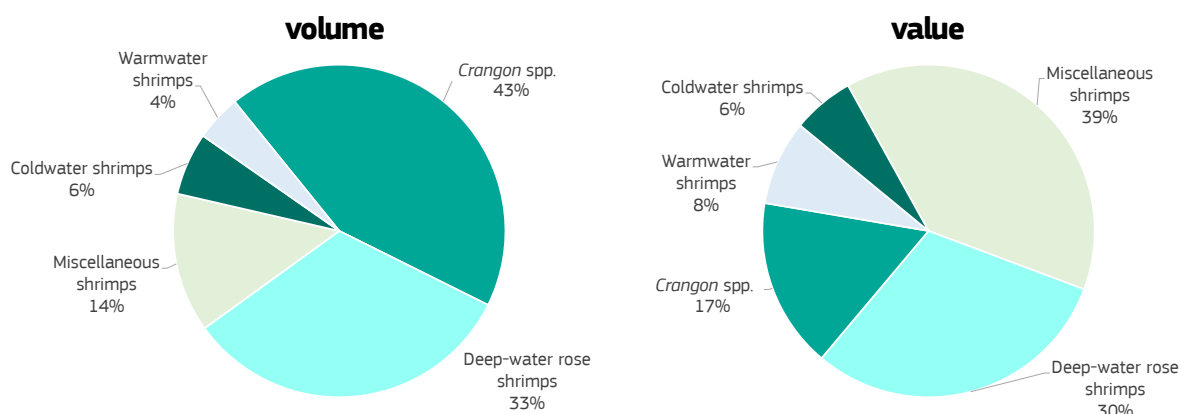


TABLE 18

AVERAGE NOMINAL PRICES OF SHRIMPS IN THE EU COUNTRIES WHERE MOST LANDINGS WERE RECORDED IN 2019 (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	2015	2016	2017	2018	2019	2019/2018	2019/2015
Shrimp <i>Crangon</i> spp.	Netherlands	3,65	6,98	7,28	3,34	2,77	-17%	-24%
	Germany	3,47	7,66	7,99	3,92	2,72	-31%	-22%
Coldwater shrimps	Denmark	3,79	4,65	4,44	5,41	4,97	-8%	+31%
	Sweden	9,15	8,51	9,69	10,37	11,92	+15%	+30%
Deep-water rose shrimps	Italy	6,35	6,33	6,20	5,77	6,84	+19%	+8%
	Spain	14,02	10,47	10,35	8,40	8,95	+6%	-36%
	Greece	4,80	2,28	3,80	4,58	4,36	-5%	-9%
Warmwater shrimps	Italy	16,30	17,40	15,45	14,99	15,60	+4%	-4%
Miscellaneous shrimps	Italy	22,02	21,43	21,61	20,25	21,73	+7%	-1%
	Spain	15,93	16,96	17,03	23,93	21,38	-11%	+34%

TUNA AND TUNA-LIKE SPECIES

In 2019, the volume of tuna and tuna-like species landed in the EU represented a 7% decrease compared with 2018 and totalled 359.060 tonnes. Nevertheless, the value increased by 5%, from EUR 761 million to EUR 797 million. This was driven by the landings in Spain, where, from 2018 to 2019, the price of skipjack tuna grew 12%, from 1,05 EUR/kg to 1,18 EUR/kg, and the price of yellowfin tuna increased 9%, from 1,94 EUR/kg to 2,11 EUR/kg.

Spain, the EU Member State landing by far the most tuna, accounted for 88% of total volumes and 76% of total values. In 2019, its landings amounted to 315.980 tonnes worth EUR 609 million, which were, respectively, 6% lower and 4% higher than in 2018.

SKIPJACK TUNA

Among all tuna landed in the EU in 2019, skipjack reported the highest volumes and values, totalling 178.473 tonnes and EUR 211 million. Compared with the previous year, this corresponded to decreases of 13% in volume and 5% in value.

Of the total volume, 97% was landed in Spain by the national fleet and mainly consisted of frozen products. Spain thus determined the overall EU trend, as in 2019 it totalled 173.046 tonnes worth EUR 203 million and, compared with 2018, its landings decreased by 10%, or 18.750 tonnes, in volume. The average yearly price increased by 12%, from 1,05 EUR/kg to 1,18 EUR/kg, thus bringing values to a 1% increase.

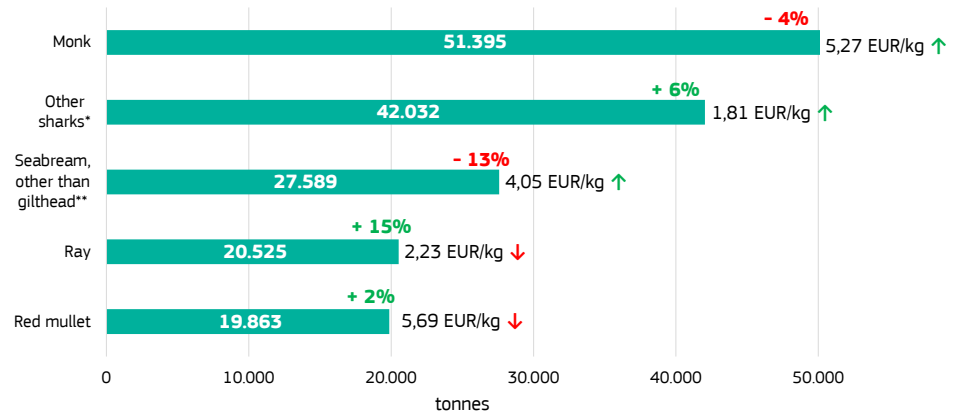
OTHER MARINE FISH

In 2019, the EU landings of “Other marine fish” reached 303.704 tonnes worth EUR 1 billion, thus increasing by 14% in volume and by 0,1% in value from 2018.

CHART 78
MAIN SPECIES OF “OTHER MARINE FISH”:
VOLUME LANDED IN 2019, % VARIATIONS 2019/2018 AND NOMINAL PRICES AT LANDING STAGE

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

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



*The grouping “Other sharks” mainly includes blue shark (60% of the total), small-spotted catshark (18%), smooth-hounds (9%), shortfin mako (8%), and tope shark, catsharks nei and catsharks, nursehounds nei (1% each).

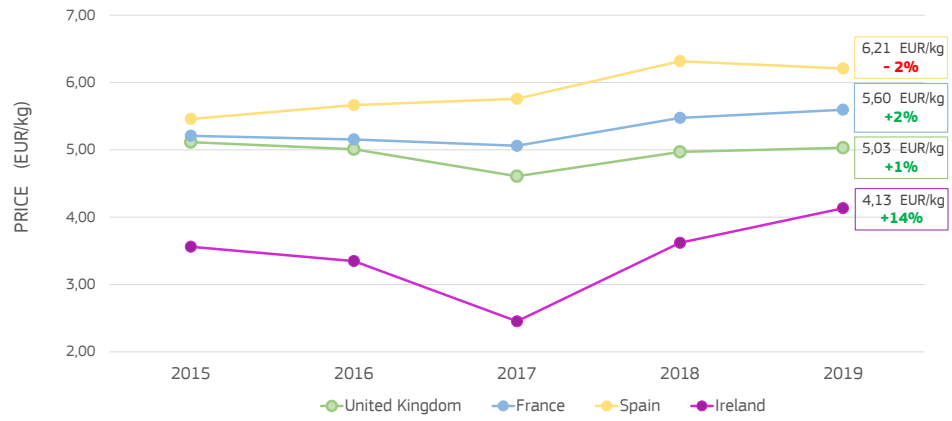
**The grouping “Seabream, other than gilthead” mainly includes bogue (34% of the total), black seabream (12%), common pandora (11%), white seabream (7%), axillary seabream (6%), red porgy (5%), large-eye dentex, blackspot seabream, saddled seabream and sand steenbras (3% each), common dentex, annular seabream, common two-banded seabream, dentex nei and red pandora (2% each), and pink dentex (1%).

MONK

In 2019, the landings of monk in the EU totalled 51.395 tonnes, decreasing 4% from 2018. Their value amounted to EUR 271 million, which was 3% lower than in 2018. Of the total volume, 50% was reported under Anglerfishes nei (*Lophiidae*), and 24% under Monkfishes nei (*Lophius spp.*). The rest was reported under Blackbellied angler (*Lophius budegassa*), Angler (*Lophius piscatorius*) and American angler (*Lophius americanus*). The United Kingdom, France, Spain and Ireland together accounted for almost 90% of total volume landed in 2019. While in the United Kingdom and Ireland most monk landings were reported under Anglerfishes nei (*Lophiidae*), in France they were mainly reported under the species Monkfishes nei (*Lophius spp.*), and in Spain they were reported under Blackbellied angler (*Lophius budegassa*), Angler (*Lophius piscatorius*) and Anglerfishes nei (*Lophiidae*). Compared with 2018, the United Kingdom, France and Spain showed a downward trend, while monk landings in Ireland increased by 6%.

CHART 79
AVERAGE NOMINAL
PRICES OF MONK
LANDED IN MAIN EU
MEMBER STATES
(EUR/KG)

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



6/ AQUACULTURE⁹⁵

6.1 OVERVIEW

TOTAL EU

EU aquaculture production in 2019 recovered after the drop registered from 2017 to 2018.

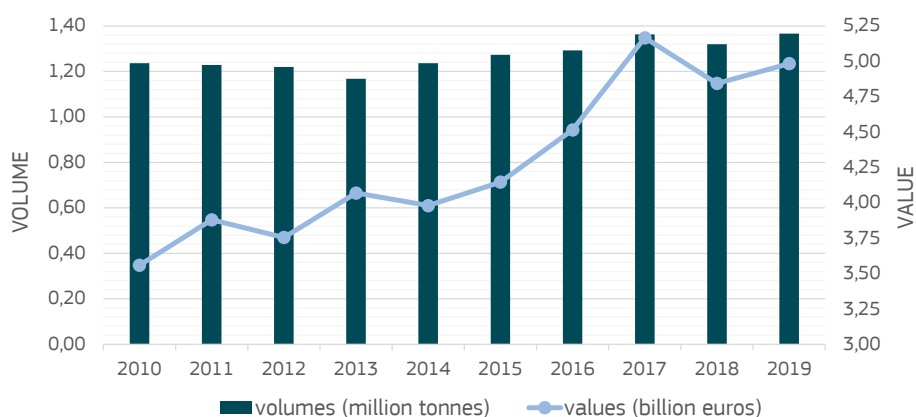
In 2019, EU⁹⁶ aquaculture production reached a total of 1,37 million tonnes, with a value of EUR 4,99 billion. This represented a 4% or 46.565-tonne increase in volume and a 4% or EUR 194 million increase in value compared with 2018 – a reversal of the drop seen from 2017 to 2018. Salmon, the major species farmed in the EU in both value and volume terms, had been behind the downward trend from 2017 to 2018 but then was the main reason for the 2018 to 2019 recovery.

Looking at the decade perspective⁹⁷, total EU aquaculture production increased by 130.554 tonnes or 11% from 2010 to 2019, while its value grew by a remarkable 40% in real terms, which meant an increase of almost EUR 1,43 billion.

The value increase in aquaculture during the 2010–2019 decade was due to increased production of high value species, such as salmon, seabass and bluefin tuna, combined with the strong price increase of some major species, such as salmon, scallop, gilthead seabream, oyster and clam. Price increases were partially connected to an increase in demand, but were also related to other factors that came into play, such as the higher quality of products, including organic, as well as a supply decrease, due to high mortality of some species, such as oysters. It should also be considered that the decade’s 11% volume increase combined with increased demand contributed to price increases and, in turn, to growth of the overall value of EU aquaculture production.

CHART 80
AQUACULTURE PRODUCTION IN THE EU

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



⁹⁵ The main source of data for EU aquaculture production is EUROSTAT. Data were integrated using FAO, FEAP and national sources for several Member States: more details on the integrations made and on data collected for each country can be found in the Methodological background.

⁹⁶ In line with the approach adopted by EUMOFA following BREXIT, the United Kingdom is considered part of the EU till 2019 and its data until that year are available in all tables, charts and analyses at EU level. In addition, EU data include Croatia since 2013, date of the EU’s enlargement to this country.

⁹⁷ In this report, value and price variations for periods longer than 5 years are analysed by deflating values using the GDP deflator (base=2015); for shorter periods, nominal value and price variations are analysed.

Almost half of EU aquaculture production volume consists of bivalves and other molluscs and aquatic invertebrates, mainly thanks to the productions of mussel in Spain and oyster in France. Salmonids⁹⁸ and the grouping “other marine fish⁹⁹” follow, with salmonids mainly including salmon and trout, and other marine fish mainly including gilthead seabream and European seabass. Freshwater species come next, largely comprising carps.

In the period 2015-2019, other groups of species, when combined, registered only around 35.000 tonnes of annual production on average.

As can be seen in charts 81 and 82 below, there was a certain stability of bivalves’ production in both volume and value terms from 2018 to 2019, while in value terms, increases were recorded for all other major commodity groups. The most remarkable increase, which concerned salmonids, was due to salmon production in the UK, the major world producer after Norway and Chile.

CHART 81
VOLUMES OF MOST PRODUCED COMMODITY GROUPS FARMED IN THE EU AND % VARIATIONS 2019/2018

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.

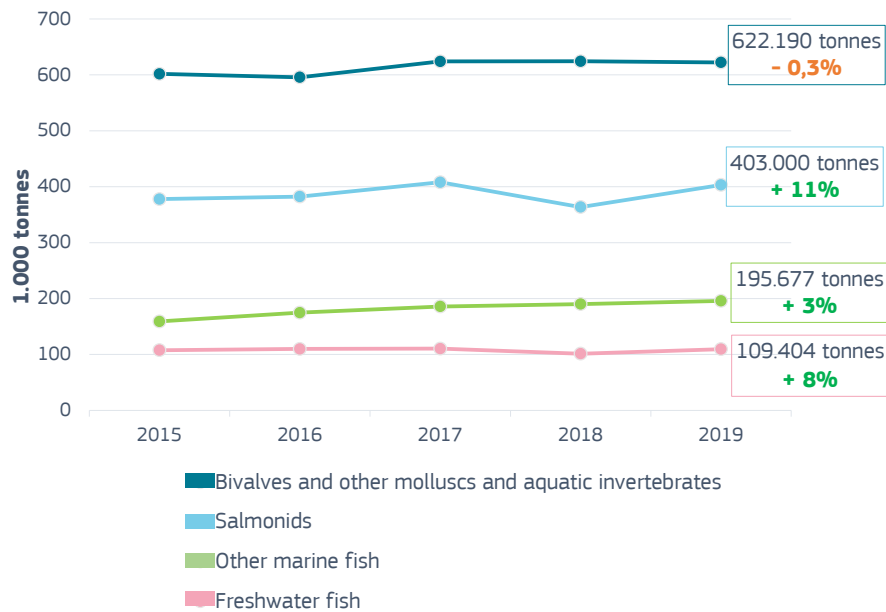
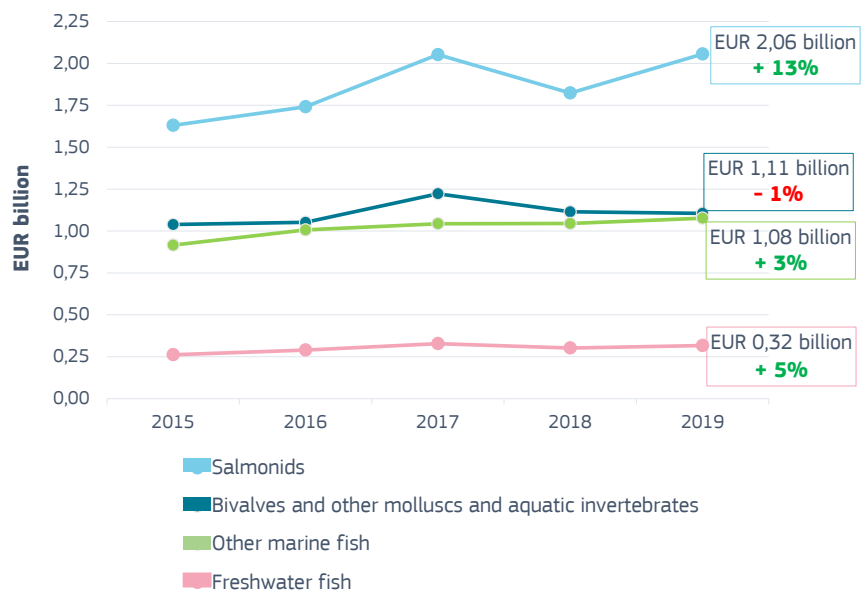


CHART 82
VALUES OF MOST VALUED COMMODITY GROUPS FARMED IN THE EU AND % VARIATIONS 2019/2018

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.



⁹⁸ Salmonids include salmon and trout, plus other types of salmonid species.

⁹⁹ 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>.

CHART 83

COMPOSITION OF EU AQUACULTURE PRODUCTION BY MAIN COMMERCIAL SPECIES (IN VOLUME): 2010 VS. 2019

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

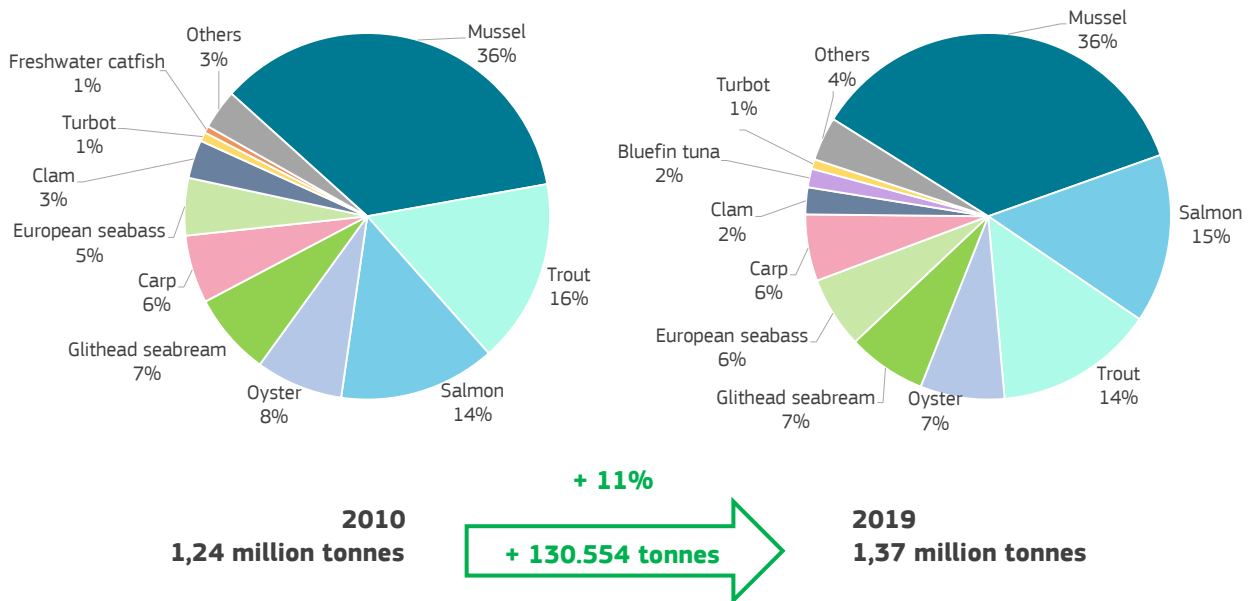
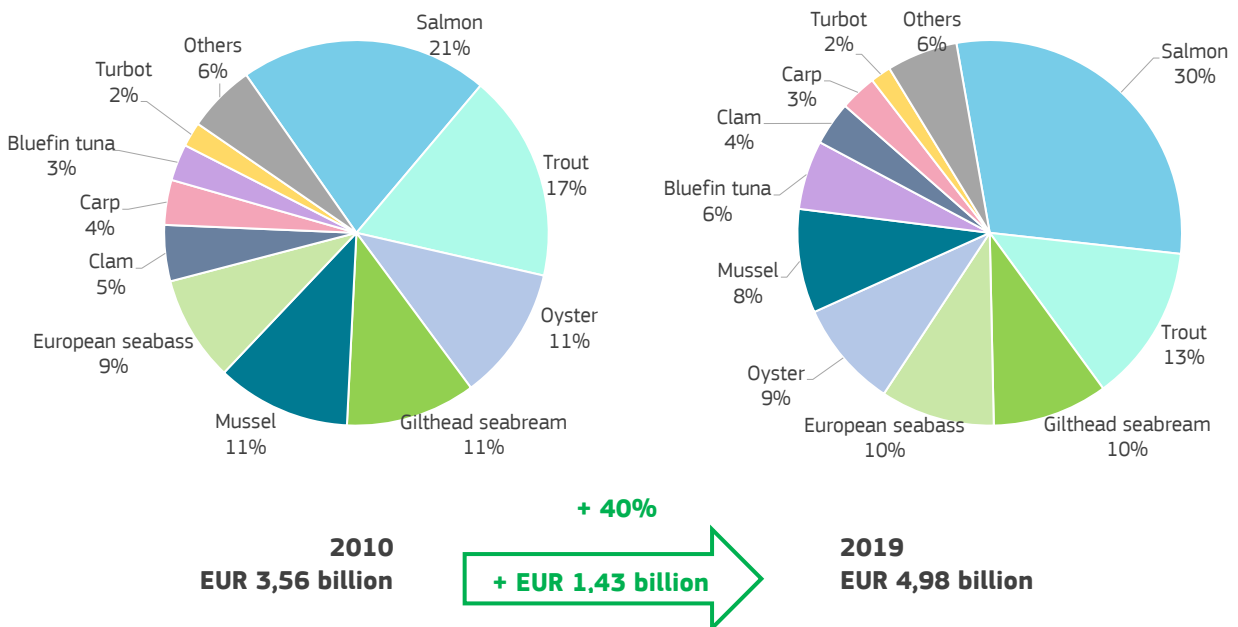


CHART 84

COMPOSITION OF EU AQUACULTURE PRODUCTION BY MAIN COMMERCIAL SPECIES – IN REAL VALUE (BASE=2015) 2010 VS. 2019

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



In volume terms, the species composition of EU aquaculture production remained similar to 10 years before, although there were significant variations in its value structure in real terms.

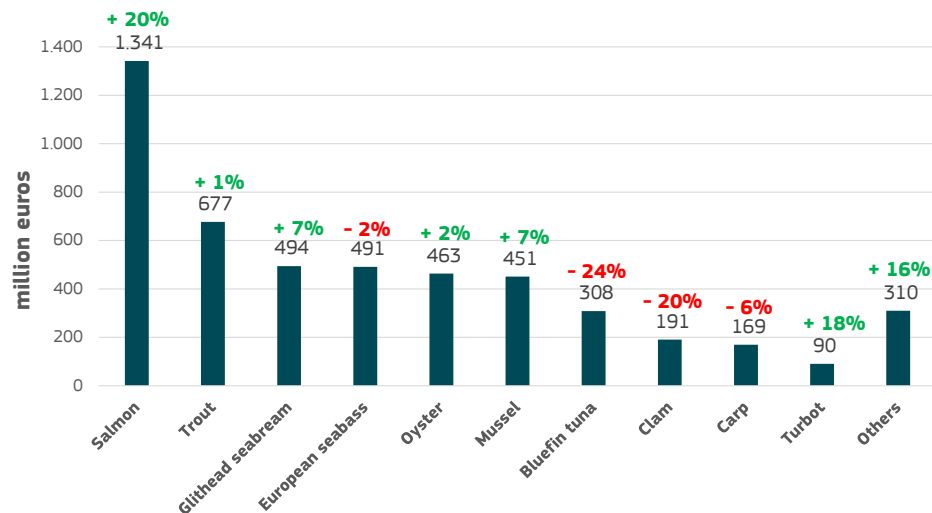
Some major examples of the variations in shares of total value of EU aquaculture production include salmon, which increased from 21% to 30%; trout, which dropped from 17% to 13%; bluefin tuna, which rose from 3% to 6%; and mussel, which decreased from 11% to 8%.

Salmon has increased its share on total value of EU aquaculture production by almost 10% in the last 10 years.

In the case of salmon, the increase was due to its value doubling from 2010 to 2019 in the UK. For trout, production value increased but its share of the total decreased due to more significant increases by other important species. Bluefin tuna's share increase was due to an exceptional trend in Maltese production from 2010 to 2019, which skyrocketed by 142% in volume and 68% in value, leading to increases of more than 7.000 tonnes and EUR 57 million, even after adjusting for inflation¹⁰⁰. By 2019, bluefin tuna production in Malta had reached 11.970 tonnes and EUR 152 million. It is worth highlighting that this upward trend in bluefin tuna's value has been possible thanks to the significant increase in Mediterranean quotas between 2016 and 2018, as "farmed production" of this species calls for fattening of wild-caught tuna. However, from 2018 to 2019, Maltese production growth stopped, with volumes falling by 31% and value by 33%.

CHART 85
VALUES OF MAIN SPECIES FARMED IN THE EU IN 2019 AND % VARIATION 2019/2018

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 specialisations 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.

In 2019, more than 70% of total EU aquaculture production in both volume and value was represented by these top five producing countries.

All five countries increased their production with respect to five years before and also saw a growth in value terms.

Compared with 2018, the UK, France and Italy saw increased production as well as a growth in terms of value, while slight decreases were observed in Greece and Spain. The UK stood out with the most significant increase, due to salmon farming. A major contributing factor behind the increase was the strong increase in the number of juvenile salmon or smolts, which were put into the sea in 2017 and then harvested in 2019¹⁰¹.

¹⁰⁰ The increase seen in Maltese fattening of bluefin tuna could also be related to illegal and unreported farming of the species in Malta. Inspections on the island's tuna pens between September and October of 2018 uncovered how ranchers had concealed hundreds of extra fish, and that consequently resulted in an upward adjustment of declared volumes.

¹⁰¹ Scottish Fish Farm Production Survey 2019

TABLE 19
VOLUME OF
AQUACULTURE
PRODUCTION IN THE
EU TOP-5 PRODUCING
COUNTRIES
(1.000 TONNES)

Source: EUMOFA, based on EUROSTAT (online data code: [fish_aq2a](#)), and FAO data. More details on the sources used can be found in the Methodological background. Discrepancies in % changes are due to rounding.

Member State	2015	2016	2017	2018	2019	2019/2018
Spain	294	287	315	319	307	-4%
United Kingdom	212	194	222	185	220	+18%
France	170	177	182	188	194	+3%
Italy	148	142	159	143	154	+8%
Greece	108	123	126	132	129	-3%

TABLE 20
VALUE OF AQUACULTURE
PRODUCTION IN THE
EU TOP-5 PRODUCING
COUNTRIES
(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	2015	2016	2017	2018	2019	2019/2018
United Kingdom	995	1.019	1.283	1.079	1.308	+21%
France	649	705	736	689	759	+10%
Spain	513	559	578	648	633	-2%
Greece	477	526	546	536	508	-5%
Italy	438	420	555	439	453	+3%

As for the other main producers, the following major developments were registered. The growing trend of Maltese production of bluefin tuna¹⁰² stopped, and by the end of 2019, it amounted to 11.970 tonnes for EUR 152 million. This corresponded to drops of more than 30% in both volume and value from 2018. Germany and Denmark saw increased production of their largest species, mussel and trout respectively, which led both countries to 5-year peaks in volume and value. After a slight increase from 2017 to 2018, in 2019 Dutch aquaculture production, which is mainly driven by mussel farming, continued the declining trend started in 2015 in both volume and value. Poland registered volume and value peaks in 2019, thanks to trout and carp production. In Ireland, which after the UK is another major salmon producer, aquaculture production and its overall value dropped to one of the lowest amounts in 10 years.

¹⁰² See previous footnote for more details about production of bluefin tuna in Malta.

CHART 86

VOLUME OF AQUACULTURE PRODUCTION IN THE MAIN EU PRODUCING COUNTRIES IN 2019 AND % VARIATION 2019/2018

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.

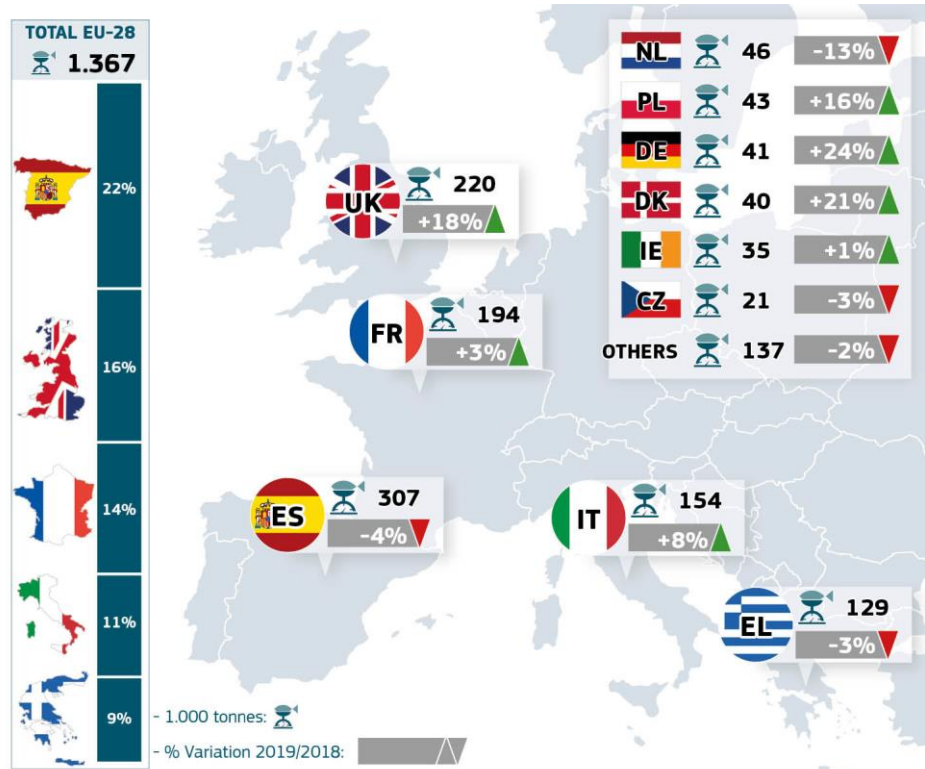
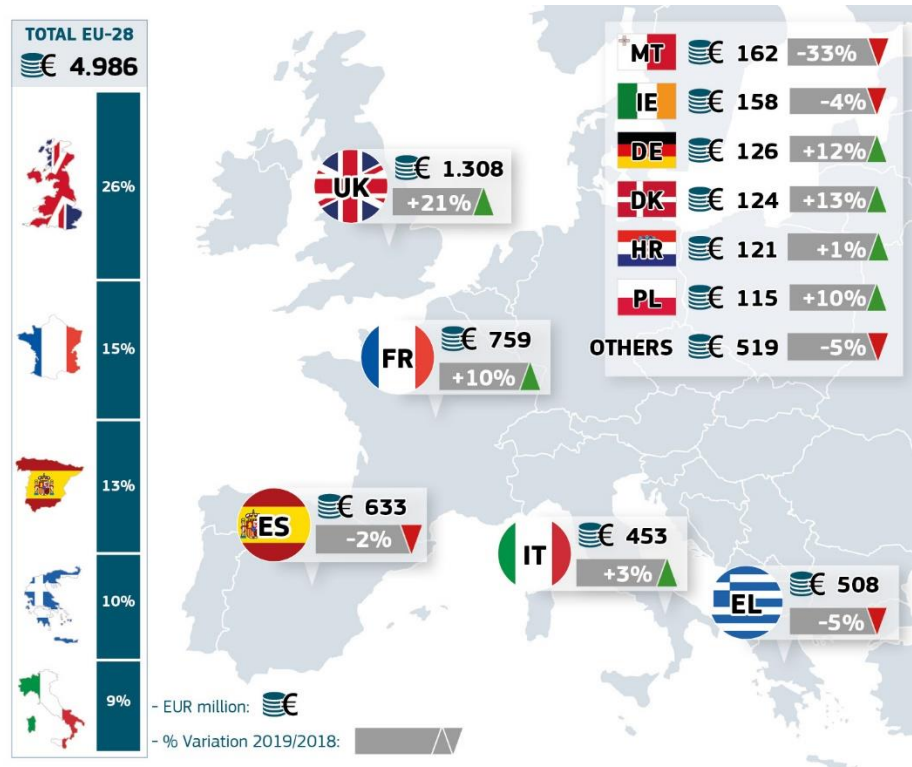


CHART 87

VALUE OF AQUACULTURE PRODUCTION IN THE MAIN EU PRODUCING COUNTRIES IN 2019 AND % VARIATION 2019/2018

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



6.2 ANALYSIS BY MAIN SPECIES

SALMONIDS

Salmonids accounted for more than 40% of the value of EU farmed production in 2019, and almost 30% of its volume. Salmon alone accounted for 15% of total volume of EU aquaculture production and 30% of its value, while trout covered 14% in volume and 13% in value.

SALMON

EU production of salmon reached 203.832 tonnes in 2019, a 20% increase from 2018 when it had touched the lowest amount of the last decade. It was sold at an average ex-farm price of 6,58 EUR/kg, the same as in 2018 and the highest ever registered for this species. Overall, it reached a total value of EUR 1,34 billion.

As salmon is almost entirely farmed in the UK, which produced 93% of the 2019 total, the trend at EU level reflects what was seen at UK level, as shown in chart 88.

Ireland was a far second, farming 11.333 tonnes of salmon for a total value of EUR 107 million in 2019, which represented decreases of 5% in volume and 7% in value compared with 2018. The average price decreased a slight 1%, from 9,56 EUR/kg to 9,44 EUR/kg. Ireland's prices are higher than the UK's, because Ireland's salmon production is exclusively organic, while in the UK, only around 2% of total salmon production in 2019 was organic. Production of organic salmon in the UK amounted to 4.462 tonnes in 2019¹⁰⁵, which represented a 6% increase from 2018.

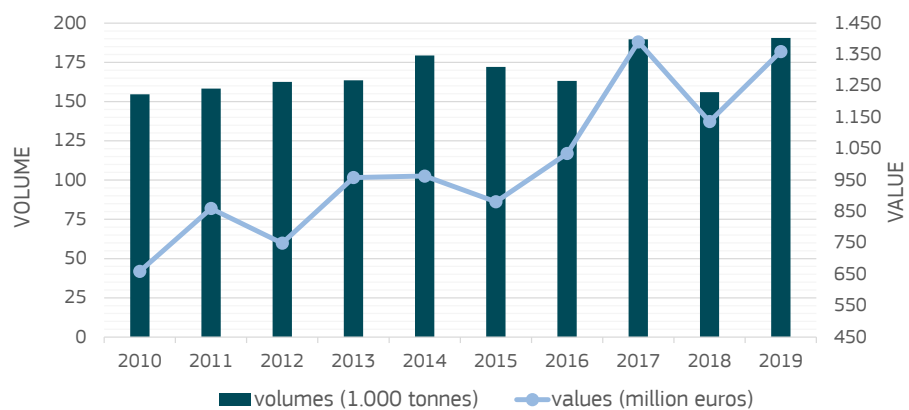
CHART 88

UK PRODUCTION OF FARMED SALMON

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

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

Values are deflated by using the GDP deflator (base=2015).



TROUT

In 2019, the EU produced 192.450 tonnes of trout – mostly rainbow trout (*Oncorhynchus mykiss*) – valued at EUR 677 million. Compared with 2018, production had increased by 2% in volume and 1% in value. The average price registered a slight decrease, moving from 3,56 EUR/kg to 3,52 EUR/kg, but remained at one of its highest levels of the last 10 years.

More than half of EU trout production takes place in France, Italy and Denmark, which in 2019 accounted for 18%, 18% and 16% of total volume, respectively. Compared with 2018, Denmark saw the most significant development, with volumes increasing by 9% to reach the highest level since 2015, while the price recorded a 3% decrease. Among other main EU producers, Poland, Spain and Finland totalled 15.978 tonnes, 15.920 tonnes and 14.204 tonnes, respectively. For Poland and Finland, these were 10-year volume peaks. As for price, Finland saw a 13% reduction from 2018, which settled at a yearly average of 3,74 EUR/kg, against an 8% volume increase. Poland saw a 4%, volume increase from 2018 while the price was stable at 3,00 EUR/kg. Production in Spain did not report any major changes compared with 2018.

¹⁰⁵ Scottish Fish Farm Production Survey 2019

TABLE 21
PRODUCTION OF FARMED TROUT IN MAIN EU PRODUCING COUNTRIES

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

Member State	2019			% variations 2019/2018		
	Volume (tonnes)	Price (EUR /kg)	Value (million euros)	Volume	Price	Value
France	35.097	3,69	130	+3%	+1%	+4%
Italy	34.460	3,13	108	+1%	+6%	+7%
Denmark	30.904	3,25	101	+9%	-3%	+6%

BIVALVES AND OTHER MOLLUSCS AND AQUATIC INVERTEBRATES

In 2019, EU Member States farmed 621.190 tonnes of bivalves and other molluscs and aquatic invertebrates, almost in line with volumes farmed in 2018. Their value reached EUR 1,11 billion, which was just 1% or EUR 9 million less than in 2018. Three main commercial species – oyster, mussel and clam – accounted for 98% of the total volume and value of EU aquaculture production of this commodity group.

MUSSEL

Each year, mussel covers more than two thirds of total volumes of aquaculture production, making it by far the most farmed species produced in the EU. After registering a drop from 2017 to 2018, the 2019 mussel production reached 10-year peaks of 487.662 tonnes and EUR 451 million, with increases of 2% in volume and 7% in value from the previous year.

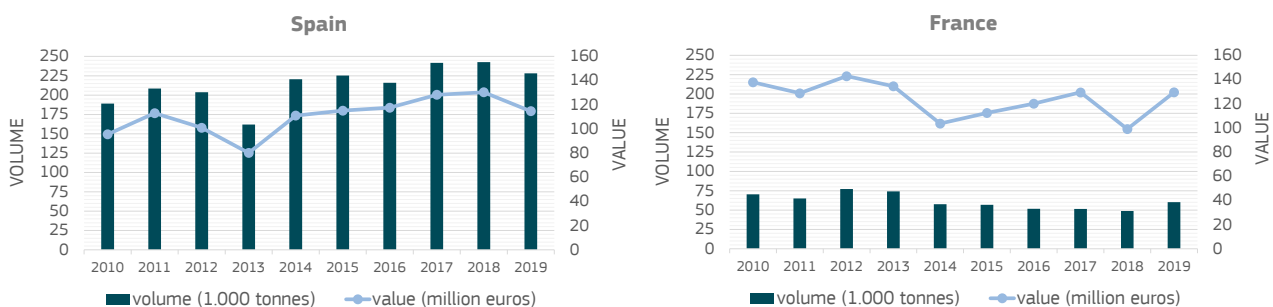
The value increase was driven by a boost recorded in France, where production increased 23% from 2018, reaching 60.255 tonnes, and value increased 32% to EUR 134 million. Italy, which also contributed to the volume increase, farmed 72.450 tonnes of mussels with a total value of EUR 54 million which represented an increase of 18% in volume from 2018 as well as a 2% increase in value. Spain, the EU's largest producer, saw production drop by 6% from 2018 to 2019 to reach 228.195 tonnes worth EUR 120 million, which was an 11% decrease from 2018.

To be noted, Spain and Italy mainly produce Mediterranean mussel (*Mytilus galloprovincialis*), which they sold at average prices of 0,52 EUR/kg and 0,75 EUR/kg, respectively, in 2019. Both countries used a large share of these volumes as raw material for processing. On the other hand, France mostly produces the more valuable blue mussel (*Mytilus edulis*), which in 2019 was sold at an average price of 2,22 EUR/kg.

CHART 89

PRODUCTION OF FARMED MUSSEL IN MAIN EU PRODUCING COUNTRIES

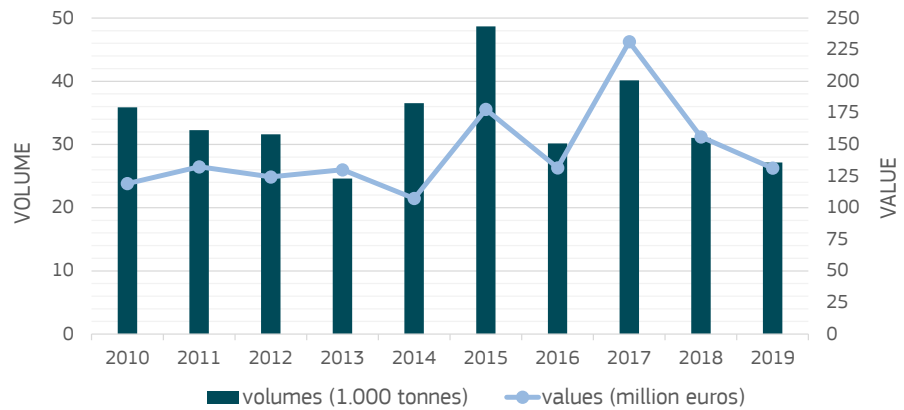
Source: EUMOFA, based on EUROSTAT data (online data code: [fish_aq2a](#)). Values are deflated by using the GDP deflator (base=2015).



CLAM In 2019, the EU production of clam dropped 19% from 2018, reaching 32.428 tonnes which was the lowest amount of the decade under analysis. Both Italy (the largest producer) and Portugal (which comes at a distance) were responsible for this decrease. Production in Italy dropped to 27.160 tonnes which represented a 13% decrease from 2018, while its value of EUR 136 million represented a 15% decrease. In Portugal, clam production halved, reaching 2.027 tonnes worth EUR 33 million. The two countries sell farmed clam at very different prices. In 2019 prices in Italy were 5,02 EUR/kg which was 3% less than 2018, while in Portugal, the price of 16,31 EUR/kg was 33% less than 2018. This difference could be linked to the different species of clam farmed in the two countries: Japanese carpet shell in Italy and grooved carpet shell in Portugal.

CHART 90
PRODUCTION OF FARMED CLAM IN ITALY

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



OYSTER In 2019, the EU farmed 101.879 tonnes of oysters with a total value of EUR 463 million. This represented a 7% decrease in volume from 2018 and a 2% total increase in value.

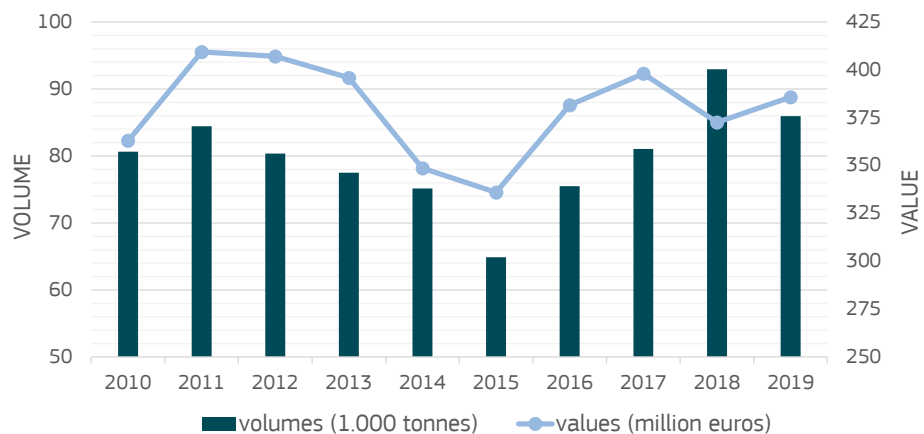
Pacific cupped oyster (*Crassostrea gigas*) is by far the main oyster species farmed in the EU.

Almost 85% of EU oyster production takes place in France. After three years of growth, in 2019, French oyster production dropped 8% from 2018, reaching 85.947 tonnes. This could be explained by the presence of noroviruses (gastroenteritis virus) in some areas of production in France in December 2019, which led to a sales ban in December, which is a peak of activity for oyster. On average in 2019, farmed oysters in France were sold at an average price of 4,63 EUR/kg, or 13% more than 2018, while their total value reached EUR 398 million, or 5% more than 2018.

Ireland followed at a distance, amounting to 7.810 tonnes of oysters produced in 2019 worth a total value of EUR 34 million. Both the volume and value of Irish production decreased by 10% with respect to 2018, while the price was almost stable, showing a slight 1% decrease to 4,38 EUR/kg.

CHART 91
PRODUCTION OF FARMED OYSTER IN FRANCE

Source: EUMOFA, based on EUROSTAT data (online data code: [fish_aq2a](#)). Values are deflated by using the GDP deflator (base=2015).



OTHER MARINE FISH

Two species of this commodity group, namely gilthead seabream and European seabass, each accounted for over 10% of the total value of EU aquaculture production in 2019.

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

GILTHEAD SEABREAM

In 2019, the EU production of gilthead seabream reached 95.207 tonnes, growing by 3% compared with the previous year. The overall value of this production also represented a 10-year peak, reaching EUR 494 million which was a 7% increase from 2018. Although not coming from the top EU producers, these increases were also driven by production in Croatia, due to strategic growth ambitions by one seabream producer. Total production of gilthead seabream in Croatia reached a peak of 6.774 tonnes worth EUR 39 million, which represented increases by 21% in volume and 19% in value from 2018.

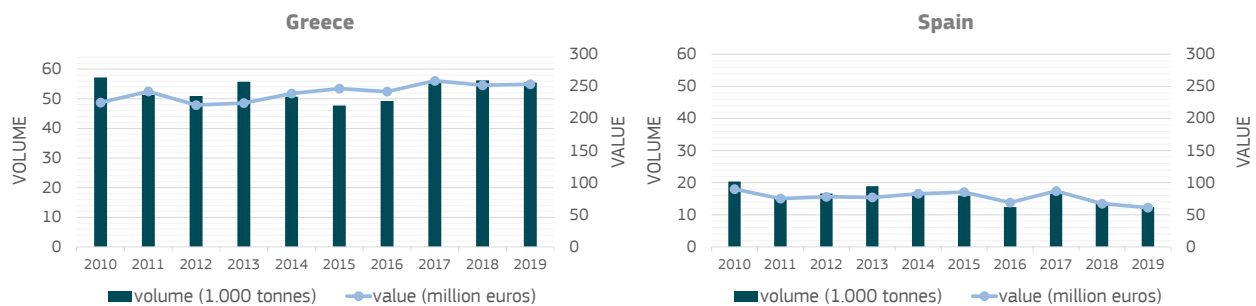
In the largest producing countries, namely Greece and Spain, the trend was different. From 2018 to 2019, volumes of gilthead seabream production in Greece decreased slightly to 55.500 tonnes. However, the average price increased by 2% to reach 4,56 EUR/kg, thus bringing total value to EUR 253 million, a 1% increase from 2018.

In the same period, Spanish production dropped by 9% in volume to reach 12.475 tonnes, and by 8% in value, totalling at EUR 64 million. This was despite a 1% increase which brought the price to 5,11 EUR/kg.

CHART 92

PRODUCTION OF FARMED GILTHEAD SEABREAM IN MAIN EU PRODUCING COUNTRIES

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



EUROPEAN SEABASS

European seabass production in the EU continued to grow, posting a new record year in 2019, with 86.149 tonnes and a total value of EUR 491 million. Compared with 2018, volumes increased very slightly while a 2% decrease was observed in terms of value.

Greek production dropped by 12% to reach 41.255 tonnes, which were sold at an average price of 4,86 EUR/kg. This represented a 5% price reduction from 2018, which contributed to a 16% drop in the total value.

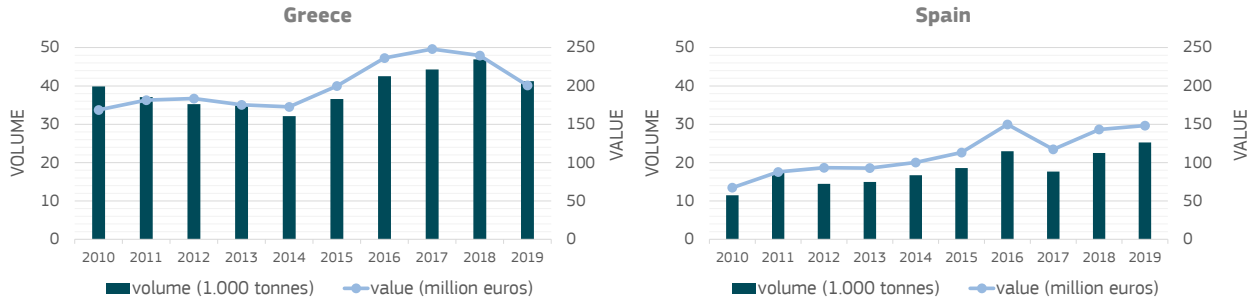
On the other hand, production in Spain grew by 12% from 2018 to 2019, bringing it to a 10-year volume peak of 25.260 tonnes. The average price, 6,12 EUR/kg, decreased by 6% against this volume increase, but the overall value managed to increase by 5% and reach EUR 155 million, touching a 10-year high as well.

Even though France is a relatively small seabass producer, it is worth noting that its production volumes rose by more than 40% from 2018 to 2019, to reach 2.461 tonnes.

CHART 93

PRODUCTION OF FARMED EUROPEAN SEABASS IN MAIN EU PRODUCING COUNTRIES

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



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